VIRTUE

A Bi-annual Refereed Journal

(Included in the UGC List of Approved Journals)

Conference Issue, April 2018

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An Overview

DAVIM has always recognized and acknowledged the contribution made by academicians in imparting management education and their need to enhance the knowledge in various functional areas of management. In this pursuit, the institute took a new initiative and released the first issue of the Journal titled **"VIRTUE"** - Bi-annual Multidisciplinary Refereed Research Journal in the year 2010. With the guidance and support of researchers, contributors, editorial board members the journal has marked its place in the UGC List of approved journals in the year 2017.

This journal seeks to provide a platform to researchers, academicians, practicing managers and other professionals from various expert fields to present their research findings and share their views and experience. Its main objective is to promote research education worldwide and to establish a link between various fields of management and information technology. The journal being a multidisciplinary focuses on various issues related to management development and implementation of new methodologies and technologies, which improve the operational objectives of an organization. Considering India's strategic role in the world economy and its contribution by providing a large pool of talented human resources to the corporate sector, it is important to understand the strategic issues those will contribute towards the success of the organization. Therefore, journal acts as a forum for exchange of new developments done by researchers and practitioners, which further contributes to the adoption of a new holistic managerial approach that ensure a technologically, economically, socially and ecologically acceptable deployment of new technologies in today's business practice.

VIRTUE

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DAV Institute of Management, NH-3, N.I.T, Faridabad-121001.

Email: info@davim.ac.in, web: www.davim.ac.in

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Conference Issue, April 2018

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EDITORIAL

Dear Colleagues

As the entire world is living through a time of Global Economic Challenges, different approaches are being carved out by various countries to insulate respective domestic economies against severe damage. At the same time we have learnt that the success of any economy is no doubt linked to the global economy. Understanding this unique phenomenon has been quite exciting and challenging for a relatively young and strong India. The nation, by its people is taking its strides along to explore its potential and define its identity, though journey just begins.

The world of knowledge is also expanding at a speed which is difficult to cope. It is therefore the responsibility of both, knowledge bearers and educational institutions to create systems and practice of tracking, documenting it and making it available to the faculty for their capacity enhancement and students for their skills up-gradation.

This special conference issue presents a panorama of research papers, articles, case studies and reviews on various aspects of business world like Marketing, Finance, Information Technology, Human Resource Management, Environment Management and Business Environment.

I express my gratitude to the eminent authors of the research papers and to the members of the conference advisory board, for their valuable suggestions. Several experts made available their time and expertise in assessing the articles and making critical comments and suggestions for improving their quality. I owe a word of thanks to each of them.

I must use this opportunity to express my sincere thanks to Dr. Juhi, Ms. Bhumika, Ms. Kavita Goyal and Ms. Neha Sharma for their support in editing and finalizing the current issue.

Happy Reading……

Dr. Ritu Gandhi Arora

*From the Desk of T*orchbearer……

Dear Researchers and Academicians

We are honored to announce the publication of the special conference issue of the Journal VIRTUE. We wish to express our gratitude to the researchers/presenters for their valuable submissions which would definitely create an impact in the minds of the readers as these research papers are the way of providing larger visibility and dimension to the varied vital topics.

The research papers and articles published in this issue, address researchers, academicians, and students who wish to complete and develop the knowledge in the area of business, economics and management, finance, information technology, languages and psychology. The journal encourages theoretical analysis, empirical studies – both in qualitative and quantitative domains, case studies, and critical reviews of existing management theories, principles, and practices.

I extend my heartfelt gratitude towards **Dr. Punam Suri Ji,** Padma Shri Awardee, President, DAVCMC, Delhi and **Sh. Prabodh Mahajan Ji**, Vice President, DAVCMC, Delhi for their blessings and commendation in all our endeavors.

Also I would like to thank our Editorial team members/Advisory board members and the reviewers who have helped in making this journal a possibility. The diverse topics in the articles and research papers that are amalgamated in this issue have a high level of application in their respective areas.

Bringing out this special conference issue is our commitment to provide a platform to worldwide academia, researchers and management practitioners to highlight and showcase their work and together take management science research to the newer apex.

We hope that our resilient efforts would help you in acquiring expertise in divergent fields.

With Warm Wishes

Dr. Neelam Gulati
(Head of the Institute)

EASE OF DOING BUSINESS: A COMPARATIVE STUDY OF INDIA AND CHINA

Deepak Kumar Adhana
Research Scholar
IMSAR, M.D. University
Rohtak

Dr. Neelam Gulati
Associate Professor
DAV Institute of Management
Faridabad, Haryana
neelamgulati2000@yahoo.com

ABSTRACT

India moved up by 30 places from 130 to 100 to enter the top 100 rankings on the 'ease of doing business' index by World Bank, owing to significant improvements in major indicators such as getting credit, protection of interest of minority investors, resolution of insolvency and payment of taxes. It is considered to be the highest upsurge ever in the ranking of a country in the index. The absolute score, also known as the Distance to Frontier (DTF) score, of India has improved to 60.76 this year from 56.05 last year (according to methodology adopted in 2017-18). "The significant jump this year is a result of the Indian government's consistent efforts over the past few years and India's endeavor to strengthen its position as a preferred place to do business."

According to the data collected by World Bank, New Zealand is the easiest place in the world to do business, followed by Singapore, Denmark, South Korea and Hong Kong. The US and the UK are ranked 6th and 7th on the list. Last year World Bank had ranked India at 130. The report has also recognized India among the top 10 improvers in this year's assessment. India has initiated and implemented reforms in 8 out of 10 indicators of 'doing business'. India is the only large economy which has achieved such a significant improvement.

The present paper highlights the scenario of ease of doing business in India. It also makes a comparison of India and China's ease of doing business standings. The study exhibits the relationship between ease of doing business and foreign direct investment. The paper, in the end also indicates the reforms that have improved India's standing in EODB.

KEY WORDS*: Distance to Frontier, Ease of Doing Business, World Bank*

INTRODUCTION

Ease of Doing Business Index

The "ease of doing business" index is an index which has been introduced by the World Bank Group. A high ranking (a low numerical value) indicates that there are easier and, generally simpler, regulations for businesses and stronger protections of property rights. Empirical research, conducted or funded by the World Bank, conclude that there is a strong impact of improvement in these regulations on economic growth.

Definition:

Ease of doing business is an index published by the World Bank. It refers to an aggregate numerical value that includes various parameters which determine the level of the ease of doing business in any country.

Description:

The figure for "ease of doing business" is determined by summing up the distance to frontier (DTF) scores of different economies. The DTF score uses the 'regulatory best practices' for doing business as the parameter and benchmarks the economies of different countries according to that parameter.

A DTF score is calculated for each indicator which forms a part of the 'ease of doing business' statistic and all the scores are added. The added up score forms the figure of "Ease of doing business" index. Indicators for which DTF is determined include construction permits, registration, getting credit, tax payment mechanism etc. Countries are given ranks according to the index figure.

METHODOLOGY

The report is a benchmark study of regulations. The survey consists of a questionnaire designed by the Doing Business team with the aid of academic advisors. The questionnaire centers on a simple case of doing business which ensures comparability across economies and over time. The survey also has assumptions about the nature, size, location and legal form of the business. The 'ease of doing business' index intends to evaluate regulations which directly affect the businesses. It does not directly evaluate more common conditions like the country's proximity to large markets, infrastructure quality, inflation rate, or crime rate.

The next step of collecting data surveys contribution from more than 12,500 experts from different fields (lawyers, accountants etc.) from 190 countries who deal with business regulations in their day-to-day work. These individuals have an interaction with the 'Doing Business' team through various ways such as in conference calls, visits by the global team and written correspondence among the other ways. For the report of 2017, the team members visited 34 countries for verification of data and recruitment of respondents. Data from the survey is subjected to several rounds of verification. The surveys are not a statistical sample. The results are construed and cross-checked for consistency before being presented in the report. They have also been validated with the relevant authority or government before publishing them. Respondents filled the written surveys and provided references to the appropriate regulations, laws and fees, based on standardized case scenarios with specified assumptions, like assumption about the location of the business (it being located in the largest business city of the country).

The ranking of a country on the index is based on the average of 10 sub indices:

- Starting a business – minimum capital required, cost, procedures and time required to start a new business
- Dealing with construction permits – cost and time required and the procedures to be followed to build a warehouse
- Getting electricity – cost and time required and the procedures to be followed by a business to get a permanent electricity connection for the warehouse which has been newly constructed
- Registering property – cost and time required and the procedures to be followed to get the commercial real estate registered
- Getting credit – depth of CII (credit information index) and strength of LRI (legal rights index)
- Protecting investors – Indices on the extent of disclosure, director liability and ease of shareholder suits
- Paying taxes – amount of taxes paid, hours spent per year in preparing tax returns and total tax payable as percentage of gross profit
- Trading across borders – cost and time required and the necessary procedures to be followed to export and import
- Enforcing contracts – cost and time required and the procedures to be followed for the enforcement of a debt contract
- Resolving insolvency – The cost, time and recovery rate (%) under bankruptcy proceeding

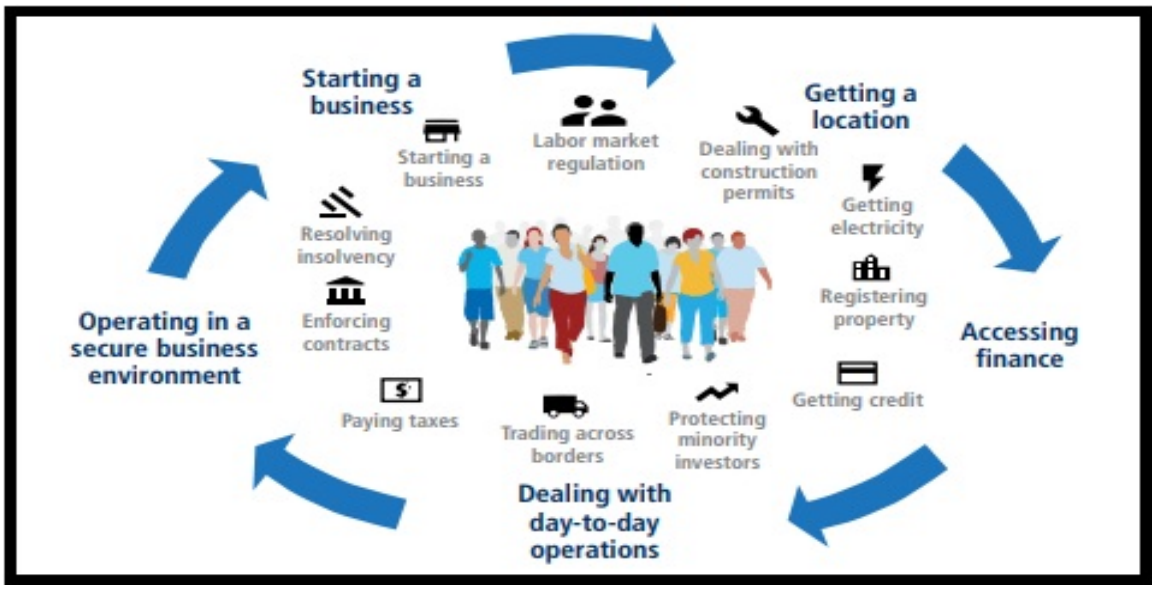
DOING BUSINESS REPORT

Since 2003, the World Bank Group has been elaborating study every year known as The **Doing Business Report** (DBR) which aims to measure the costs of business regulations to the firms in 190 countries. The study has become one of the flagship knowledge products of the World Bank Group in the field of development of private sector. It has also motivated the blueprint of various regulatory reforms in developing countries. The study provides a detailed analysis of procedural requirements and costs usual private firm is subject to in all the countries, and then, allots ranks to every country on the basis of their index figure. Broad communication efforts provide a back up to the study. The study also spotlights countries and their leaders who are promoting reforms by providing the ranks.

Overview of Doing Business 2018:

Reforming to Create Jobs, a World Bank Group flagship publication is the 15th in a series of annual reports which measures the regulations which result in enhancement of business activity and the regulations which hinder it. Doing Business provides quantitative indicators on business rules and regulations and the safeguard of property rights that is comparable across 190 economies—from Afghanistan to Zimbabwe—and over time.

Doing Business assess the regulations which affect 11 domains of a business' life. All except one of these domains, that is labor market regulation, are included in this year's ranking on the ease of doing business. The domains which are included while determining the rank are resolving insolvency, trading across borders, paying taxes, protecting minority investors, getting credit, registering property, getting electricity, dealing with construction permits, enforcing contracts and starting a business,.



Main Findings of Doing Business 2018:

Reforming to Create Jobs finds that entrepreneurs in 119 economies saw improvements in their local regulatory framework last year. The report documented 264 business reforms between June 2016 and June 2017.

BIG THUMBS-UP TO MODINOMICS: INDIA JUMPS 30 PLACES TO 100TH RANK IN EASE OF DOING BUSINESS REPORT

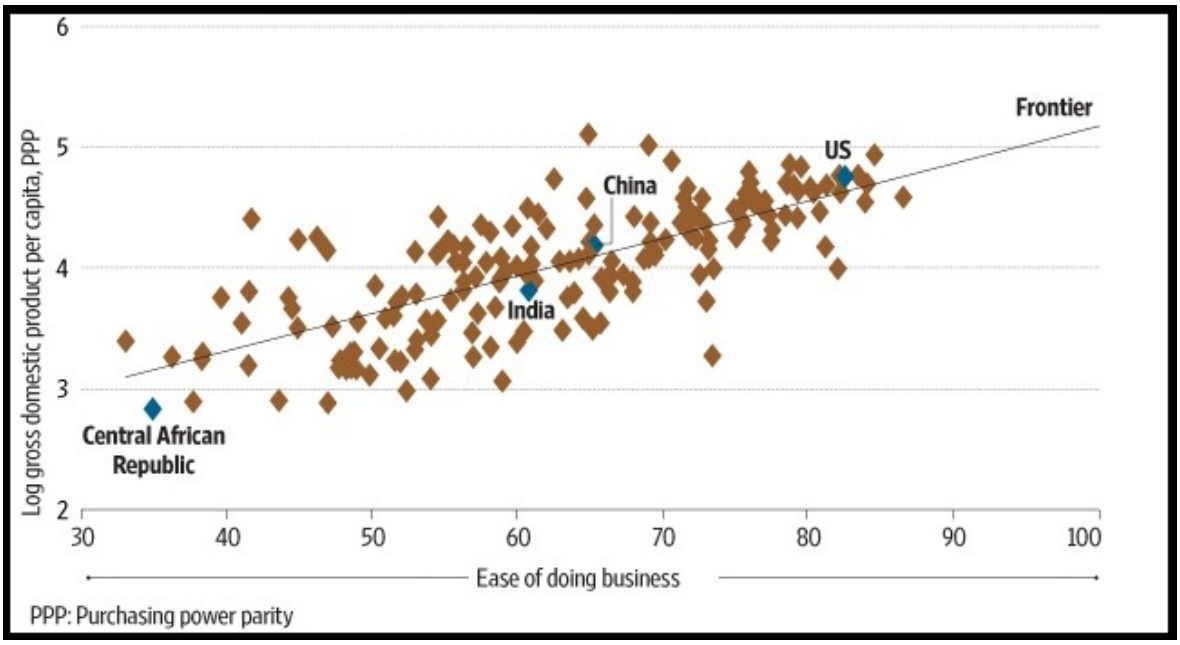
India has jumped 30 places to number 100 in the latest Ease of Doing Business report for 2018 released by the World Bank. India has stood out this year by being one of the 10 economies which recorded improvement in most of the areas measured by Doing Business.

The report, which counts New Zealand, Singapore and Denmark among the easiest countries in the world to do business in, ranked China at 78, which is 22 places ahead of India. However, there was no improvement in China's rank, albeit the Distance to Frontier (DTF) scores of the country increased by 0.40 points. India's DTF score increased by 4.71 points this year reaching at 60.76 points. India was ranked at 130th position last year. India's 30 place elevation is the highest elevation made by any country this year. It was a clear and big acknowledgement of the structural reforms that Modi government has been undertaking.

PARAMETERS	DTF SCORES		SIGN
	2017	2018	
Starting a business	**74.3**	**75.4**	↑
Dealing with construction permits	**32.8**	**38.8**	↑
Getting electricity	**85.2**	**85.2**	
Registering property	**50**	**47.1**	↓
Getting credit	**65**	**75**	↑
Protecting minority investors	**73.3**	**80**	↑
Paying taxes	**46.7**	**66.1**	↑
Trading across borders	**57.6**	**58.6**	↑
Enforcing contracts	**35.2**	**40.8**	↑
Resolving insolvency	**32.8**	**40.8**	↑

What is the distance to frontier score?

Doing Business measures various aspects of regulation of business. Doing business calculates the DTF score to merge measures which have different units, for example the number of days to obtain a construction permit and the number of procedural requirements to commence a business into a single score. The DTF (distance to frontier) score captures the gap between the current performance of the country and the best practice and performance across the entire sample of 41 indicators across 10 Doing Business indicator sets.



Source: World Bank Ease of doing business 2018

The chart shows the correlation between the natural logarithm of gross domestic product (GDP) per capita, adjusted for purchasing power parity, on the vertical axis, with the World Bank DTF, on the horizontal axis, using data from the latest Doing Business report and the latest GDP data from the World Bank as well.

India finally has become a Better Place to do Business:

The World Bank rolled out the Doing Business report in 2002, and it currently ranks 190 countries to identify the most business-friendly nations on the basis of 10 parameters. This year, India managed to improve its ranking in six out of these 10 criteria.

Source: India's Rank in World Bank Ease of doing Business Reports

Parameters/Year	2017	2018
Starting a Business	**155**	**156**
Dealing with Construction Permits	**185**	**181**
Getting Electricity	**26**	**29**
Registering Property	**138**	**154**
Getting Credit	**44**	**29**
Protecting Minority Investors	**13**	**4**
Paying Taxes	**172**	**119**

Trading Across Borders	**143**	**146**
Enforcing Contracts	**172**	**164**
Resolving Insolvency	**136**	**103**

The adoption of an insolvency and bankruptcy code, making compliance with corporate income tax laws easier, and extended paid maternity leave have together helped improve India's ranking. In all, the country has adopted 37 reforms since 2003 and nearly half of these came in the last four years.

However, it still lags behind in areas such as starting a business, enforcing contracts, and construction permits. "Tackling these challenging reforms will be a key to India in sustaining the momentum towards a higher ranking." This year, India is among the top 10 countries to significantly improve their rankings. But Asia's third-largest economy is still far from achieving its ambitious target of breaking into the top 30 countries by 2020. The introduction of the GST, which was not taken into account this year, is expected to boost India's position next year.

India Can Beat China Next Year

India and China are two major rivals between whom any comparison cannot be done, especially given the fact that India has beaten China to become the fastest growing economy in the world. And, if the Central Government focuses right on three key areas then, India may outperform China in the World Bank 'Ease of Doing Business' Rankings as well in future!

India has come out as an outperformer in 'Ease of Doing Business' rankings of the World Bank this year. India has jumped up by a whopping 30 notches to the 100th rank in a study which ranks 190 countries. Prime Minister Mr. Narendra Modi has often highlighted his government's aim to break into the top 50 league of countries for doing business, and this jump to 100 would come as a big boost for him, especially at a time when economic growth and reforms are being questioned.

The position of China, however, has not changed from 78th rank since 2017. The gap between the positions of China and India may seem to be very small but it is very difficult to bridge this gap. As not only India has to increase its competitiveness in all the ten indicators but also need to do it better than the other nations.

Ease of doing business 2018: How China and India stack up

Parameters/Country	CHINA	INDIA
Starting a Business	**93**	**156**
Dealing with Construction Permits	**172**	**181**
Getting Electricity	**98**	**29**

Registering Property	**41**	**154**
Getting Credit	**68**	**29**
Protecting Minority Investors	**119**	**4**
Paying Taxes	**130**	**119**
Trading Across Borders	**97**	**146**
Enforcing Contracts	**5**	**164**
Resolving Insolvency	**56**	**103**

The above table indicates that India already has a better ranking than China in 4 out of 10 the parameters. India needs to pay attention to following three indicators in order to beat China and make it to the list of top 50 nations:

1. Registering property: The total number of procedures to register a property in China is 4, whereas in India the number is double i.e. 8, Not only that, on average it take 19.5 days to register a property in China, but 53 days in India, For 2017, India's ranking was 138, and has seen a further decline to a disturbing 154. In fact in for 2015, the rank was 121, and declined to 138. This is one aspect that requires immediate attention of the respective authorities and government.

2. Enforcing contracts: World Bank notes that "India made enforcing contracts easier by introducing the National Judicial Data Grid, which makes it possible to generate case management reports on local courts. This reform applies to both Delhi and Mumbai." However, in China, which ranks 5 on this indicator, it takes just 496 days to enforce contracts. In India, this figure is as bad as 1,445 days.

Ease of doing business 2018: Detailed analysis of India's rankings

✔ Reform making it easier to do business ✘ Change making it more difficult to do business

INDIA		South Asia		GNI per capita (US$)	1,680
Ease of doing business rank (1–190)	100	Overall distance to frontier (DTF) score (0–100)	60.76	Population	1,324,171,354
✔ **Starting a business** (rank)	156	✔ **Getting credit** (rank)	29	✔ **Trading across borders** (rank)	146
DTF score for starting a business (0–100)	75.40	DTF score for getting credit (0–100)	75.00	DTF score for trading across borders (0–100)	58.56
Procedures (number)	11.5	Strength of legal rights index (0–12)	8	*Time to export*	
Time (days)	29.8	Depth of credit information index (0–8)	7	Documentary compliance (hours)	38.4
Cost (% of income per capita)	14.8	Credit bureau coverage (% of adults)	43.5	Border compliance (hours)	106.1
Minimum capital (% of income per capita)	0.0	Credit registry coverage (% of adults)	0.0	*Cost to export*	
				Documentary compliance (US$)	91.9
✔ **Dealing with construction permits** (rank)	181	✔ **Protecting minority investors** (rank)	4	Border compliance (US$)	382.4
DTF score for dealing with construction permits (0–100)	38.80	DTF score for protecting minority investors (0–100)	80.00	*Time to import*	
Procedures (number)	30.1	Extent of disclosure index (0–10)	8	Documentary compliance (hours)	61.3
Time (days)	143.9	Extent of director liability index (0–10)	7	Border compliance (hours)	264.5
Cost (% of warehouse value)	23.2	Ease of shareholder suits index (0–10)	7	*Cost to import*	
Building quality control index (0–15)	11.5	Extent of shareholder rights index (0–10)	10	Documentary compliance (US$)	134.8
		Extent of ownership and control index (0–10)	8	Border compliance (US$)	543.2
Getting electricity (rank)	29	Extent of corporate transparency index (0–10)	8		
DTF score for getting electricity (0–100)	85.21			✔ **Enforcing contracts** (rank)	164
Procedures (number)	5	✔ **Paying taxes** (rank)	119	DTF score for enforcing contracts (0–100)	40.76
Time (days)	45.9	DTF score for paying taxes (0–100)	66.06	Time (days)	1,445
Cost (% of income per capita)	96.7	Payments (number per year)	13	Cost (% of claim)	31.0
Reliability of supply and transparency of tariffs index (0–8)	7	Time (hours per year)	214	Quality of judicial processes index (0–18)	10.3
		Total tax and contribution rate (% of profit)	55.3		
Registering property (rank)	154	Postfiling index (0–100)	49.31	✔ **Resolving insolvency** (rank)	103
DTF score for registering property (0–100)	47.08			DTF score for resolving insolvency (0–100)	40.75
Procedures (number)	8			Time (years)	4.3
Time (days)	53			Cost (% of estate)	9.0
Cost (% of property value)	8.4			Recovery rate (cents on the dollar)	26.4
Quality of land administration index (0–30)	8.2			Strength of insolvency framework index (0–16)	8.5

Source: World Bank Ease of doing business 2018: How India ranks?

Ease of doing business 2018: Detailed analysis of China's rankings

CHINA		East Asia & Pacific		GNI per capita (US$)	8,260
Ease of doing business rank (1–190)	78	Overall distance to frontier (DTF) score (0–100)	65.29	Population	1,378,665,000
✔ **Starting a business** (rank)	93	**Getting credit** (rank)	68	**Trading across borders** (rank)	97
DTF score for starting a business (0–100)	85.47	DTF score for getting credit (0–100)	60.00	DTF score for trading across borders (0–100)	69.91
Procedures (number)	7	Strength of legal rights index (0–12)	4	*Time to export*	
Time (days)	22.9	Depth of credit information index (0–8)	8	Documentary compliance (hours)	21.2
Cost (% of income per capita)	0.6	Credit bureau coverage (% of adults)	21.4	Border compliance (hours)	25.9
Minimum capital (% of income per capita)	0.0	Credit registry coverage (% of adults)	95.3	*Cost to export*	
				Documentary compliance (US$)	84.6
Dealing with construction permits (rank)	172	**Protecting minority investors** (rank)	119	Border compliance (US$)	484.1
DTF score for dealing with construction permits (0–100)	47.28	DTF score for protecting minority investors (0–100)	48.33	*Time to import*	
Procedures (number)	23	Extent of disclosure index (0–10)	10	Documentary compliance (hours)	65.7
Time (days)	247.1	Extent of director liability index (0–10)	1	Border compliance (hours)	92.3
Cost (% of warehouse value)	7.8	Ease of shareholder suits index (0–10)	4	*Cost to import*	
Building quality control index (0–15)	9.6	Extent of shareholder rights index (0–10)	3	Documentary compliance (US$)	170.9
		Extent of ownership and control index (0–10)	2	Border compliance (US$)	745
Getting electricity (rank)	98	Extent of corporate transparency index (0–10)	9		
DTF score for getting electricity (0–100)	68.83	✔ **Paying taxes** (rank)	130	**Enforcing contracts** (rank)	5
Procedures (number)	5.5	DTF score for paying taxes (0–100)	62.90	DTF score for enforcing contracts (0–100)	78.23
Time (days)	143.2	Payments (number per year)	9	Time (days)	496
Cost (% of income per capita)	356.0	Time (hours per year)	207	Cost (% of claim)	16.2
Reliability of supply and transparency of tariffs index (0–8)	6	Total tax and contribution rate (% of profit)	67.3	Quality of judicial processes index (0–18)	15.1
		Postfiling index (0–100)	49.08		
Registering property (rank)	41			**Resolving insolvency** (rank)	56
DTF score for registering property (0–100)	76.15			DTF score for resolving insolvency (0–100)	55.82
Procedures (number)	4			Time (years)	1.7
Time (days)	19.5			Cost (% of estate)	22.0
Cost (% of property value)	3.4			Recovery rate (cents on the dollar)	36.9
Quality of land administration index (0–30)	18.3			Strength of insolvency framework index (0–16)	11.5

Source: World Bank Ease of doing business 2018: How China ranks?

3. Resolving insolvency: India has made huge and noteworthy progress on this parameter. From a rank of 136 to 103, a jump of 33 is difficult to ignore. "India made resolving insolvency easier by adopting a new insolvency and bankruptcy code that introduced a reorganization procedure for corporate debtors and facilitated continuation of the debtor's business during insolvency proceedings. This reform applies to both Delhi and Mumbai," says World Bank. China however is at 56. For example, it takes an average of 1.7 years to resolve insolvency in China. In India this time period is 4.3 years

Another important area in which both India and China rank poorly is 'dealing with construction permits'. This year World Bank has noted India's efforts to improve procedures. "India reduced the number of procedures and time required to obtain a building permit by implementing an online system that has streamlined the process at the Municipality of New Delhi and Municipality of Greater Mumbai." Nevertheless, at 181, a lot more still needs to be done to resolve issues faced by businesses in this area.

India has customarily been seen as a country which is not gracious for domestic and foreign investors. Regulatory hurdles and red tape are seen as the common problems that plague the system. The government's target of breaking into the list of top 50 countries is ambitious, yet achievable if it gets its priorities right on the areas mentioned above**.**

Ease Of Doing Business: How India Improved Its Ranking?

For the first time, India jumped a record 30 places to 100 in the Ease of Doing Business report for 2018, which is an influential 190-country barometer of competitiveness that many businesses likely consider for investment decisions.

Every year, the World Bank collects data about how easy it is to do business in 190 countries. Let's takes a look at how India fares in comparison to China, its economic competitor in the developing world, as well as its performance in the past 5 years:

PARAMETERS	**WORLD AVG.**		**CHINA**		**INDIA**	
	2014	**2018**	**2014**	**2018**	**2014**	**2018**
Days to Start a business	**25.6**	**19.8**	**32.4**	**22.9**	**32.6**	**29.8**
Days to get a Construction permit	**169.2**	**143.9**	**247.1**	**247.1**	**180.4**	**158.5**
Days to get Electricity	**105**	**91.7**	**143.2**	**143.2**	**101.8**	**45.9**
Days to Register property	**50.8**	**49.5**	**19.5**	**19.5**	**47**	**53**
Hours to file taxes each year	**262**	**240.1**	**318**	**207**	**251**	**214**
Days to Enforce contracts	**643**	**645.4**	**496.3**	**496.3**	**1445**	**1445**

The findings of the report underline how initiatives by both the states and the Centre are crucial. India mostly lags in parameters where state government interference is maximum, registering a property, starting a business or getting an electricity connection.

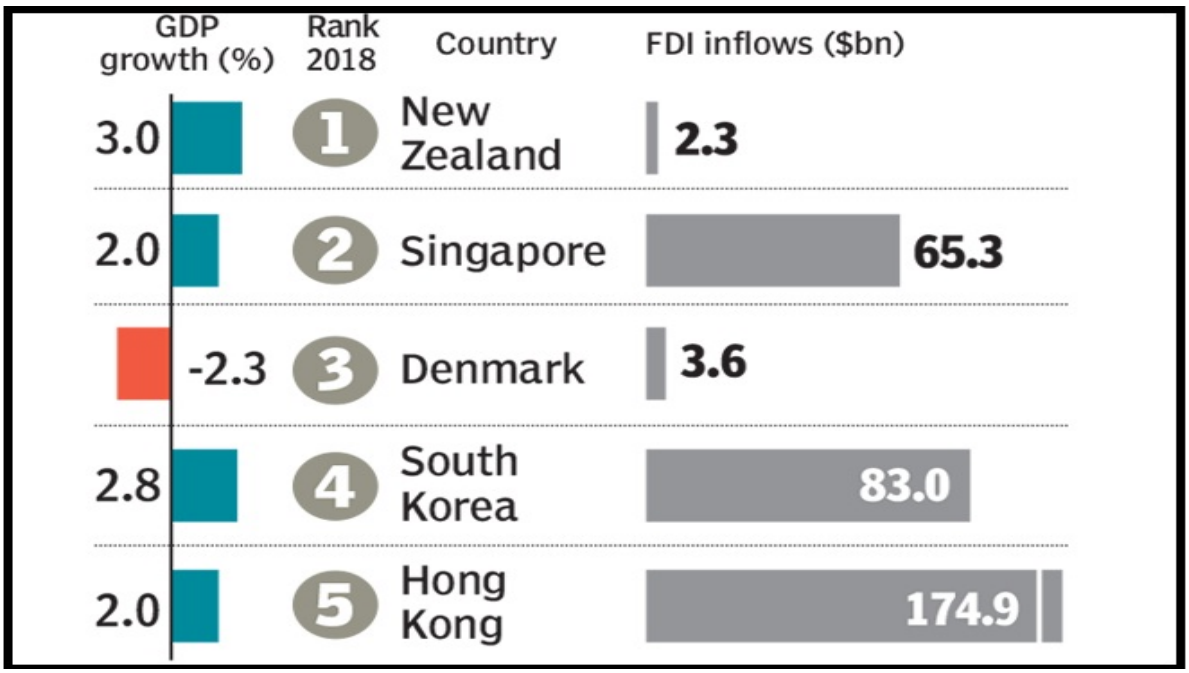
Though India improved its position by six ranks – from 185 in 2016 to 181 in 2017 – vis-a-vis getting construction permits, its position dropped by 16 ranks in another indicator – registering properties

The number of cities which will start issuing online permits will go up by March 2018. By March 2018, construction permit will go online for all 500 cities selected under the government's urban upgrade scheme, Atal Mission for Rejuvenation and Urban Transformation."

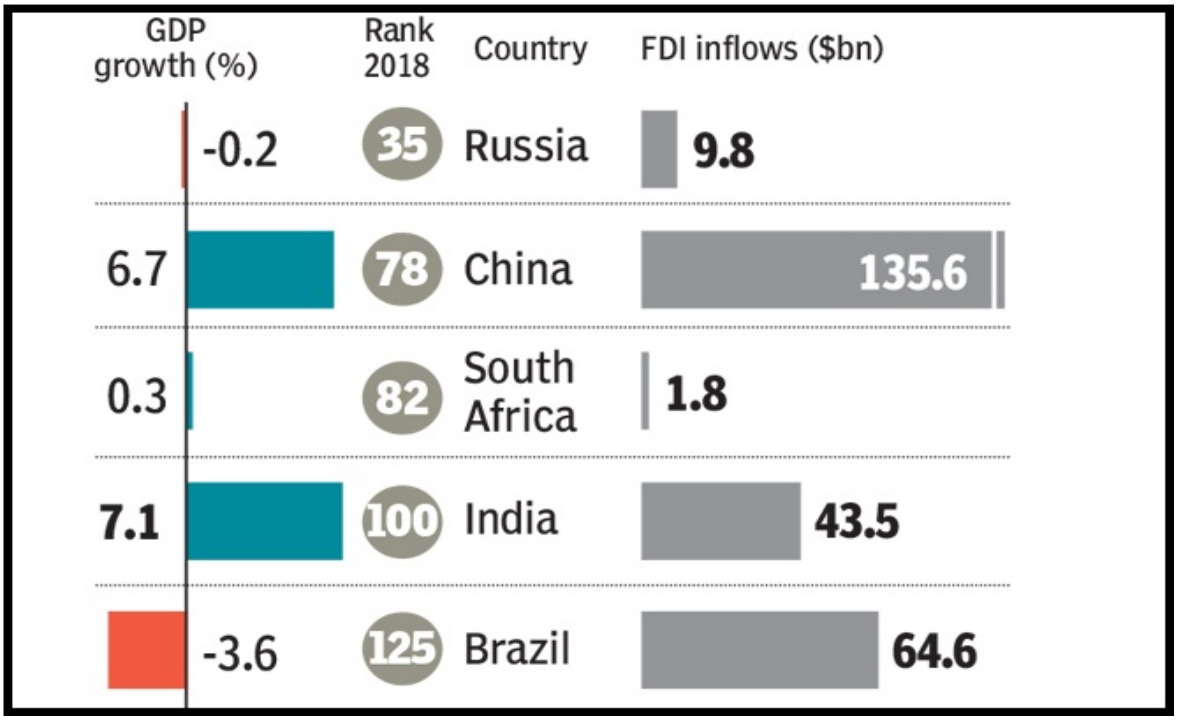
Ironically, despite reduction in the required number of days for starting a business in India, its rank dropped one place. This happened because the ranking is also affected by the performance of other nations. Presently, it takes 30 days to get a new business registered, down from 127 days 15 years ago, but "the number of procedures is still cumbersome for local entrepreneurs who still need to go through 12 procedures."

Does Ease Of Doing Business Affect GDP & FDI Inflows:

5 Easiest-to-do-business economies:



Compared with 5 emerging economies:



India FDI data for 2016-17; FDI data for others for 2015

Source: World Bank, UNCTAD, World Investment Report, Santander Trade website

Financial Year (April-March)	FDI in Billions	Ease of Doing Business Ranking
2008-09	**41.8**	**133**
2013-14	**36.05**	**142**
2014-15	**45.15**	**130**
2015-16	**55.56**	**130**
2016-17	**60.08**	**100**

Source: Department of Industrial Policy & Promotion, India

If we look at the above table which shows the inflows of Foreign Direct Investment in India there is a direct correlation between the inflows and Ease of Doing Business rankings. In 2008-09, when UPA-1 ended and UPA-2 took charge the India was at 133 in Ease of Doing Business rankings and when UPA-2 ended the ranking worsened and the inflows plummeted too. If we recall, those were the years of policy paralysis, retrospective tax conundrum, which showed the sheer lack of faith of investors to invest in the Indian economy as was clearly reflected in the rankings.

Reforms That Made It Possible

Following are the reforms that took India up in Ease of Doing Business ranking;

A. Paying Taxes:

- Payment of RSIC and EPFO contributions made fully online
- Corporate tax rate reduced to 25 % from 30 % for domestic companies having turnover below 50 crore
- Goods and Services Tax (GST) rolled out on 1 July 2017, subsuming multiple taxes

B. Protecting Minority Investors:

- Greater transparency requirement for interested parties transactions
- Greater shareholder protection through constitution of NCLT

C. Enforcing Contracts:

- 22 rank improvements over 3 years
- Commercial courts and benches set up to fast track resolution of commercial disputes
- National judicial data grid monitors and manages court cases

D. Starting a Business:

- Five services of name registration, company incorporation, obtaining DIN, PAN and TAN through newly introduced SPICe form
- Requirements of company seal and minimum paid up capital removed

E. Trading Across Borders:

- Single Window Interface for Facilitating Trade (SWIFT) implemented integrating 6 departments

- Three-tier Accredited Economic Operator programme expanded for direct port delivery/entry facilities to exporters and importers

F. Getting Credit:

- Scope of security interest registration under SARFAESI Act expanded
- Security creditors are given priority over government dues for recovery

G. Getting Electricity:

- An improvement of 108 rank within a short span of 3 years
- Time taken for new electricity connections reduced from 106 days to 46 days

H. Construction Permits:

- Single window system introduced in Delhi and Mumbai
- 90 % reduced in cost of water and sewer connection in Delhi
- Facility of third-party certification introduced in Mumbai and Delhi

I. Resolving Insolvency:

- Insolvency and Bankruptcy code enacted to bring India's insolvency law to international standards
- Professional institutions created for efficient handling of restructuring and insolvency proceedings
- Important role in decision-making assigned to creditors in restructuring on insolvent companies

Where India Slipped Up?

- In the category of starting a business, though, the need for local entrepreneurs to go through 12 procedures to start a business, as opposed to five in high-income countries, worsened India's ranking in the category to 156 from 155 last year.
- There was also a major fall in ranking in the category of registering property — from 138 last year to 154 this year — due to increase in time taken, cost and number of procedures for registration. Bhutan, in 75th place, is South Asia's highest-ranked economy, followed by India (at 100) and Nepal (at 105).
- India's corporate law and securities regulations were recognised as highly advanced, placing it in fourth place in the global ranking on protecting minority investors. The time taken to obtain an electricity connection in Delhi reduced from 138 days four years back to 45 days now, against a 78-day average in OECD high-income economies, the report observed. This put India in 29th place in the category.
- India still lags in areas such as starting a business, enforcing contracts and dealing with construction permits. It takes longer to enforce a contract today, at 1,445 days, than 15 years ago (1,420 days).
- Tackling these challenging, reform will be a key for India in sustaining the momentum towards a higher ranking. To secure changes in the remaining areas will require not just new laws and online systems but

deepening the ongoing investment in the capacity of States to implement change and transform the framework of incentives and regulation facing the private sector.

CONCLUSION

In the last three years, Prime Minister Narendra Modi's government has taken several revolutionary steps to improve the business environment in India. The jump in India's ranking in the World Bank's Ease of Doing Business Report, from 142 to 100, in three years, is a result of this. India has improved on indicators like dealing with construction permits, getting credit, protecting minority investors, paying taxes, enforcing contracts and resolving insolvency. But the process is not yet complete. This is an area where a country with ample business opportunities should not be satisfied with 100th rank. Therefore should strive towards 50th rank. The day is not far away where India will be in top 50 destinations for ease of doing business.

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A REVIEW STUDY ON BIOMETRIC AUTHENTICATION TECHNIQUES

Nidhi Sharma
Research Scholar
Department of Computer Science
Singhania University, Rajasthan
nid31sharma@gmail.com

ABSTRACT

With the advancement in the field of information technologies, the concept of security has become a vital issue and it becomes more essential to make the information fully secure. There are so many methods available to deal with security but, authentication plays very important role in ensuring security among them. Authentication is the process to identify the users prior to access to the system resources. In authentication, the users must identify themselves to the verifier. Biometric is the most reliable technique to authenticate the users. Biometric authentication is a security process that relies on unique physical or biological attributes of an individual to verify their identity. Biometrics provides the methods to recognize a person based on physiological or behavioural characteristics. By using biometrics, it is possible to identify persons authentically .This paper presents an overview, analysis and comparison of different biometric authentication technologies like fingerprint identification, face recognition, retina scanning, hand geometry, voice recognition, iris recognition, vein pattern analysis, signature recognition, DNA analysis with their advantages and disadvantages etc.

Keywords: *Security, Information, Biometrics, Authentication Technologies.*

INTRODUCTION

Information security is concerned with the assurance of integrity, confidentiality and availability of the information. There are so many tools and techniques available to maintain the security but authentication is one of the most popular as well as reliable method used in security. Authentication is the process to identify the users prior to access to the system resources. In authentication, the users must identify themselves to the verifier and this can be done with the help of following:

- Something known: this is a secret known only by the users that can be checked by the verifier. Examples are passwords, PIN numbers etc.
- Something possessed: this is something that can prove the identity of the users. Examples are smart cards, an identification card, credit card, passport, driving license etc.

- Something inherent: it is an inherent characteristic of individuals (a biometric) Examples are fingerprints, retinal pattern, facial characteristics, voice etc.

Biometric authentication is the analysis of physical and behavioural characteristics of the people. A biometric system is an authentication technique which identifies individuals by determining their specific physiological or behavioural characteristics. Biometrics provides better, more secure authentication over traditional authentication methods. This technology is used to maintain and improve the security. Biometric characteristics can be divided into two main categories:

a) Physiological biometrics is related to physical characteristics which differ person to person. Examples of this type of biometrics are fingerprints, face recognition, hand or palm geometry, iris recognition etc.
b) Behavioural biometrics is related to the behaviour of a person. Examples of this type of biometrics are voice recognition, signature etc.

Components of biometric system: A simple biometric system has four basic components which are:

1. Sensor module which is used to acquire the biometric data of persons.
2. Second component is feature extraction module where the acquired data is processed to extract feature vectors.
3. Next component is matching module where the feature vectors are compared against those stored in the templates.
4. Decision making module is the module in which the identity of the users is established or where the users are accepted or rejected.

REVIEW OF LITERATURE

Pankaj sareen discussed about various biometric characteristics and the basic technique and operation that every biometric system follows explaining various biometric methodologies with their comparison with each other. Then various decision factors for selecting a particular biometric technology for a specific application are discussed. He also discusses various biometric performance measures, areas of concerns, how biometric systems are being used and advantages and disadvantages of the biometric system in his paper titled" Introduction, Characteristics, Basic technique, its Types and Various Performance Measures".

Ramandeep Chahal in his paper entitled"A Comparative Study Of Various Biometrics Approaches" have discussed biometric traits with all of its traits and existing techniques for biometric authentication with fusion. In his paper, various advantages and disadvantages of various modalities of biometric system are

represented along with a comparison between different modalities of biometrics on the basis of biometric sample, accusation device, feature of biometric to be extracted with matching algorithm.

S.sravan Kumar and N.Anand Ratnesh in their paper titled" A Review on Different Biometric Techniques: Single and Combinational" have represented the comparison of different biometric techniques proposing a new technique known as combinational biometrics in order to provide more and better security. Each technique of biometric with comparison of results among them is introduced to find out best biometric technique or combination of them.

Debnath Bhattacharyya et.al in the paper entitled" Biometric Authentication: A Review" have presented a review on biometric authentication techniques with their future possibilities. They have also described the usability of various biometrics authentication systems, comparison between biometric techniques with their advantages as well as disadvantages.

Subhash Basishtha and Saptarshi Boruah in their paper titled "A Review on Biometric Authentication Techniques" have represented an overview of biometrics including some emerging biometric authentication techniques with some performance metrics associated with biometric technology.

Delac Kresimir, Mislav Grgic in the paper titled "A Survey of Biometric Recognition Methods" have given a brief overview of biometric methods both uni-model and multimodel with advantages and disadvantages of each.

RESEARCH METHODOLOGY

Biometrics Characteristics: The following factors are responsible to determine the appropriateness of physical or behavioural trait to be used in biometric applications:

- **Universality:** Every individual accessing the application should posses the trait.
- **Uniqueness:** The given feature should be satisfactorily different across individuals comprising the population.
- **Permanence**: The biometric trait of an individual should be sufficiently invariant over a long period of time with respect to the matching algorithm.
- **Measurability:** It should be possible to acquire and digitize the biometric trait using suitable devices that do not cause inconvenience to the individuals. The acquired raw data should be amenable to be processed in order to extract representative feature sets.
- **Performance:** The recognition accuracy and the resources required to achieve that accuracy should meet the constraints imposed by the application.

- **Acceptability:** Individuals is the target population that will utilize the application, should be ready to present their biometric traits to the system.
- **Circumvention:** It refers to the ease with which the trait of an individual can be imitated using artifacts (fake fingers) in case of physical traits and mimicry in case of behavioural traits.

ANALYSIS OF DIFFERENT TECHNIQUES USED IN BIOMETRICS:

A human body posses several physiological and behavioural traits as biometric features. The various biometric characteristics that are generally used are fingerprints, face, eyes, hand geometry, DNA, gait, keystroke, odor, signature, voice, keystroke pattern and gait.

Fingerprint Recognition:

Fingerprint recognition is one of the oldest methods among biometric techniques as fingerprints of each individual are unique. A fingerprint pattern is made up of lines and spaces. These lines are called ridges and spaces between the ridges are called valleys. In fingerprint identification, the ridges and furrows in the finger are used as the identifying trait since it is immutable. A fingerprint scanner is used to get the image of user's finger.

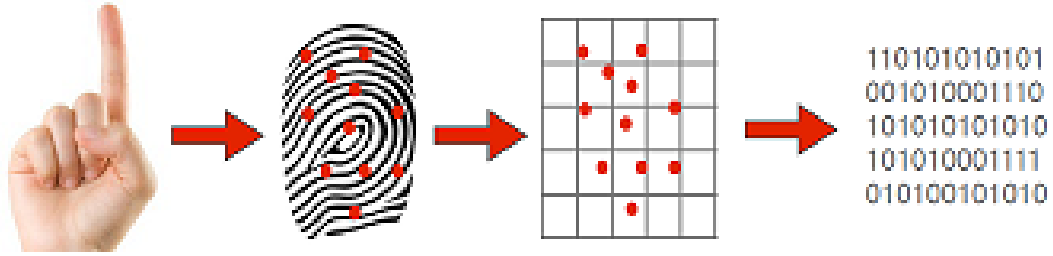

Fig 1 Fingerprint Recognition

This biometric provide high accuracy, requires little physical space for reading hardware to store the data. Also it is highly economical to use. A vulnerability of this method is reproducing a fingerprint for example with silicone. Users involved in heavy manual labour get their ridges and furrows changed. Dirty and marked fingers have a bad impact which can decrease the rate of rejection.

Face Recognition:

Face recognition is one of the most flexible techniques used in biometric identification method which uses distinctive facial features. It is the analysis of facial features or patterns for the authentication and recognition of individuals. Face recognition systems work by systematically analyzing specific features that

are common to everyone's face like distance between the eyes, position of cheekbones, sides of the mouth, width of nose, jaw line, chin etc. A simple camera or a web camera with good resolution is used in face recognition. After capturing the face image, the device computes a digital representation based on some features of the face. This digital representation is then compared with the stored one in database. If both match, the users are authenticated.

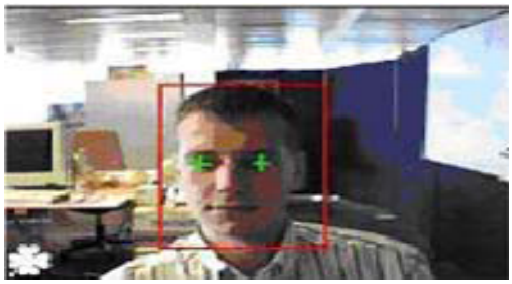

Fig 2 face recognition from body

It is very easy method to implement and use but does not provide 100% accuracy every time because it is easy to fool, because all what you need to fool biometric system is only a single photo of a user's face.

Eyes Feature Recognition:

For authentication there are two methods using eyes characteristics. The first is based on retinal recognition in which the users have to look in a device that performs laser-scanning of their retina. The device analyzes the blood vessels formation of the acquired retina image. This blood vessel configuration is unique for person to person. Retinal scanners use low power infrared laser and cameras to identify the patterns on retinal blood vessel. In retinal scanning, the person has to remove his glasses and place the eye very close to the scanner, watch at a specific point and remain still, and focus on a specified location for approximately 10 to 15 seconds until the scan is completed. A retina scan cannot be faked as it is impossible to forge a human retina.

Fig 3 image of retina

The retinal authentication systems provide very accurate results also more reliable because retina does not change all over life. The weakness of this technique is that it is difficult to use and users are also not comfortable to get their eyes very close to the light source.

The second method is iris recognition. Iris is a thin and circular structure presented in the eye that is responsible for controlling the diameter and size of the pupils and thus the amount of light reaching the retina of eye. Eye colour is in fact the colour of iris only that is different in each individual. Even twins have different iris patterns and everyone's left and right iris is also

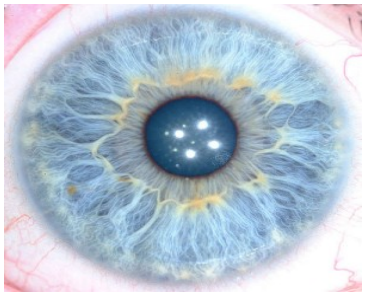

Fig 4 Image of iris

different. Iris scanning is an appropriate technique used to recognize individuals. Like retina scanning, there is no requirement of special lightening conditions in this method. This technique is very fast and accurate used for recognition. Unlike the retina scanning, there is no need for the individuals to be very close to the light in this method.

Hand Geometry Technology

Hand geometry is the recognition of geometric shape of the hand. The fundamental nature of hand geometry is the comparative dimensions of fingers and location of joints, shape and size of palm. The technique is very simple, comparatively easy to use and also inexpensive. Dry weather conditions or individual anomalies such as dry skin do not appear to have any negative effects on the authentication accuracy. In addition hand geometry information may not be invariant during the growth period of children. Also an individual's jewellery (e.g., rings) or limitation in dexterity (e.g. from arthritis) may pose challenges in extracting the correct hand geometry information. The physical size of a hand geometry system is very large and it cannot be embedded in certain devices like laptops. This biometric method cannot be used for very young and very old individuals.

Fig 5 Hand geometry technology

Voice Recognition

Voice recognition is the recognition of persons based on unique quality on their voice. Voice characteristic is the combination between physical and behavioural biometric. The physical features of an individual's voice are based on the shape and size of the appendages (like vocal tracts, mouth, nasal cavities and lips) that are used in creating a sound. These physical characteristics of human speech are different in each individual, but the behavioral aspect of the speech changes over time due to various factors like age, medical conditions (such as cold, cough) and emotional condition etc. Voice identification distinguishes a person by matching particular voice traits against templates stored in a database. Voice recognition systems must be trained to the individual's voice at the time of enrolment, and more than one enrolment session is often required. The voice recognition is used in many systems because it is cheap and easy to setup but less accurate than other biometrics authentication methods, and some errors can also occur. This authentication technique can be easily fooled by recording the voice of anyone.

Fig 6 Voice Recognition

Signature Recognition Technique

A signature is basically a behavioural feature of an individual which is unique to him/her. Signature requires contact and effort with the writing tool and this technique of biometric authentication is accepted and used in official, government and commercial transactions as a method of authentication. Being a behavioural biometric trait, signatures also changes over a period of time and also affected by physical as well as emotional conditions of the individuals. Signature of some people varies a lot. Further, the professional forgers may also copy signatures that fool the signature authentication system. There are two approaches to signature verification: static and dynamic. In static signature verification, only geometric features of the signature are used for authenticating a personality. In dynamic method of signature verification, not only the geometric features but also the dynamic features of signature like velocity, acceleration and trajectory profiles of the signature are also used for authenticating the individual. The signature impressions are processed as in a static signature verification system. The dynamic signature verification is more reliable than static method because the forger has to not only know the impression of the signature but also the how the impression was made.

Fig 7 Signature recognition technique

DNA Analysis:

Deoxyribonucleic acid (DNA) is the most reliable biometrics. It is in fact a one-dimensional code unique for each person except for the fact that identical twins have the identical DNA pattern.. To perform a DNA analysis the user has to give some of his cells, for example by giving a hair, or skin. This biometric is currently most used in forensic applications for identification. Three issues limit the utility of this biometric for other applications

1) Contamination and sensitivity: It is easy to steal a piece of DNA from an individual and use it for an unknown and invalid purpose.

2) No real-time application is possible because DNA matching requires complex chemical methods involving expert's skills.

3) Privacy issues: Information about susceptibilities of a person to certain diseases could be gained from the DNA pattern.

Fig 8 DNA Analysis

Gait Recognition:

The term Gait refers to the manner in which a person walks. Gait is not supposed to be unique to each individual. This is one of the newer technologies. Gait is a behavioral biometric, it can be affected by several factors like footwears, walking surface, pregnancy in women etc. and cannot be remain same over a long period of time due to change in body weight, physical injuries or serious brain damage. It is not supposed to be very distinctive but can be used in some low-security applications..

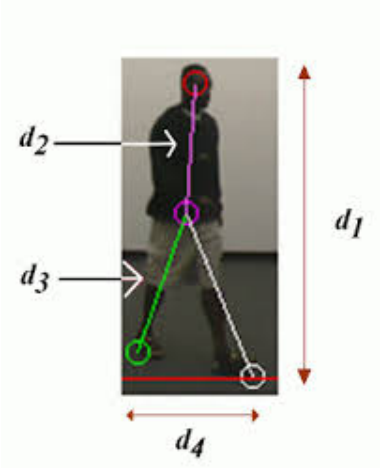

Fig 9 Gait recognition

Keystroke Dynamics:

It is believed that each person types on a keyboard in a distinctive way. It analysis the patterns in the way the users type the keys on keyboard like the time required to find the keys, total time(how long a person holds down a key), time duration between the keystrokes etc . This is a behavioral biometric ,large variations in a person's typing pattern may occur due to change in emotional state, position of the person with respect to keyboard, type of keyboard used etc. It provides a good authentication method in term of uniqueness, but

the problem is that a user can have different keystrokes if he is stressed, or tired. It is the easiest biometrics authentication method to implement.

Fig 10 Keystroke dynamics

Odor:

It is known that each object exudes an odor that is characteristic of its chemical composition and could be used for distinguishing various objects. The primary odor of a person contains constituents that are stable over time regardless of diet or environmental factors. Secondary odor contains constituents that are present due to diet and environmental factors. Tertiary odor contains constituents that are present because of the influence of outside sources such as lotions, soaps, perfumes, deodorants etc. An array of chemical sensors is used in odor recognition.

APPLICATIONS OF BIOMETRICS:

Biometrics applications can be categorized into three groups:

1. Commercial applications such as computer network login, electronic data security, e-commerce, internet access, medical records management, distance learning, use of debit/credit card, use of mobile phone, physical access control etc.
2. Government applications such as national ID card, driving license, passport control, social security, welfare disbursement, border control etc.
3. Forensic applications such as criminal investigation, parenthood determination, corpse identification etc.

Commercial	Government	Forensic
ATM	national ID card	corpse identification
Access control, computer login	Driving license, voter registration	criminal investigation

Mobile phone	welfare disbursement	parenthood determination
e-commerce, internet banking, smart card	Border crossing	Missing children

Table1: Applications of Biometrics

FINDINGS AND SUMMARY

Advantages of Biometric Authentication

The Biometric authentication has several advantages. The biometric characteristics that are used in authentication systems are distinctive for each person. The major advantage of the biometrics is that the individuals have their physical and biometric traits always with them. For example, someone can forget a password or lost an access card but it is impossible to forget his fingerprint, gait, and signature. Biometric is more practical method for the user as compared to remember a number of passwords. Thus it becomes more difficult to attack a biometric authentication system as attacking an authentication system based on password or access card. Passwords can easily be guessed or stolen by anyone but it seems more difficult to fool a good quality and reliable biometric authentication system.

LIMITATIONS OF THE BIOMETRIC AUTHENTICATION

The first negative aspect of biometric authentication is that some methods are not suitable and can't work for some individuals. For example, it is impossible to use fingerprint authentication for the individual who has no hands/fingers. Some behavioral authentication techniques can't work if something is changed in individual's physique like if he/she has new shoes, perhaps his/her gait will vary, and it can be a problem to authenticate him/her. Furthermore if one of our fingers is severely injured, then the fingerprints authentication will not work accurately and the wrong output may be produced. Some characteristics as our facial features can also change with the age. Moreover, most of the biometrics authentications systems are still in under developing state and it can be expensive, complex to install and use them. Some biometrics authentication systems are not really user-friendly, easy to use such as DNA or retinal recognition. It is also possible that users don't want to use such system. Biometrics authentication also raises the problem of respect of privacy. If biometric is general in our daily life and all our activities are stored in database, there is no more privacy. Personal information taken by biometrics device also can be misused. We must decide in which system we must authenticate by biometrics and in which system we must not.

CONCLUSION

Biometrics is being used all over the globe and is undergoing constant development. Each biometric trait is useful and its reliability depends upon the application area. Biometrics is the one of the best authentication's method and obviously offer several advantages over traditional methods like passwords, ID cards etc. because biometric attributes cannot be lost, stolen, transferred or forgotten and provides better security as they are very difficult to forge but still they are far from perfect solution for security, a lot of work has to be done on both technical and ethical sides. The use of biometrics also raises several privacy questions.

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BIG DATA INNOVATION AND CHALLENGES

Lalita Devi
Research scholar
Computer Science and Application
Singhania University, Jhunjhunu, Rajasthan
lalita7882@gmail.com

Sandeep Maan
Associate Professor
Computer Science and Application
Govt. Girls College, MDU, Rohtak
sandeepmann23@gmail.com

ABSTRACT

Today's number of companies and agencies are growing in which data is a strategic asset to maximize the goal. Different kind of data generated from various sources and after that data will analyse to provide enormous competitive advantage for corporations, helping the businesses. Massive amount of digital data generated and collected from surrounding which makes data as Big Data. The main aim of this paper is to discuss the various approaches of Big Data and challenges. Different challenges faced by Big Data like storage issue, privacy and security, access to data, distribution of data. Big Data can be structured and unstructured which is used in sense of technologies. Structuring of this Big Data is impossible without analysis. Different types of techniques and algorithms applied to analyse the data and to extract the valuable information which is used for further decision making.

Keywords: *Big Data, Challenges to Big Data, Big Data analytics, Role of big data analytics.*

INTRODUCTION

Today's Big data used everywhere in our life. Big Data can seen everywhere like in banking, business, government agencies, stock exchange, healthcare, e-commerce, education, media etc. Big Data can found all around us in three form, structured, semi- structured, unstructured. Big Data implies the large set of data which is impossible to manage and process due to their size complexity. After collecting data from various sources it converts into valuable information. Big data analytics is the process of extracting actual or required data, discover the hidden pattern and information.

Big Data: Big Data basically refers to as 3 V's are volume, velocity and variety.

Volume

Many petabytes of data generated from various resources which dealt with the data volume. Due to this the complexity of data increased.

Velocity

How frequently data generated is dealt with velocity with in time.

Variety

Generated data is not only textual but also video and audio data is in exponential form.

New types of data open the challenges and traditional databases are not sufficient to store and process this large set of volumes.

Big Data Analytics

Different types of data collected, stored and processed with the data analytics. Big data analytics is the process of getting valuable information after refining and cleaning of large data sets. With help of Big Data analytics different types of organizations and agencies use the data for future use. Big data analysis not helps us only to gives the information but also helps to understand the data and to use in further for decision making. The main goal of data analytics is to make data valuable for organizations and businesses. Data can be analysed by using different techniques like statistical analysis, text analytics and data mining.

Due to various challenges of size, velocity, variety of big data complexity of storage of big data, processing in real time is impossible. So the newer technologies involved in Big Data Analytics like Hadoop and related tools such as YARN, MapReduce, Spark, Hive and Pig as well as NoSQL databases.

Different levels of Big Data

There are six major levels of Big Data.

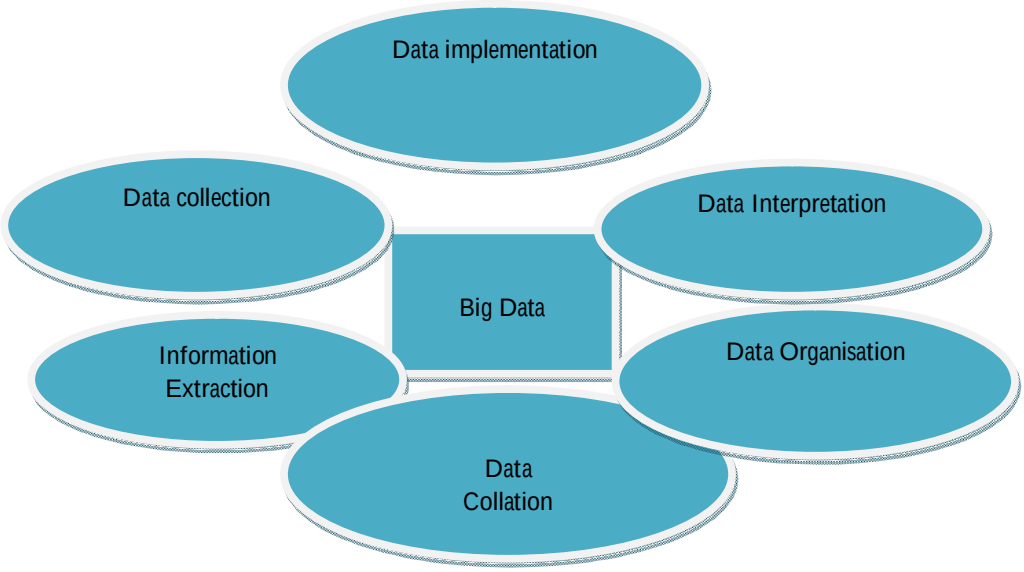

Figure: 1 Various levels in Big Data.

DATA COLLECTION

Data collected from various sources because the data rate rising exponentially. Smart devices and web services generated the data continuously with high speed and variety.

Information Extraction

After collecting of data, data will store and different analytics techniques are applied for refinement and to convert into valuable insights. Due to variety of data and continuity, data is complex to extract. Depending on nature of data information extraction is also a challenge.

Data Collection

Data from a single source is not sufficient for prediction and judgment. For example in weather forecasting different techniques used to major the temperature and humidity same as in Big Data various pictures are used with textual data.

Data Organization

After data extraction data is aggregated and stored in particular format for ease of future use and this is also called structuring of data.

Data Interpretation

Once the data is Organized and stored, Queries are made to satisfy the visualization of data. Raw data or primary data cannot be used for decision making.

Data Implementation

The final and last level of Big Data is to implement the data in processed form after the all other levels. Organizations used to extracted information for further decision making.

ISSUES IN BIG DATA

Privacy and Security Issue

Not only the large organizations are using the big data while small and medium industries are also using the big data. Due to complexity of data, data sets are difficult to manage and process. So the various challenges arise in Big Data processing. Such issues affect the performance and development of system. Due to dynamic data security technologies are inefficient to manage that data, so the privacy and security is also major challenge.

Storage and Processing Issue

Data is generated from different sources in different formats due to velocity, variety and volumes of data. Data can be structured or unstructured format.

The unstructured data needs to store in structured format to access in future for advanced database. Current methodologies and techniques of data mining cannot handle these huge data volumes. So in future data analytics structure, distributed Data mining, distributed processing, Data compression and secured and with in real time sharing is also a challenge.

Quality of Data

Data generated from heterogeneous sources and of different kind or in different format. If data transaction is required it will be in one format but Big Data comes in various format, which a challenge.

Sharing of Data

The sharing of Data among the various organizations is also a big challenge. Each Organization has its own warehouse to contain the confidential information. Some data may be secured to access publically. The challenge here is not to cross the boundaries during the sharing of information.

ROLE OF BIG DATA ANALYTICS

- Big Data used everywhere in the world like in **organizations, hospitality, Management, healthcare, Infrastructure development, education, banking, energy, transportation etc.**
- Big Data analytics used to make cities smart. Smart cities leads to make all the public information online, cost reduction and resource consumption.
- With the IOT (internet of Things) data will be exchanged and can collect from different sources. It allows connecting various things physically and creating a great opportunity for future.
- **Smart cities** mission can be fulfilled by making the cities with **Smart Education, Smart Healthcare, Smart Infrastructure, Smart Transportation etc.**
- **Big Data** analytics also used in Indian Politics for prediction.
- **Big Data** analytics used by different organizations for further decision making.
- **Big Data** used by different industries for risk analytics.
- **Big Data** analytics used for demand and capacity management of consumer.
- **Big Data** analytics used in weather forecasting.

CONCLUSION

From above discussion it is clear that Big Data is very important in every aspect**.** Big Data is a basic building block to smart development and growth. Web Based services and solutions provide the fast development and processing. Big Data analytics help in future prediction by collecting data from various physical devices connected by the network. Big Data is also a part of Digitization with the IOT (Internet of things) to make India Digital and Smart because everything in technology is all about the IoT. Data can be in different format and of different types collected from heterogeneous sources and Due to dynamic nature of data various challenges faced to Big Data. In which **privacy and security, quality and sharing of data in distributed environment** are the major concern. It is hoped that this study will help to understand the Big Data, stages of data and major concern of Big Data.

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BIOMETRICS: AN EFFECTIVE TOOL FOR INFORMATION SECURITY

Preeti Aggarwal
Research Scholar
Department of Computer Science
Singhania University, Rajasthan
dolly.preety@gmail.com

ABSTRACT

Information security's mainly focuses on the balanced Security of the data. Recent advancement in biometric technologies coupled with the increased threats in information security has expand the applications of biometric systems to safe- guard information and its supporting processes, systems and infrastructures. In this we discuss the technical issue and challenges faced by biometric technologies within the physical and logical access control applications of information security. In this paper, we provide an overview of biometrics and discuss some of the most important research issues that need to be addressed for making biometric technology a valuable tool for providing information security. The discussion includes concerns on the system performances with regard to robustness to the actual operating environment and recognition capability of different biometric traits. It also addresses various security fear which include spoofing and repeat attacks.

Keywords: *Biometric, Physical & logical access, 'Liveness' detection, Biometrics traits, Multimodal Biometrics System.*

INTRODUCTION

Information security basically a grouping of the secrecy, uniformity & acceptance of information. It essentially provides the essential security to information and the supporting process, systems and infrastructures from various forms of possible fear. Both physical and logical access controls are involving the essential security scheme in information safety [6, 1]. Physical access controls ensure that only official persons are provided way in to buildings or rooms containing IT infrastructures, certificate or substantial, etc. On the other hand, logical access controls defend the computers, network facilities and information systems from fear of unofficial access.

Physical and logical access controls are essentially based on user validation whereby an individual's uniqueness is acknowledged during any one of the three following property [3,2]:'by something you are'(for eg, appearance, fingerprint, iris, voice, gait, signature etc.),' by something you have'(for eg. ATM cards, passport, etc.),' by something you know' (for e.g.- Passwords and PIN numbers). Unluckily, the second and third method are at risk of being shared, lost, duplicated, or stolen[4].. But the first method that relies on 'by something you are' is depends on the biometric system. Since biometric system are special to persons, they are more consistent in proving the individuality than coupon and knowledge-based technique; however, the set of biometrics identifiers raise privacy concern about the final use of this information.

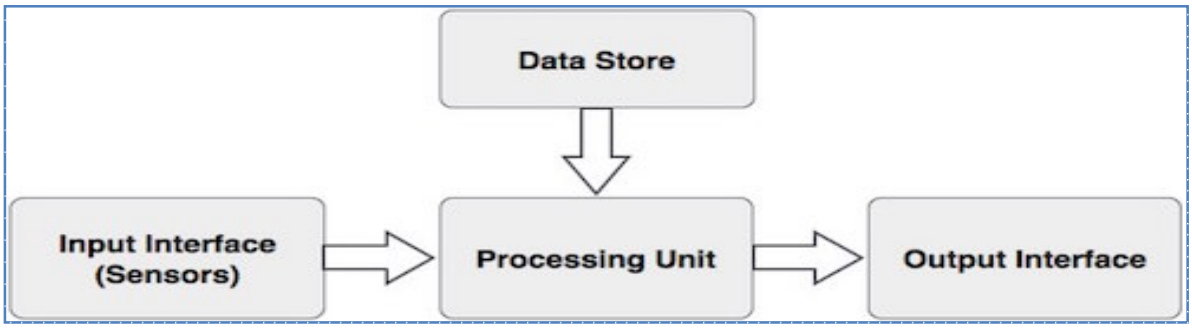
Biometrics described as the science of recognizes an human being based on his or her physical or behavioral behavior, it is start to gain getting as a correct method for formative an person identity. Biometric systems have now been used in different commercial and national applications as a way of start individuality.

Biometric System's Basic Components.

Biometrics system can be classified in to four basic components.

- Input Interface(sensors)
- Output interface
- Data store
- Processing unit

Figure1.The Components of Biometric System



- **Input Interface (Sensors):-** In Input crossing point apparatus biometrics system converts human biological data into digital form.
- **Processing Unit:** The processing unit components behave like a microprocessor which

process the sensing data into a processor.

- **Data Store:** In this component data is being stored in this. The database stores the enrolled sample, which is recall to execute a equal at the time of confirmation.
- **Output Interface:** This component can be accept or reject the user. It completely depends upon the data stored in processing unit.[8]

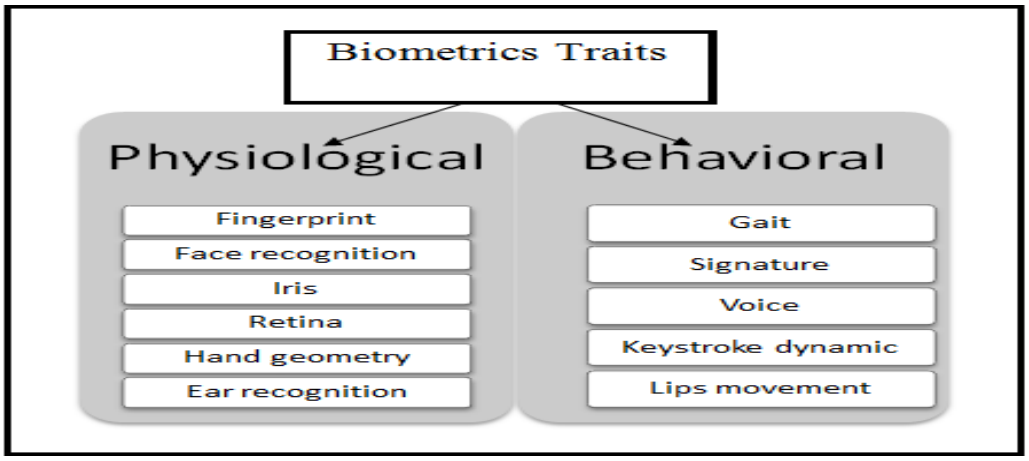
Classification of Biometric schemes

Mainly, Biometric system can be classified in two categories.

- **Physiological Classification**
- **Behavioral Classification**

Every human being has Static and dynamic known as Physiological and Behavioral characteristics. This can be also used for biometrics person identification. Physiological and Behavioral can be defined by many examples. Examples of Physiological-based biometrics include face recognition, hand geometry, palm print, fingerprint, iris recognition, DNA, retina and recognition of blood veins pattern. These attribute cannot be changed over the time. They are static attribute of every person. But in case of Behavioral biometrics it depends upon the person performance. Examples of behavioural-based biometric systems are voice recognition, keystroke dynamics, signature verification and gait analysis.

Figure 2. Classification Diagram of Biometrics System.



RESEARCH OBJECTIVE

Basic objective for using the Biometrics System is that now a days when we are using lots of digital equipment. It is very much necessary for us to protect our information from illegal abuser. So biometrics used 'identification' or a verification system.

First, in **identification** method the system perform a one-to-many evaluation, in this biometrics system person by camera or face recognition system in which data is now being stored in record.

Second, in **verification** (or certification) mode the system perform a one-to-one evaluation in this system person's uniqueness is prove by his/her own stored identity. It can be either face recognition or retina identification system.[4]

LITERATURE REVIEW

A. K. Jain [1] in his paper Biometrics: A tool for information security, explain that biometric is an effective tool for information security. It provides us the overview of biometrics tool and discusses some of the silent features of the biometrics system that can be the biometrics system an effective tool for enhancing the system security. Biometric can be defined by the combination of physical and behavioural traits. It can be used in many application such as civilian, commercial and forensic system to used for better performance and security. Biometric also described some of the limitation which is being introduced when we are using this biometric system in different type of application.

Prabhakar S. [2] :In his paper Biometric recognition: Security and privacy concerns, biometrics describe that it is the better method to enhance the security and performance of any system as compare to any other traditional system which is being used to recognition of any person. In some of the application biometrics is the best supplement tool for enhancing the system security and performance. In his paper some person mention that the biometric is a completely effective tool for security.

K. A. Rhodes, **[3]**in his paper Information Security: Challenges in Using Biometrics view on current technical issues and challenges of biometric system as physical and logical access control tool in information security. Each topic in this paper explains the various techniques to enhance the system security. In short, both aspects remain as two technical issues to be studied and addressed in our future work.

Gurpreet Singh [4] in his paper A Review on Biometric Recognitions introduce that human can be identified by their characteristics. In traditional method identification involve the by using the PIN and password. But Biometric present the technique for identification i.e. fingerprints, voice recognition, thump impression, DNA, palm recognition. This paper gives the overall survey of the different technique to expand the features for recognition which can be helped to other researcher for obtaining the information.

RESEARCH METHODOLOGY

Research Methodology refers to the knowledge of the particular area of investigation of any discipline which includes important terms used in the research work tools to be used for data collection and procedure of the data collection. Here we describe some tools and techniques.

1. **Liveness Detection:** Liveness detection is also known as vitality detection. In biometric system liveness detection means the aptitude of the system to identify a user during enrollment and verification process. This is mainly used for differentiate whether the user is live or not. If the system is designed to secure against spoof attacks with dummy face, fingerprint and iris, it must also check that the existing biometric data belong to the live human being or not who was firstly enrolled in the system. In fingerprint system scan be fooled with synthetic fingerprints, static facial images can be used to fool face identification systems, and static iris images can be used to fool iris recognition systems. For making a

secure biometric system, liveness detection is a very good method that determines whether the sample known by user is live or not.

2. **Multimodal biometric:** Multimodal biometric systems use many techniques or biometrics to overcome the boundaries of unimodal biometric systems.[9] For illustration iris identification systems can be compromise by aging irises [5] and finger scanning systems by worn-out or cut fingerprints. While unimodal biometric systems are restricted by the consistency of their identifier, it is doubtful that several unimodal systems will skill from identical limits. [11][12].
3. **Watermark-Based**: The basic idea of watermarking is to add or subtract a watermark signal to the host data to be watermarked such that the watermark signal is inconspicuous and safe.
4. **Cancelable biometrics:** Cancelable biometrics refers to the designed and carefully repeatable twist of biometric features in order to secure approachable user-specific information. If a cancelable feature is support, the deformation individuality is misused, and the same biometrics is mapped to a new template, which is used subsequently. Cancelable biometrics is one of the major categories for biometric pattern security reason besides biometric cryptosystem.

DATA ANALYSIS OR EXPERIMENTAL ANALYSIS

Comparison of Various Biometric Technologies

- **Universality** means that every person using a system should have the feature.
- **Individuality** means the feature should be suitably unique for persons in the connected people such that they can be impressive from one another.
- **Durability** relates to the manner in which features be different over time. More particularly, a quality with 'good' permanence will be reasonably invariant over time with value to the correct similar algorithm.
- **Measurability** relate to the ease of acquirement or measurement of the attribute. In adding, acquire data should be in a form that permits following giving out and deduction of the important feature sets.
- **Performance** relates to the accuracy, speed, and power of skill used
- **Suitability** relates to how well persons in the relevant people accept the ability such that

they are organized to have their biometric feature confine and evaluate.

- **Circumvention** relates to the unfussiness with which a feature might be replicate using an article or interchange.

Attack on Biometrics system:

It is important to know that full proof system is not being planned. Every system has some downside. Security is a risk management approach that identify, controls, reduces tentative events that may badly affect system resources and information. Biometric system is also affect with some attack which affects the security of biometrics system. e.g. To make fake individuality of face, iris & fingerprints.

RESEARCH FINDINGS

Benefits of biometric system:

- **ID Correctness:** biometric identification has the possible to exactly recognize someone without a shade of a doubt almost 100% of the time. But with a **multimodal biometric** identification system you can eliminate those factors. Multiple biometric attribute can recognize someone with 100% confidence every time you scan them.
- **Reduced Cost:** biometric system help to reduce other expenses eg. new ID cards, and wronged ID cards. Biometric identification also generates cost savings for IT by eliminate the time overwhelming and resource demanding need to rearrange passwords.

- **Accountability:** Each and every action or matter will be recorded and clearly accepted by the individual related with it which reduce the option of system exploitation and scam

- **Complicated to create:** Biometric attributes are almost impractical to create or unused.

- **Expedient:** Biometric technology makes person identification suitable without the need to carry around ID cards or memorize difficult passwords. Due to the fact that passwords can be onwards or easily guess and the fact that ID cards can be injured, swap, or joint, biometrics are more appropriate because individual physiological characteristic are evermore with you.

- **Time Saving:** Biometric systems can be easily used in offices for managing the attendance system and surveillance with managing through a single window on a computer. Biometrics provides centralized control for protection administrator.

- **Protection:** The problem with efficient password systems is that there is often a chain of numbers, letters, and symbols, which make it hard to learn on a normal base. The difficulty with token is that they can be easily stolen or misplaced

Limitation on the Biometric system:

- **Biometrics is not a secret:** different passwords and cryptographic keys that are known only to the user, biometrics such as face and fingerprints can simply be record and potentially changed by biometrics experts without the user's approval.
- **Biometrics cannot be cancelled:** Passwords, PINs, etc., can be reset if compromise. What about your biometrics? It is clear that tokens such as credit cards can be replaced if stolen. Still, biometrics is permanently associated with the user and cannot be replaced if compromised.
- **Compromised biometrics:** Biometrics provides usability advantages since it obviates the need to believe and deal with multiple passwords. still, this also means that if a biometric is compromised in one application, frequently all applications where the particular biometric is used are compromise.
- **Tracking:** It is likely that the same biometric might be used for various applications and locations, the user can potentially be track if organizations collude and share their respective biometric databases while traditional verification schemes requires the user to keep different identities to prevent tracking. The detail that a biometric remains the same presents a privacy concern.[10]
- **Effortless**: **T**he best thing about using the biometrics system is that hardware and software using in this system can be used without any training and additional attempt.

- **Security**: In conventional approach system problem is that secret code, pin number and any other code are can be simply stolen and track by other user but in biometrics system by using the person own uniqueness .there is less chances of stolen the data. So this is more secure.

- **Time saving:** biometrics system is much more time saving as compare to another system. A person can be recognized or discarded in a subject of seconds. For those business owners that understand the value of time management the use of this technology can only be expensive to your office income by growing competence and reducing costs by eliminate scam.

CONCLUSION

Biometric system authenticates an individual based on their biometric behavior. It is extremely safe as compare to conventional methods of authentications. Biometric is basically a model identification system. Now a day biometric is playing key role in many application. Even though there are some problems with biometric systems but it is also attractive a rising technology in the field of safety. To address these issues multimodal biometric is used, which use more than one feature. This significantly increase the performance. And with a multimodal biometric recognition system you can eliminate many factors. Multiple biometric attributes can recognize someone with 100% belief every time you scan them. This is mainly used for differentiate whether the user is live or not. If the system is planned to secure against spoof attacks with fake faces, fingerprint and iris, it must also check that the existing biometric data belongs to the live human being or not who was firstly enrolled in the system.

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PROBLEMS & PROSPECTS OF WOMAN ENTREPRENEURSHIP-A CRITICAL STUDY

Komal Sharma Bhardwaj
Research Scholar
School of Management
Lingayas University,
Faridabad, Haryana, India

Dr. Urvesh Chaudhery
Professor, Dept of Management,
Advanced Educational Institutions,
Palwal, Haryana, India
Email: urvesh.chaudhery@gmail.com

ABSTRACT

For the growth of any country an entrepreneur plays an important role in the development of its economy. An entrepreneur is the heart or sole of any economy. Now a day's scenario has been changed and females are now educated and they are not only take the responsibility of an entrepreneur .Even it is not so easy for a women to enter in business as she has to face so many problems and challenges before coming or showing her presence in the market .In the tough competition of market females have to suffer more as she has dual responsibility of family or and do many other works in different fronts.. At the same time when she is the owner of a company she has also responsibility as a mother of a child, as a wife of a person, sister of a brother ,daughter in law etc ,so it is not so simple for a female to be an entrepreneur. In India almost 50% of population is women even then the number of female entrepreneurs is very less. In terms of figure if we tell according to 2017 data it was only 7.36% or out of 361.76 lakh enterprises, only 26.61 lakh have women in top[1]. There are so many problems that are faced by the women entrepreneurs in social & economic frames while running or starting an enterprise. In this paper the authors are trying to find the problems faced by female entrepreneurs and their solutions, in addition to they are discussing about the change in status of women entrepreneurs. The main motive to write this paper is to find some solutions of the problems or challenges faced by the women entrepreneur by reviewing the various work done by so that the solution for their problems can be solved.

Keywords: *Women Entrepreneurship, Women Entrepreneurs, Challenges, Finance, Economy*

INTRODUCTION

An entrepreneur is one who is busy in financial or economic activities and regularly taking some new & creative steps to develop his business. Entrepreneurship deals with creativity and re thinking . For being a successful entrepreneur you should have an art to take best out of the waste. Entrepreneurs not only makes profit for his own but also provide work to so many people. He is actually serving the society by creating employment opportunities in the market and also by optimum utilisation of the resources .Mostly it has been seen that males are becoming entrepreneur, normally males are financially strong and supported by their families. But it is very difficult for a female to have financial support from her family especially for starting the business. Now a day's situation is changed, more and more females are doing business as entrepreneurs or are in higher positions in the enterprises/organisations. Entrepreneurship knows no boundation even it is not hereditary to any person irrespective of his/her gender, caste or religion anyone can start a business. In past few years, scenario has been changed due to urbanisation & industrialisation; more & more females are coming forward as an Entrepreneur. Not only as starters but they have become the role model for many. This is due to the education & awareness only that is rising day by day .Even govt. has also taken so many steps to raise the living standard of the women. Doing Business not only help them in earning, and make them financially strong but it also gives them motivation, self -confidence ,independent & develop her personality too. Entrepreneurship is the creativity of a person, more he is creative more he will be successful in his venture. A country which is rich in so many resources needs more & more entrepreneurs who can do the best use of these resources. Entrepreneurs are the one who can make a society financially & economically strong. Even it is confirmed by various sources that "the women entrepreneurs play a crucial role in the economies across the world"1.In U.S,1.5 trillion dollars worth of sales is generated by more than 9million firms owned by the female entrepreneurs, while according to statistics only 26.6 lakhs MSME units are there in India. Women is doing business in every field whether it is production, marketing ,services or trading sector. It is very clear that in the growth of an economy women plays an important role, so it is necessary that a women friendly environment must be created so that they can do their business easily.

RESEARCH OBJECTIVE

The condition of women in India is merciful. Even so much awareness about rights of woman, acts has been passed to save guard their rights. Even then the condition of women in India is pitiful .To improve the status of women, it is necessary to know about them. The objective of writing this paper is to find the problems of women entrepreneurs in India and try to find the solutions ,that how can we solve their issues.

LITERATURE REVIEW

Many studies have already been done regarding entrepreneurship in under developed and underdeveloped countries but not much study is done in relation to female entrepreneurship.(Key et al.,2003:Jahanshashi et al.2010).According to Amha and Ademassie (2004) gender related challenges are faced by the women entrepreneurs in Ethiopia. As per OECD,2004,female entrepreneurs in Turkey has to face many obstruction and challenges while establishing ,increasing and running their organisations. They have to face many societal limitations such as patriarchal beliefs, traditional gender roles, poor education and poor experience of labour force. According to Hendricks, 2005 , In south Africa males are more dominant as compare to females in entrepreneurial activities. Same case is with Bangladesh also as per Hossain 2007.

An important study done in India is by Rani, in 1996 who had highlighted the various issues of Indian female Entrepreneurs. Her study was related with the examination of social and economic background of women entrepreneurs, she also studied the strengths, weaknesses and motivational factors of Indian women. She worked on these factors to analyse their threats and opportunities in Indian culure and Society. She also find out that Indian women give priority to their families, even their family support them in doing business still they feel that that home management is the duty, which comes first. Even it has been found that they prefer small enterprise or side business which can be easily managed along with the family. They used to sacrifice their career for their family and children .Even they don’t want to shift after leaving their family for a good job or opportunities. Work-Home conflict are normal as male bypass the working schedule of the females outside the home., it is just time pass for them. Vyas and Singh in 1993 studied the role of family, psychological issues and social factors that impact the entrepreneurship in India. According to Singh (1997).the personality of a person if motivated can

influence entrepreneurial behaviour of a person. As per Pujar (1989), the elements which help in achieving success are autonomy, financial independency and a need for achievement. Some of the main qualities which are required in a person to be a good entrepreneur are ambition to prove himself, risk taking habit and good social relation as analysed by Kaza,1996

DEFINITION OF WOMEN ENTREPRENEUR

The term "entrepreneur" is derived from a French word i.e. "Entreprendre" which means to undertake. An entrepreneur is a person who combines capital and labour for production. Women Entrepreneurs can be defined as a woman or group of women who owned a business enterprise & taking decision is her sole responsibility. It means that she is the decision maker of the business. According to Government of India a women can be called an Entrepreneur if she has minimum financial interest of 51% of the capital in the enterprise owned & controlled by her. Also she is giving 51% of employment or jobs to the women only. Today‘s women are not confined to her home only she is showing her talent and skills to the whole world. She is handling her office as well as she manages at her home. Women are said to be the best managers of the world. In the economy of the developing countries women entrepreneurs are giving their due share.

STATUS OF WOMAN ENTREPRENEURS IN INDIA

As per 2001 census; India's half population is made of females only, out of which 70% are busy in agriculture, while 21.7% are busy in non –agricultural jobs and rest are busy in household activities. But with the impact of Industrialization policy of globalization and the increase in privatization during mid 90's ,the women are coming forwarded in this man oriented society where it was the matter of a shame to do the business by a female. There are so many examples of Women entrepreneurs who has taken the initiative and become the well known reckoned ladies in the world of business .Some to cite here are *Surabhi Dewra, Founder, MeraCareerGuide.com, Suruchi Wagh, Founder and COO, Jombay.com, Suchi Mukherjee founder & CEO, Limeroad.com* and many more to count. Doing business not only make them financially independent but also give them self respect & confidence in them. The women are taking lead role in setting up their own ventures like MSME's.

In India 26.61 lacs enterprise are female-owned out 361.76 lacs enterprise in the Small, Medium & micro enterprises. While out of 805 lacs employees 120 lacs of employees are females. As per the MSME annual report 2017-18 .As per business report 2017 and survey done by IFC,women enterprises contribute 3.09% of industrial output and employ over 8 million people[12].As per the report of Female entrepreneurship Index by the global Entrepreneurship and Development Institute in survey of 77 countries India ranks 70.All over the world the number of women entrepreneurs are raising day by day while in India it is not showing any improvement. There are so many problems that are faced by Indian female entrepreneurs that need to be sorted out. The main problem is of Capital that is the basic requirement for doing any business which is not easily available here or we can say that the females are unaware of the facts that from where they can arrange the funds to start up their own venture. Another factor can be lack of skills & tight social norms that discourage women to start their own venture.

WHY THE WOMEN ENTREPRENEURSHIP IS NEEDED?

There are so many reasons that support the women Entrepreneurship. According to the 2011 census around 48% of population are women, out of which 34% are not paid for their work and efforts.[13]Most critical situation arises when the sole earner of the family is no more and there is no financial support to the family. In that situation it is the basic requirement of the society to promote the women entrepreneurship.

Involving women in business has its own benefits for the society as well as the economy. Women entrepreneurship helps in creating more job opportunities in the market as well as help in improving per capita income of the nation. The various factors[14] that helps in making a women entrepreneur are:-

1. **To Make her Own identity**

   If a women becomes an entrepreneur, than she is able to find her own identity in the society otherwise she remains an unknown name in the darkness of four walls.

2. **Be independent**

Entrepreneurship helps a woman in becoming independent; she is financially independent and can make her decision at her own. She doesn't have to depend on anyone else for her well being.

3. **Bright Future**

   By becoming an entrepreneur, a woman assures her bright future as she is able to make her own destiny. Her future is secure in addition to her dependents and whole family.

4. **Increase confidence and Positivity**

   Entrepreneurship helps in increasing confidence and positivity in a woman. Now she is confident enough to make her own decisions.

5. **Create Employment opportunities**

   Women Entrepreneurship helps in creating employment opportunities in the market as more entrepreneurs mean more job opportunities.

6. **Better education and Awareness**

   Chances of better education and awareness are increased by increase in the number of women entrepreneurs.

7. **Support of family members**

   As woman is become entrepreneur than she can get the support of family in her ventures very easily as they came to know her capabilities.

8. **Increasing Risk Taking Abilities**

   The abilities of a women to take risk are increased when she become an Entrepreneur.

9. **Developing equal status in society**

   Women Entrepreneurship helps in developing equal status of women in the society.

10. **Innovative Ideas and Creativity**

    It is ability of women to creatively think & doing work in such a different way that enhance the possibilities of woman to become an entrepreneur.

PROBLEMS FACED BY WOMEN ENTREPRENEURS

1. **Problem of Capital**:-Arrangement of finance is a major problem for the women entrepreneurs, as they are not financially so strong to start their own business. Mostly women don't own a good bank balance and no man wants to give his money to invest in her venture

as he doesn't believe in his entrepreneurial skills. They are unable to fetch finance from market too as they don't have any property on their name or good bank balance too. As per the research done by Robert in Non-OECD and developing economies shows around 59% of respondents have financial problem as major problem for starting his business while 41% have the main problem in obtaining loan from external sources.

2. **Lack of Formal Education**:-In India & developing countries, women don't get proper education related to developing entrepreneurial skills or training. Lack of finances, social barriers or lack of interest there can be many reasons due to which women are unable to get formal education.

3. **Competition in the market:-**There is stiff competition in the market and it is very hard to find a suitable customer, even middleman exploit women entrepreneurs more as they are less aware about the market. Even they don't know the market tricks and new technology available in the market. Most of the women entrepreneurs run small, micro or middle enterprises while market is rule by the large enterprises in terms of cost, standard, & marketing skills they are unable to compete with them.

4.Social Factors:-There are so many factors in the society that create hindrance in the success path of women entrepreneurs .They have to face Gender discrimination, family responsibilities & burden of dependents and many more such social factors are there which they have to face.

5. Poor Entrepreneurial Skills:-Women are not having training or learned entrepreneur skills in a formal way .SO they lack somewhere in management skills of Planning, Organising, Directing and controlling. Even they are not aware of the latest trends and techniques available in the market.

6. Not ready to take Risk: Women fear of taking risk. It has been seen that man are more self confident and take risk than women. As woman have to play on safer side and answerable to their male counterpart so it is not easy for them to take higher risk.

Other factors can be:-

- Travelling Problem
- Shortage of resources
- High Cost of Production

- Playing so many roles
- Lack of Experience
- Tax related Issue
- No Government support
- Lack of well qualified or trained employees
- Unable to take risk
- Family Matters Most
- Poor self-Confidence
- So many legal formalities

SUGGESTIONS /SOLUTIONS TO OVERCOME THE PROBLEMS OF WOMEN ENTREPRENEURS

Women are almost half or 50% of our population and developing women entrepreneur's means developing our economy. If more and more women are becoming entrepreneurs than problem of poverty, unemployment and education can be resolved. Women entrepreneurs are facing so many problems in India because of many reasons, but still they are showing significance improvement in their growth .They are boosting our economy and breaking "Glass ceilings".

Some suggestions are hereby given to solve the problems of women entrepreneurs in India:-

1. Provision of Financial Support and Loan: - More and More financial institution should be started to provide easy finance and loan to women entrepreneurs as per their need and requirement. Female should be appointed as the in charge & employees of these institutions so that the women can easily approached them for the help and the finance should be provided at local level.

2. Help in marketing:-Marketing co operatives should be provided to them to support them in their marketing activities. Even govt. should purchase from women entrepreneurs so that it helps them in their survival.

3. Availability of Raw materials: Help should be provided in the arrangement of cheap and best raw materials to the women entrepreneurs by different agencies.

4. More Professional Knowledge and Awareness: Steps should be taken to increase awareness and education among women to do the business. Scholarship schemes and grants should be provided to the women so that they have knowledge and courage to start their own venture.

5. More clear picture or draft of their actual plan. As per the studies it has been found that women face failure in their business because they don't have any written plan or design regarding their product or service. They need to have set their well defined goals and strategies which can be executed with proper planning.

6. Support & cooperation: Women need not to do all the work alone. They should know how to use the talent of the people surround her .She has the talent to choose the right person for right work.

7. Relation Building: Women entrepreneur should have very good professional relationship so that she shouldn't face any problem in public dealings.

8. Right estimation of Price value: As per Wes man females under estimate their value and ready to work at comparatively low price than males .similarly they do with their product and not able to fetch right price of their product.

9.Avoid dealing money issues:- Normally women hides from the cash issues,and rely on some other person who can deals with money issues on her part which is not right. She should know how to deal with the debtors and creditors of the business.

10. Friendly relations with Employee: Employees are the back bone or base of any business. A women should take care of maintaining cordial relationship along with professionalism. So she should know how to mix the both.

Government initiatives to develop Women Entrepreneurship are

1. Indira Mahila Yojana
2. Indira Mahila Kendra
3. Mahila Samiti Yojana
4. Rashtriya Mahila Kosh
5. Prime Minister's Rojgar Yojana
6. Women's Development Corporation Scheme
7. Khadi and village industries commission
8. Indira priyadarshini Yojana
9. SBI's Sree shakti Scheme
10. NGO's Credit Schemes

CONCLUSION

In a country like India where women face so many discrimination against men need support to improve their status in the society. Even for the growth of our economy, development of women is very necessary. It is only through the growth of the women, after that we can say that we are completely developed. Even govt. has given the slogan of "**Beti Bachao, Beti Padhao"** just to improve the situation of females in India. Education, Awareness, Financial support etc are the some ways by which we can improve the status of women entrepreneurs. Women are called the "Nari shakti" and they have the power to change the world. Need of the hour is to support them, to motivate them and help them in their ventures. They want Moral, Financial, Physical and Family support to go beyond the limits. Women are very good managers but they are always harassed and used by the society for their own selfish wishes. Now it is the high time to make the people aware about the importance of Women Entrepreneurship. Government should take some important steps to safeguard the rights of women entrepreneurs.

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ON THE APPLICABILITY OF GENETIC ALGORITHM IN TEST CASE PRIORITIZATION

Esha Khanna
Assistant Professor
DAV Institute of Management, Faridabad
eshakhanna30@gmail.com

Ketna Khanna
M. Tech Scholar
YMCA University of Science & Technology
ketnakhanna05@gmail.com

ABSTRACT

Regression testing re-executes the test cases to validate that new changes introduced in module has not interrupted correct working of other module. Regression testing is a costly process and has to be performed during software maintenance phase. Due to constrained resources, all the test cases of regression suite may not be executed. Test cases are therefore prioritized in such a way that most important test cases are executed before others. Test cases prioritization reorders the test cases in a way that important test cases are executed first. The work reviews various genetic algorithm based test case prioritization techniques. An extensive literature review has been carried out in accordance to the guidelines of Kitchen ham.

Aim of the study: *To present the role of genetic algorithm in test case prioritization.*

Methodology: *An extensive literature review has been carried out in accordance to the guidelines laid by Kitchenham (Kitchenham, 2010).*

Findings: *The work summarizes the different techniques to use Genetic algorithms in order to prioritize test cases of regression test suite. The techniques discussed would be helpful to both researchers and practitioners if the testing has to be stopped prematurely due to lack of resources.*

Keywords: *Genetic Algorithm, Test Case Prioritization, Regression Testing*

INTRODUCTION

Software must be thoroughly tested to ensure its quality. During maintenance phase, software undergoes various changes. These changes when introduced may affect previously tested functionality of software. Regression testing is performed to check that changes made in new version of software have not affected the previous functionality. Regression testing re-executes the test cases to validate that changed modules have not interrupted the proper working of other

modules (Chauhan, 2010). Re-executing all the previous test cases along with the new ones is a costly process. Due to constrained resources all test cases cannot be executed. Techniques of regression testing are test case selection, test case reduction and test case prioritization (Yoo and Harman, 2012). Test case prioritization reorders the test cases based on some criteria so that important test cases are executed in time.

The work reviews various genetic algorithm based intelligent techniques to prioritize test cases for regression testing. Genetic algorithms are adaptive heuristic search algorithms that are based on Charles Darwin theory of the survival of the fittest (Bhasin and Manoj, 2012). Genetic Algorithms are used to solve optimization problem. An extensive literature review has been carried out using the guidelines of Kitchenham (Kitchenham, 2010). The work reviews various computational intelligent based techniques for test case prioritization. The work paves the way of genetic algorithm in regression testing.

The paper has been organized as follows. Section two discusses regression testing. Section three presents Genetic Algorithms. Section four reviews various genetic algorithms for test case prioritization. Section five concludes.

REGRESSION TESTING

Whenever changes are made to existing software, Regression testing is performed. Regression testing re-executes the test cases to validate that changed modules have not interrupted the proper working of other modules (Chauhan, 2010). Re execution of test cases is required to ensure that changes do not harm the existing features of software. Regression testing is selective retesting of the system or components to verify that modifications have not caused an unintended effects and the system or component still complies with its specified requirements (IEEE).

Regression testing is required in the following scenarios (Rajal and Sharma, 2015)

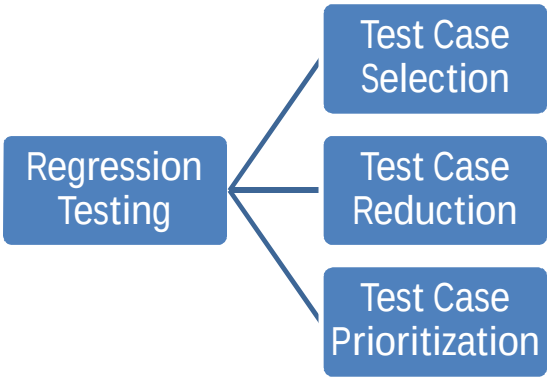
- Software code is modified in accordance to changed customer requirements.
- Functionality of software is enhanced.
- Fixing of defects in previous versions.
- Removal of obsolete functionality from previous version.

New test cases are crafted to check enhanced software functionality and are added to regression test suite. Some of the test cases of obsolete functionality are removed from test suite. Other test

cases are re-executed to ensure correct working of previous functionality. Test cases in regression test suite are therefore classified as new, obsolete and reusable.

Simple approach to regression testing is to re execute all these test cases. This approach is called retest-all. However, as the software evolves, number of test cases in regression test suite becomes colossal. Due to limited time and resources, all the test cases cannot be executed. Three techniques that aid regression testing are classified as test case selection, test case reduction and test case prioritization.

Figure 1. Techniques of Regression Testing

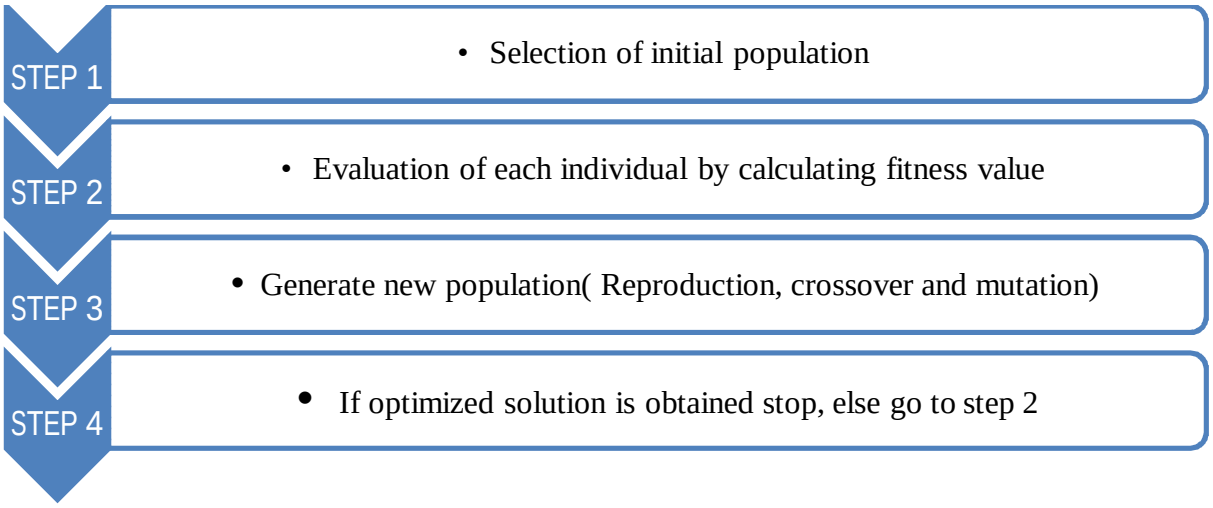


Test case selection technique selects and re-executes only a subset of test cases that focuses on changed module (Yoo and Harman, 2012). Test case minimization technique reduces the test case suite based on some criterion (Yoo and Harman, 2012). Test case prioritization technique reorders the test cases based on some criterion in such a way that most important test cases are executed within time and resources (Srivastava, 2008).

GENETIC ALGORITHM

Genetic algorithm (GA) is heuristic search algorithm inspired by Charles Darwin theory of natural evolution. GA is an intelligent search technique and is used to solve optimization problems (Klir and Yaun, 1995). It performs random searches through a pool of solution and aims to find best alternative according to some given criterion. Basic steps of a GA are as follows.

Figure 2: Steps of Genetic Algorithm



Step 1: Selection of initial population- The first step is to select a finite set of individuals (chromosomes) for a given problem. This leads to the generation of initial population.

Step 2: Evaluation of each individual- Each member of the population is evaluated according to some objective function. The objective function (also known as fitness function) assigns a fitness value to each individual member of population based on some given criterion.

Step 3: Generate new population- A new population of solution is generated by applying GA operators. These are reproduction, crossover and mutation (Shivanandam and Deepa, 2012).

Step 4: Stopping criteria- Duplicates are removed from the new generation of chromosomes. If optimized solution is obtained stop, else go to step 2.

GENETIC ALGORITHM IN TEST CASE PRIORITIZATION

An extensive literature review has been carried out in order to find out the techniques which use Genetic algorithms to carry out the task of regression testing. The review also tries to find out the gaps in the existing literature. Several databases including IEEE explore, ACM, Springer and Wiley online have been searched. The review has been carried out according to the guidelines proposed by Kitchenham (Kitchenham, 2010). Some of the works has been summarized in this section.

The work by Li, Z. et. al., compares the performance of genetic algorithms and greedy approaches in order to prioritize regression test cases (Li et. al., 2007). The techniques are applied to six programs ranging 374 to 11,148 lines of codes. Greedy approaches may lead to

suboptimal results. The work shows the effectiveness of metaheuristic and evolutionary search algorithms to prioritize test cases. The work used three choices of fitness metric and addressed problems of fitness matrix, suitable search technique and landscape modality.

Konsaard and Ramingwong presents a genetic algorithm based test case prioritization technique. Genetic algorithm is used to prioritize regression test case on criteria of total coverage (Konsaard and Ramingwong, 2015). Test cases covering maximum code are assigned higher priority than others. The work also compares genetic algorithm with five other approaches on the performance of average percentage of condition covered and execution time.

In another work, genetic algorithm is used to prioritize test cases on statement coverage criteria (Yadav and Dutta, 2016). Average percentage of statement coverage (APSC) metric is used to show the efficiency of proposed algorithm. The algorithm generates optimal sequence of test cases for regression testing based on statement coverage.

In the work by Khanna, E., genetic algorithm reorders regression test cases on criteria of maximum fault detection (Khanna, 2016). Fitness value of test cases is evaluated using number of fault covered. Based on fitness value, an optimal sequence of test cases is selected which leads to total fault coverage.

In the work by Harsh Bhasin and Manoj, a Genetic Algorithm based prioritization technique is proposed (Bhasin and Manoj, 2012).. The technique uses coupling number calculator to assign fitness value to test cases. Test cases prioritized using this technique results in high fault detection rate in comparison to others.

Huang, Y. C., et. al. proposes a cost cognizant prioritization technique which takes into account test case costs and fault severities in test case prioritization (Haung et. al., 2010). The work uses genetic algorithm and test historical records to prioritize the test cases of regression test suite. The results reports the effectiveness of proposed technique by using APFDC (average percentage of faults detected per cost).

The work by Suman and Seema proposes a genetic algorithm based prioritization technique which uses complete code coverage criteria in order to prioritize the test cases dynamically. The work uses PMX and cyclic crossover to generate new test cases (Suman and Seema, 2012). The work aims at reducing the number of test cases of regression suite case without affecting the software quality.

In the work by Kaur, A. and Goyal, S., a genetic algorithm based prioritization technique that automates the test case prioritization process based on code coverage (Kaur and Goyal, 2011). The work presents the effectiveness of proposed algorithm by APCC (average percentage of code covered) metric.

The work by Mishra, P. K. and Pattanaik, B.K.S.S , prioritizes the regression test cases based on fault severity and customer requirement(Mishra and Pattanaik, 2010). The work proposes a genetic algorithm based technique which uses testing time and code coverage information to prioritize test cases. The work compares genetic algorithm approach with goal oriented and path oriented prioritization technique. The results depict that genetic algorithm based approach have greater code coverage in less time.

CONCLUSION

Modification of software requires re-execution of all the test cases in order to validate that changes in one module have not affected correct functionality of others. Due to constrained resources, all the test cases cannot be re-executed within the development period. Prioritization of test cases is required in order to maintain quality of regression testing. Test cases need to be prioritized in such a way that important test cases are executed before completion of software. This results in cost effective regression testing within limited time and resources. The work reviews various test case prioritization techniques. The paper presents use of genetic algorithm in the task of regression test case prioritization. The techniques discussed would be helpful to both researchers and practitioners if the testing has to be stopped prematurely due to lack of resources.

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EFFECT OF SHOPPING ORIENTATIONS ON ATTITUDE TOWARDS ONLINE SHOPPING

Tarun Gupta
PhD Scholar
School of Management
Lingaya's University, Faridabad
tarun_77@rediffmail.com

Dr. Urvesh Chaudhery
Associate Professor
School of Management
Lingaya's University, Faridabad
urvesh.chaudhery@gmail.com

ABSTRACT

Shopping orientations refer to the general predisposition of consumers toward the act of shopping (Gehrt et al., 1992). This predisposition may be manifested in varying patterns of information search, alternative evaluation, and product selection. There is a lot of literature abounding shopping orientation in retail (stores) but very few in the context of online shopping behaviour. With the advent and steady adoption of internet, there has been paradigm shift in the shoppers buying behaviour. So, it is vital to identify the shopping orientation/motivation of the shoppers and analyze their impact on the shopper's attitude also. This is the primary aim of this research paper which is attained through a quantitative research survey administered on a sample of 286 respondents in Delhi/NCR regarding their shopping orientation. This will generate vital implications to e-retailers in segmenting and positioning to their target shoppers for long term loyalty.

Keywords: *Shopping orientation/motivation, Attitude towards shopping, Online shopping*

INTRODUCTION

In recent times, India is poised to become the world's fastest growing e-commerce market, driven by healthy investment in the sector and rapid increase in the number of internet users. As per a report on India's B2C Ecommerce 2016 BY E Commerce Foundation approximately 255 million people use internet and out of that 83 million people shop online out of which 33% population uses smart phones. This is bound to grow in almost all the product categories. There is no denial to the fact that now Internet has emerged as a dominant way of shopping a wide gamut of products with much ease in all parts of the world. This proliferation of online shopping has also brought major changes in the consumer's attitude and propensity to purchase wide gamut of products and brands. Consumers can buy products/services without undergoing the hassles of

going to a physical store. This innovative life style has been adopted more quickly in most of the developed countries and is also catching up fast in the developing countries. Therefore, it is very important to investigate the online purchase behavior and intention of consumers especially in the context of developing nations. There are many research studies conducted in the west about the shopping orientation of consumers in the online arena but hardly any study in the context of developing nations. It is imperative to understand the nature of on line shopping orientation/motivation (i.e. their decision making style) while shopping online. Moreover, as a salient part of this study, it investigates the major shopping orientation/motivation styles impacting their attitude towards online shopping in Delhi/NCR.

To achieve this objective, an exploratory cum causal research study was conducted on a representative sample of 286 on line shoppers using Google survey. The respondents were asked questions related to their shopping orientations (as extracted from the extant Review of literature studies) and then factor analysis was run to identify their key shopping orientation/motivation. Further analysis was carried out to examine whether there was any effect of these shopping orientation/motivation styles on their attitude towards online shopping. This will develop insights to the marketers for segmenting and positioning appropriately to their selected target.

RESEARCH OBJECTIVES

The primary objectives of the study are:-

2.1 To examine the shopping orientation/motivation of online shoppers in Delhi/NCR.

2.2 To examine and assess the impact of key shopping orientation/motivation drivers on the online shoppers Attitude towards shopping.

LITERATURE REVIEW

A consumer's approach to the act of shopping is referred to as shopping lifestyle or shopping orientation. The basic premise of shopping orientations is that people take many different approaches to the act of shopping. Thus, this type of analysis determines the variety of shopping styles that individuals adopt and how these styles relate to purchase intentions. Shopping orientation/motivation basically demonstrates that whether consumers prefer to shop under an experiential or a task focused orientation. Research examining the Internet purchaser falls within

the streams identified earlier. The Internet shopper has been found to be older and of higher income than the non-shopper (Donthu and Garcia, 1999; Korgaonkar andWolin, 1999), slightly more likely to be a male (Korgaonkar and Wolin, 1999), and less risk averse (Donthu and Garcia, 1999; Korgaonkar and Wolin, 1999). There is also evidence that the Internet shopper is convenience-oriented (Donthu and Garcia, 1999; Korgaonkar and Wolin, 1999), innovative and variety-seeking (Donthu and Garcia, 1999). He or she does not appear to be brand- or price-sensitive (Donthu and Garcia, 1999). These described consumer characteristics borrow heavily from the concepts of shopper orientation and retail patronage mode. But there has been hardly any study related to understanding the shopping orientation/motivationin the Indian context. This is the driving factor behind this study. In this background some salient reviews are presented in the subsequent paragraphs:

Jiradilok (2014) et al investigated upon customer satisfaction that leads to online attitude towards online shopping for all online users, conversant online purchasers and new online purchasers. The study revealed that people mostly value assurance and empathy as the most important dimensions. This finding was applicable for both types of internet users that are users with knowledge in purchasing and users with no experience in purchasing.

Cheema (2013) et al studied factors that manipulate online shopping intentions. The findings disclose that apparent ease of use and supposed enjoyment are the factors that affect online shopping purpose. Unexpectedly, the effect of supposed usefulness was not noteworthy on online shopping intention.

YinFah et al (2013) studied difference in shopping orientation/motivation and its association with the online purchase purpose among university students. Respondents' regularity of online purchasing was completely related to the occurrence of online browsing. Of the five types of shopping orientations, convenience category of shopping orientation/motivation had the strongest relation to online purchasing purpose.

Al-Swidi, Seed Behjati and Arfan (2012) made an attempt to study the antecedents of online purchasing intention among MBA students. This study focused on the frequency of buying and attitudes towards online shopping among the MBA students. The TPB model was tested and the data were collected from 136 MBA students, either full or part time. This model especially studied the intention of taking on a particular behavior or a specific product. The results indicate

that frequency of buying from the internet and search for information are increasing the probability of online purchase attitude.

Phang et al (2010) investigated the effects of the demographic variables of age, gender, education and income based on the theories of media sincerity and consumer trait and attachment. They concluded that e e-commerce marketers must recognize consumer's fundamental shopping motivations and needs in order to successfully satisfy them. They establish that demographic variables as such don't impact the client intention of what they want to purchase as most of the times they do surfing and then compare the prices with offline stores.

Choon ling, et al. (2010) examined the effects of shopping orientations, online trust and prior online purchase experience toward customers' online purchase intention. The data were collected from 250 students. The variables taken up for the study are impulse purchase intention, new product buying frequency of buying from the internet, and prior online purchase experience. From the results of multiple regressions, it was found that these variables are having weak relationship 0.091. But overall the variables are strongly positively related to purchase intention.

Kwek et al (2010) identified the determinants of the customer online purchase objective. They found that urged purchase intent, quality orientation, brand name orientation and convenience orientation are completely related to the customer online purchase goal. It was also discovered that ease of buying orientation is the most vital contributor to the online purchase purpose.

Connolly and Bannister (2008) stated that Irish consumer's trust in internet shopping is the result of particular factors, which relates to the vendor's professed integrity, and the vendor's professed capability. The earlier encompasses communal experience of trust, while the second encompasses the technical background of trust. Both of these factors are within the control of vendor.

Jayavwardhena, et al. (2007) examined the purchase orientation and attitude towards online shopping of consumers. For the study the variables namely proposed purchase loyalty, multiple purchase orientation, and online shopping experience were tested. The data were collected from 396 respondents. The K means cluster analyses were used to classify the respondents. It was identified that consumers were categorized as active shoppers, price sensitivities appears, discerning shoppers, brand loyal and convenience oriented. It was further identified that consumer purchase orientation and attitude towards online shopping in both the traditional world and on the internet are largely similar among various classifications of respondents.

Vijayasarathy (2003) stated that Shopping orientations are helpful in the study of patronage performance including store faithfulness, brand reliability, in-home shopping, and out-shopping. Paper further illustrated that home, economic, and neighbouring shopping orientations are associated to online shopping intentions. Product types, based on price tag and tangibility, do not have a moderating influence on the relationship between shopping orientations and intentions to shop using the Internet, but do have a direct effect on the latter. And, the incremental involvement of demographic indicators in predicting online shopping objective is negligible.

Brown et al (2003) stated that in spite of the prevalent belief that Internet shoppers are mainly motivated by convenience, the authors showed empirically that consumer's primary shopping orientations had no considerable impact on their inclination to purchase products online. Factors that were more likely to control attitude towards online shopping included product type, previous purchase, and, to a smaller extent, sex.

Soyeon Shim, et al. (2001) made an attempt to determine whether intent to search the internet is a key element for predicting purchased intention. The data were for the study collected through a mail survey in 15 US metropolitan areas. Intention to use the internet for information search, frequency of buying from the internet, preferable mode of payment, new product buying frequency and previous internet shopping experience are the items taken for the study. From the results it was found that, intention to use the internet to search for information is the strongest predictor for other variables. Both direct and indirect relationship between the above variables is also observed during the results. It was observed that frequency of buying from the internet was also important in predicating internet purchase intention. The study also suggested the effective plans and strategies that reduce consumer perceived risk, experience and knowledge of internet shopping protocols.

RESEARCH METHODOLOGY

Exploratory cum Causal research design was undertaken to primarily investigate the shopping orientation/motivation based on the characteristics of the shoppers in the Delhi/NCR and then analyze its impact on shopper's attitude towards online shopping. Convenience sampling method was adopted for this study as in most consumers' study owing to the widespread dispersion of

online shoppers. The **s**ample size for the study constituted of 286 respondents from whom an e-response was generated to indirectly cross-check with their inclination for online shopping.

DATA ANALYSIS AND INTERPRETATION

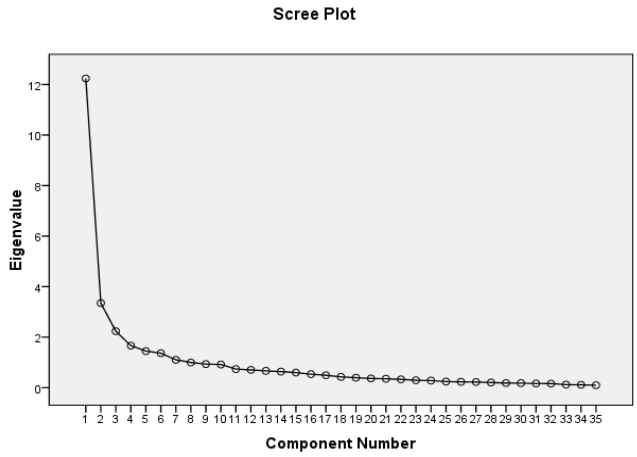
Shopping orientation/motivation of the online shoppers in Delhi/NCR

For identifying the factors that affect consumer's motivation to shop online, an exploratory factor analysis was conducted. Factor analysis was used to reduce the 35 items into a smaller number of dimensions. The data was subjected to principal component analysis with varimax rotation. The appropriateness of factor analysis is checked using KMO and Bartlett's test of sphericity.

Table 1: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.887
Bartlett's Test of Sphericity	Approx. Chi-Square	9.175E3
	Df	595
	Sig.	.000

It is found that the Kaiser-Meyer-Olkin measure of sampling adequacy was .887, above the commonly recommended value of .6, and Bartlett's test of sphericity was significant $\chi 2 = 595$, $p < .05$. Thus the data set was appropriate for running a factor analysis. Six factors emerged which had an Eigen value more than 1 explaining 60.401 % of the variance.



Further, the results of the Rotation Component Matrix as mentioned in the table below that explains how the variables weighted for each factor and also expressed the correlation between variables and the factor.

The summary result of the Factor Analysis showing the online motivation factors is represented in the table below

Table 2: Factor Analysis for Components and Variation

Name of the Dimension	Statements	Variation %
Brand Motivation	It is important for me to buy products/services from the e-retailer with well-known brands	13.854%
	Once I find a brand I like in online shopping, I stick with it irrespective of the reviews or price	
	I prefer to buy the well-known brands online	
	The popular national/international brands are the main motivation for me to shop online	
	I can easily compare different brands and choose the best one in online shopping	
Prior Online Purchase Experience	My prior knowledge about a website helps me to judge its credibility quality of products sold	13.199%
	My previous experience dictates whether I will purchase a product online or not	
	If I am not satisfied with my previous purchases I won't again buy from the site no matter what	
	I will purchase online if I feel that the web site is easy to use and navigate	
	On line shopping for me is an enjoyable experience free from the hassles of travel and parking inconvenience	
Convenience &	I like online shopping as it offers me round the clock shopping ease	9.613%

Trust motivation	I like browsing online to preview products before purchasing	
	It is easy to shop and saves time online shopping while trying to compare prices for the best deals	
	I can trust that my financial privacy is well met whenever I do any online transactions	
	The web site of the e-retailer offers secure personal privacy	
mpulse Purchase Motivation	I buy immediately when purchasing products in online shopping	8.904%
	Even when my intention is to only browse through the website, I end up making a purchase	
	When I purchase products spontaneously from the e-retailer, I feel released	
	When there are bulk discounts on offer I feel an impulse to buy the product/services	
	Whenever I do a planned purchase online I also end up buying unplanned things as well.(often)	
	In online shopping, I am tempted to buy the popular products without much thoughts (less risk) It relates to shoppers own impulsive disposition towards shopping and the ability of online shopping that encourages	
Quality Motivation	I can find better quality products/services from on line shopping	8.000%
	My product/service expectations are met when I buy online	
	I always buy good quality products even though a cheaper version is available as well with less emphasis on brand	

	The availability of trending high-quality brands provided by the e-retailer is very important to me	
Price Motivation	I can bargain for the best deals	6.830%
	I am assured that through online shopping , I will get the best value for money	
	I can easily compare prices between stores and the online e-retailers	

The questions that load highly on factor 1relate to 'Brand motivation'. The variables included in the factor include broader selection of brands and ease in comparison different brands, access to national and international brands and availability of well reputed brands of the e-retailers.

The questions that load highly on factor 2 relates to 'Prior Online Purchase Experience'. This relates to the shopper's Prior knowledge about online shopping, ability of the shoppers for online shopping and ease of navigating through the website to search product/price information, Moreover, the attitude is likely to be favorable if they had a good prior purchase experience in online shopping.

The third factor relates to 'Convenience & Trust motivation' and is measured by the convenience of round the clock shopping experience from anywhere without the hassles of travelling or parking in crowded retail stores. This is a major motivation behind online shopping besides the ease of previewing products and comparing it across several brands and price ranges to arrive at the best deals. Trust also drivers the shoppers for online shopping. If the online shoppers are assured that their personal and financial information are secured then they are likely to shop more from the e-retailers.

The fourth factor relates to 'Impulse purchase motivation' and it relates to shopper's own impulsive disposition towards shopping; they are more drawn towards impulse purchases whenever they see a new product or a price deal and coupled with convenience factor, this leads to purchase even when they haven't planned the purchase.

The fifth factor relates to 'Quality motivation'. As per this, the motivation for shopping online is basically dictated by the availability of high quality trending products that are readily available therein. This motivates the shoppers towards online shopping where they can buy the best quality national/international brands at the same time.

The sixth factor is 'Price motivation' and it includes searching for best deals, price comparisons and assurance of best value to the shoppers. The sixth factor was dropped as its reliability score (Cronbach alpha) was less than .60. For the rest factors reliability was more than .75 and Overall reliability was.87

To sum up, the 5 important factors driving online shopping are Brand motivation, followed by Prior Online Purchase Experience, Convenience & Trust motivation, Impulse purchase motivation, and Quality motivation

Impact of the shopper's motivation/orientations on Attitude towards shopping

Further, to study the impact of motivation on Attitude towards online shopping, multiple regression analysis was conducted taking factor scores of the shopping motivation as the independent variables. The dependent variable was Attitude towards online shopping which was measured by the 4 item scale developed by Parkand Cameron (2003).The results of the regression analysis is presented in the tables and figures below:-

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.664[a]	.440	.433	.61649	2.101

a. Predictors: (Constant), Brand motivation, Prior Online Purchase Experience, Convenience & Trust motivation, Impulse purchase motivation, Quality motivation

b. Dependent Variable: Attitude towards online shopping

Table 4: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	113.300	5	22.660	59.623	.000[a]
	Residual	144.041	379	.380		
	Total	257.340	384			

The results of the regression analysis revealed that overall the regression was significant, $F(5,286) = 59.623$, $p < 0.05$. Of the predictors investigated, Brand motivation ($\beta = 0.118$, $p<0.05$),

Prior online purchase experience (β = 0.277, p< 0.05), and Convenience & Trust motivation (β = 0.382, p< 0.05) were significantly affecting Attitude towards online shopping. However, it was found that Impulse purchase motivation (β = -.0.043, p > 0.05), and Quality motivation (β =0.081, p > 0.05 were not significant predictors of Attitude towards online shopping. This is represented in the coefficients table given below.

Table 5: Coefficients

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0.64	0.198		3.231	0.001		
	Brand motivation	0.094	0.035	0.118	2.671	0.008	0.756	1.324
	Prior online purchase experience	0.289	0.044	0.277	6.523	0	0.817	1.224
	Convenience & Trust motivation	0.355	0.045	0.382	7.885	0	0.629	1.589
	Impulse purchase motivation	0.04	0.043	0.043	0.927	0.354	0.691	1.448
	Quality motivation	0.068	0.039	0.081	1.771	0.077	0.713	1.403

As a step further, the linear regression equation model was drawn up which is as:-

Regression Equation

Attitude towards online shopping = 0.64+.382*X1+.277*X2+.118*X3

where, X1= Convenience & Trust motivation

X2= Prior online purchase experience, and

X3= Brand motivation

Thus, as per the Regression model, the three significant factors impacting Attitude towards online shopping are Convenience & Trust motivation Prior online purchase experience, and Brand motivation. Out of these, the most dominant factor affecting Attitude towards online shopping is Convenience & Trust motivation; 38.2% change in it can effectuate a unit change in Attitude towards online shoppingas per the regression equation. This is followed by Prior online purchase experiencewhich accounts for 27.7% variation in bringing a unit change in Attitude towards online shopping. Similarly, the other significant factor Brand motivation effectuates a unit change in Attitude towards online shopping by 11.8%. However, the other factors, Impulse purchase motivation and Quality motivation do not account for a significant change in the online shopper's attitude.

CONCLUSION

In consistence with previous studies, the findings of this study also corroborated the existence of multiple shopping orientations. The major themes identified were convenience and trust motivation, prior purchase experience, and brand motivation. During online shopping, shoppers expect a wider selection of products/ brands of repute. So, if product information is also provided then, it can break the barrier of 'no touch and feel' aspect of online shopping. The convenience offered by online shopping is in the form of not having to leave home and thus saving the time and effort of visiting stores. The risk component, in terms of financial and personal risk, translates to the trust factor that the shopper reposes on the e-retailer. This perceived trust will go a long way in influencing their attitude towards e-retailer. Even the e-retailers should assist in mitigating the risk component and dissonance of online shopping by providing product reviews and enabling easy purchase, payments and returns policy.

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MULTIPLE RELAY HYBRID APPROACH IMPROVED SECURITY AND RELIABILITY TRADE OFF IN COGNITIVE RADIO NETWORK

Anjali Khokhar
Research Scholar
Department of Electronics and Communication Engineering, Baba Mastnath University Rohtak.

Dr. Jitender Khurana
Head of Department
Electronics and Communication Engineering, Baba Mastnath University Rohtak.

ABSTRACT

Cognitive Radio has been the solution for the problem of underutilization of radio spectrum in which cognitive radio devices intelligently sense and exploit the part of spectrum. Hybrid Cognitive Radio Network is useful to improve the security and reliability of the network. Hybrid cognitive radio network jointly utilize both the cognitive and licensed radio networks. This paper analyses the performance of Hybrid Cognitive Relay network for single relay and multiple relay under AWGN and Rayleigh fading channels. The performance metrics such as Capacity, Bit error rate and Spectral efficiency are formulated and numerical simulations by using MATLAB are performed. This analysis is helpful in determining the Capacity and Bit error rate for optimum usage of power and bandwidth is better. This analysis is also helpful to compare the result of single relay and multiple relay hybrid graphs.

Keyword: *Amplify-and-forward, Decode-and-forward, Hop-wise harmony*

INTRODUCTION

In wireless channel when broadcasting is in process than a user transmits data to another user and nearby users can also receive the signal. These nearby users can act as relays to forward the received data from the source to the destination. Such kind of collateral networks are known as relay networks. Relay Selection is important for powerful communication and to main quality of service (QoS) and different parameters in Cooperative Networks. [1] To improve the performance of relay networks various relay selection strategies have been proposed. The simplest strategy involves the selection of a single relay that gives the strongest end-to-end path from the source to the destination. [4]Another processing techniques such as amplify-and-forward (AF), decode-and-forward (DF) and network-coded cooperation are also suggested. In

Wireless Communication the data from source to destination is sent through the participation of intermediary relays. [8]Wireless networks are characterized by the phenomena of multi path fading, shadowing and path loss. The relays i.e. single relay or multiple relay form a virtual antenna array and with united strategy they can get the benefits of multiple-in multiple-out (MIMO) system. We analyze the performance Hybrid relaying scheme that reduces the required bandwidth and bit error rate. We will mainly analyze, A Hybrid relaying scheme over fading channels by using single relay and multiple relay.

RESEARCH OBJECTIVE

Hybrid relay selection scheme (Decode and forward + Amplify and forward) is considered to enhance the wireless secrecy capacity and to reduce the implementation complexity. Also, analyzed the SRT by using hybrid relay scheme of the conventional direct transmission and over fading channel transmission. Apply Hybrid relay selection scheme in cognitive radio network based on multiple relay approach.

LITERATURE REVIEW

- **Jia Zhu, Zhida Liu, Yuan Jiang, and Yulong Zou (2015):** In this paper, the SRT performance of a cooperative AF relay network in the presence of an eavesdropper, in which the source transmits it signal to the destination with the help of multiple AF relays. We analyzed the SRT performance of the best-relay selection over Rayleigh fading channels, while the direct transmission is presented as a benchmark. It was shown that the best-relay selection scheme outperforms the direct transmission in terms of its SRT. In addition, as the number of AF relays increases, the SRT performance of the best-relay selection scheme improves significantly.
- **Amitav Mukherjee, S. Ali A. Fakoorian, *Student Member, IEEE,* Jing Huang, and A. Lee Swindlehurst, *Fellow, IEEE*(2014):** In this paper the essential premise of physical layer security is to enable the exchange of confidential messages over a wireless medium in the presence of unauthorized eavesdroppers, without relying on higher-layer encryption. This can be achieved primarily in two ways: without the need for a secret key by intelligently designing transmit coding strategies, or by exploiting the wireless communication medium to develop secret keys over public channels.

- **Cheol Jeong, *Member, IEEE*, Il-Min Kim, *Senior Member, IEEE*, and Dong In Kim, *Senior Member, IEEE*(2014):** In this paper, we studied an AF MIMO relay system where the relay was considered as a potential eavesdropper. The cooperative scheme should be used when the number of relay antennas is large, the relay transmit power is high, and the distance between the source and the relay is small compared to the distance between the source and the destination.
- **Yulong Zou, Xianbin Wang, and Weiming Shen(2013):** In this paper the physical-layer security in cooperative wireless networks with multiple relays where both amplify-and-forward (AF) and decode-and-forward (DF) protocols are considered. an asymptotic intercept probability analysis to evaluate the diversity order performance of relay selection schemes and show that no matter which relaying protocol is considered (i.e., AF and DF), the traditional and proposed optimal relay selection approaches both achieve the diversity order M where M represents the number of relays.
- **A. Olteanu and Y. Xiao(2010):** In this paper security conventional way is to apply cryptographic techniques. But this increases system complexity together with introduces computational overhead. The existing cryptographic approaches are not perfectly secure and can still be decrypted by an eavesdropper (E), provided that it has the capacity to carry out exhaustive key search with the aid of brute-force attacks.

METHODOLOGY

CR represents a paradigm change in spectrum regulation and access, from exclusive use by primary users to shared spectrum for secondary users, which can enhance spectrum utilization and achieve high throughput capacity. Cooperative communications represents another new paradigm for wireless communications [3],[4]. We assume a primary network with multiple licensed bands and a CR network consisting of multiple cooperative relay links. Each cooperative relay link consists of a cognitive radio transmitter, a cognitive radio relay, and a cognitive radio receiver. The objective is to provide an analysis for the comparison of two representative cooperative relay strategies, i.e., *decode and forward* (DF) and *amplify and forward* (AF), in the context of CR networks.[9] We first consider cooperative spectrum sensing by the CR nodes. We model both types of sensing errors, i.e., miss detection and false alarm, and

derive the optimal value for the sensing threshold. We develop expressions i.e. closed form for the network wide capacities. This can be achieved by decode forward and amplify forward respectively, as well as that for the case of direct link transmission for comparison purpose. Through analytical and simulation evaluations of DF and AF-based cooperative relay strategies, we find the analysis provides upper bounds for the simulated results, which are reasonably tight. [11]There is no case that one completely dominates the other for the two strategies.

PROPOSED MODEL

Multi-Hop Relay Selection is the most informal relaying approach in the treatise is to select a relay to help a transmission from a sender to a destination. Data send by direct transmission also from source to destination. [7]Single transmission/data transmission can do by using with and without hybrid approach. The clogging free shortest path from source to destination is found by using the routing algorithm. When applied to multi-hop networks, this method desires the repetition of the relay selection procedure for each hop from sender to destination.

We design a network with multiple nodes. In this methodology first node behaves as a source and last node behave as a destination. Decode and forward technique is chosen from source to relay. This will help to reduce the error present in the transmitted signals, and retransmit to the next relay or destination. [4]Hybrid can work combination of decode forward and amplify forward approach. If the next node is a relay, then decode and forward is chosen else if the next node is destination, then amplify and forward is chosen. Amplify and forward is mainly used to amplify the received signals. So hybrid protocol is used to obtain secured data.

The steps to be followed in the proposed technique are

Step 1: Random SNR Generation.

Step 2: Check the SNR value and choose the acceptable signals.

Step 3: Source to relay and relay to destination apply direct transmission.

Step 4: Again signal transmission by using single relay approach.

Step 5: Again signal transmission by using multiple relay approach.

Step 6: Again signal transmission Source to relay communication –decode and forward, Relay to destination communication –amplify and forward for single relay Hybrid approach.

Step 7: Again signal transmission Source to relay communication –decode and forward, Relay to destination communication –amplify and forward for multiple relay Hybrid approach.

Step 8: Final output

RESULT

The X-axis represents the outage probability and Y-axis represents the intercept probability. From our proposed methodology the signal transmitted by direct transmission, artificial noise, single relay, multiple relay data transmission through source to destination without hybrid approach and also single relay, multiple relay data transmission through source to destination with hybrid approach.

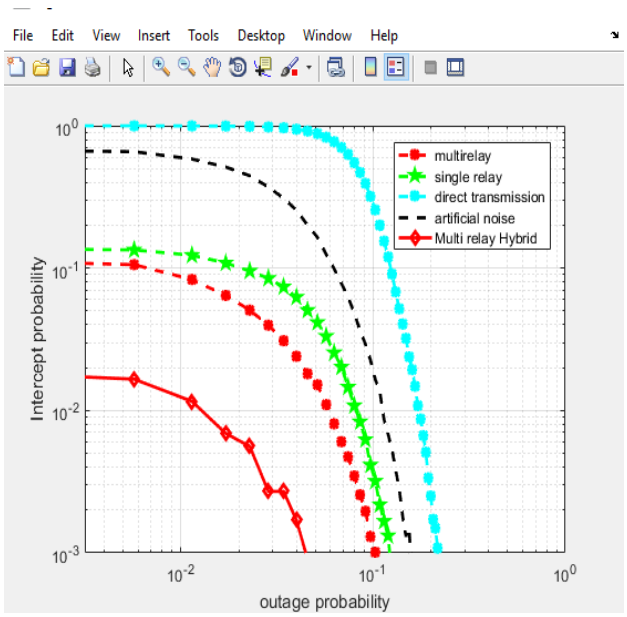

Fig 2:- IP versus OP of the direct transmission, artificial noise, single relay scheme, multiple relay scheme, single relay hybrid scheme, multiple relay hybrid scheme for (Pcd, Pfd) = (0.9, 0.1)

Graph shows that as the spectrum sensing reliability (*Pcd*, *Pfd*) = (0.9, 0.1). For an improved security and sensing reliability, an unoccupied licensed band would be detected more accurately and less mutual interference occurs, which results in a better security and reliability trade off.

Result shows that multiple relay hybrid approach gives better security and reliability trade off rather than direct transmission, artificial noise, single relay scheme, multiple relay schemes, single relay hybrid approach. Means signal transmission through multiple relay hybrid approach gives better security and reliability trade off in cognitive radio network.

CONCLUSION

We examined the security and reliability performance of the signal transmitted by direct transmission, artificial noise, single relay, multiple relay data transmission through source to destination without hybrid approach and also single relay, multiple relay data transmission through source to destination with hybrid approach secondary transmissions in the presence of relay sensing and spectrum sensing. The security and reliability of secondary transmissions are denoted in terms of IP and OP, respectively. The above results and analysis shows the importance of including the relaying links and the combining techniques into the performance analysis of cognitive networks.

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IMPACT OF THE FOURTH INDUSTRIAL REVOLUTION ON INDIA-OPPORTUNITIES AND CHALLENGES

Vandana Jain
Asst. Professor
DAV Institute of Management
Faridabad, Haryana
cfavandana.jain@gmail.com

Dr. Ashutosh Gupta
Asst. Professor
DAV University
Jalandhar, Punjab
gupta.ashutosh@yahoo.co.in

ABSTRACT

India is one of the fastest-growing economies in the world today. The biggest challenge that it has to face is of sustaining that performance, provide jobs to large number of people and ensure steadily rising incomes among all groups. There is no set global formula to gain prosperity; so each country must jot down its own unique path to success. And India needs to do this at a time when digital innovations are rapidly transforming global industry. In this Global era of development when the developing economies are moving towards the pace of growth a new challenge has erupt i.e The Fourth Industrial Revolution".

As described by the founder and executive chairman of WEF, Klaus Schwab, "the fourth industrial revolution is a technological revolution that will fundamentally alter the way we live, work and relate to one another".

The Previous industrial revolutions liberated humankind from animal power, made mass production possible and brought digital capabilities to billions of people. This Fourth Industrial Revolution has distinctive features as compare to the revolutions that preceded it. This is characterized by a range of new technologies. These technologies are a fusion of physical, digital and biological worlds, and will have impact on all disciplines, economies and industries. It is an umbrella concept that includes several emerging technologies such as artificial intelligence, robotics, big data, cloud, 3D printing or additive manufacturing, block chain, machine learning and the Internet of Things (IoT) among other things. Industrial Revolution 4.0 hold on to distinct yet connected technologies that are growing and evolving at a rapid pace. The world has the potential to connect billions more people to digital networks, dramatically improve the efficiency of organizations and even manage assets in ways that can help regenerate the

natural environment. This revolution will probably undo the damage of previous industrial revolutions. It has impact on almost every aspect of business, social and personal life, and will lead to creation of Internet-based economy.

This paper is an attempt to examine various opportunities and challenges of fourth industrial revolution in India and the way forward Indian economy will adapt to it.

Keywords: *Industrial Revolution 4.0, Opportunities, Challenges*

INTRODUCTION

In the Global era of competitiveness where each country must chart out its own unique path of success, India needs to do this at a time when digital innovations are rapidly transforming global industry. The country's growth prospects are strong, and business confidence is also rising. The new wave of economic reforms reflects the government's commitment to enhancing transparency and improving the ease of doing business. But India still needs to undergo basic development if it is to meet the growing demand of the Indian population. Areas that need particular attention are:

- Jobs for young people (since 45% of the population are below the age of 25)
- More traditional manufacturing (it makes up only 17% of GDP)
- Easier access to affordable, quality healthcare (infant mortality remains high)
- Training to keep the country competitive (skilled workers account for only 2% of the workforce)

The fourth industrial revolution plays to India's strengths as it has a natural advantage in digital technologies, ahead of many other countries. By putting the two pieces of the puzzle together, it is possible to redefine what industrialization actually means for countries such as India. It means digital connectivity, new materials and smart manufacturing. And it also means traditional manufacturing and vocational skill development.

This new trend in industrialization is understood to change the way the modern world operates. It combines elements of the internet, robotics, machines, biotechnology, nanotechnology and artificial intelligence to bring about smart factories that can manufacture goods with little to none human interference

The shift in economic power and acceleration in middle class growth, consumer demand and urbanization in recent decades has coincided with extraordinary progress in communications and technology.

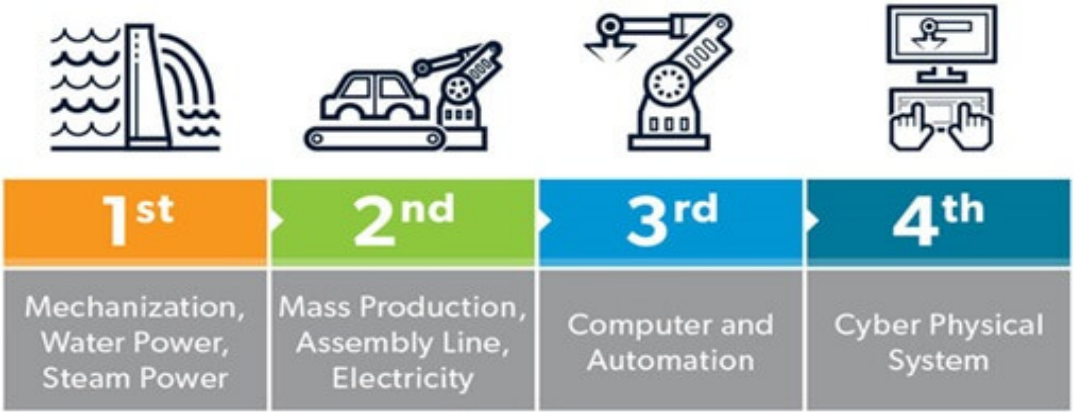
RESEARCH OBJECTIVES

1. To examine various opportunities and challenges of fourth industrial revolution in India;
2. To define way forward Indian economy will adapt to it.

INDUSTRIAL REVOLUTION

The Industrial Revolution is a concept and a development that has fundamentally changed our society and economy. The term "development" in the context of a "revolution," signifies a rapid and fundamental change, but there is no doubt that major shift happened within a relatively short period. Industries arose and replaced small-scale workshops and craft studios. Textile and pottery factories were the first to recognize this new advent of change, and a new infrastructure of canals and railway lines enabled efficient distribution. It was the transition from industrious to industrial, and the start of a boom for both.

During the first industrial revolution, water and steam power was used to mechanize production and equipment. In the second, electric power was used to achieve mass production and division of labour. As the third revolution approached, electronic and information technology was used to automate production, paving the way for greater economies of scale. Just like the three that preceded it, the Industrial Revolution 4.0 will mark a significant change in the way we work. The emergence of digital systems, networked communications, machine learning and large-scale data analysis; refers to the increasing integration of these technologies into business and production processes in order to make them self-sustaining and more efficient.



Source : https://www.aerotek.com

Stepping beyond the 1960s revolution of automization and computerization, this latest shift will see systems that bring together web connectivity and digital controls with real-world tools. Embedded sensors that collect and transmit data will be omnipresent, in everything from manufacturing hardware to wearables, permitting "smart" adjustments that enhance use and drive further improvements. This could apply to everything from industrial production to household management, to health care etc.

The fourth Industrial Revolution which has almost started and which we are experiencing today builds on the first wave of computerization with the latest, rapidly evolving and disruptive advances in technology: the Internet of Things, the Industrial Internet, robotic process automation, autonomous vehicles, artificial intelligence, 3D printing, cyber-physical systems and connected wearable devices. As these sophisticated tools and technologies begin to converge, the impacts of the fourth Industrial Revolution are starting to become evident across many industries.

The term Fourth Industrial Revolution is an umbrella concept that includes several emerging technologies such as artificial intelligence, robotics, big data, cloud, 3D printing or additive manufacturing, blockchain, machine learning and the Internet of Things (IoT) among other things.

There are three myths about Industrial Revolution 4.0.

1. The first is that it won't really have as big an impact as the previous periods of change, most especially the breakthroughs associated with the second industrial revolution. In the past, it has always taken time to feel the full effects of technological change and many of today's advances are in their infancy. It is far too early to say that the car or air travel will prove to be less important than the sequencing of the human genome or synthetic biology.
2. The second myth is that the process will be trouble free provided everything is left to the market. It is a fantasy to believe that the wealth created by the fourth Industrial Revolution will cascade down from rich to poor, and that those displaced will just walk into another job that pays just as well.
3. The third myth is polarisation of the labour force as low-skill jobs continue to be automated and this trend increasingly spreads to middle class jobs and that the benefits of the coming change will be concentrated among relatively small elite, thus exacerbating the current trend towards greater levels of inequality.

The McKinsey Global Institute (2014) identified 12 empowering technologies, classified into three categories for India, which could create both economic and social value, helping India achieve its goals of rapid economic growth, greater social inclusion, and better governance:

1. **Technologies that "digitize" life and work** (mobile Internet, cloud technology, automation of knowledge work, digital payments, verifiable digital identity);
2. **Smart physical systems** (Internet of Things, intelligent transportation and distribution, advanced geographic information systems [GIS], next-generation genomics);
3. **Technologies for rethinking energy** (advanced oil and gas exploration and recovery, renewable energy, advanced energy storage).

An edge over previous revolutions:

There are three reasons why today's transformations represent not merely a prolongation of the Third Industrial Revolution but rather the arrival of a Fourth and distinct one: **velocity, scope, and systems impact**.

- The speed of current breakthroughs has no historical precedent. When compared with previous industrial revolutions, the Fourth is evolving at an exponential rather than a linear pace.

- Moreover, it is disrupting almost every industry in every country. And the breadth and depth of these changes herald the transformation of entire systems of production, management, and governance.
- The 4th revolution will be characterized by the advent of cyber-physical systems which, while being reliant on the technologies and infrastructure of the third industrial revolution, represent entirely new ways in which technology becomes embedded within societies and even our human bodies. Examples include genome editing, new forms of machine intelligence, and breakthrough approaches to governance that rely on cryptographic methods such as block chain.
- Hence, it can be said that the 4th industrial revolution is conceptualized as an upgrade on the third revolution and is marked by a fusion of technologies straddling the physical, digital and biological worlds.

The Fourth Industrial Revolution is changing how we live, work, and communicate. It's reshaping government, education, healthcare, and commerce—almost every aspect of life.

In the future, it can also change the things we value and the way we value them. It can change our relationships, our opportunities, and our identities as it changes the physical and virtual worlds we inhabit and even, in some cases, our bodies

The challenge is to find the balance between exploring the innovations that technology offers for improving the environment, while developing ways and means to ensure that risks are minimized and opportunities are maximized.

OPPORTUNITIES UNDER FOURTH INDUSTRIAL REVOLUTION

The Fourth Industrial Revolution encompasses the Internet of Things, but goes beyond simple device connectivity toward being an Internet of Everything. At its core is the combination of big data, analytics and physical technology. The aim is to provide increasingly enhanced, customized offerings to help meet the needs of individuals and organizations that can adapt and evolve to changing situations and requirements over time.

As a result, the revolution will bring new opportunities for people and machines to collaborate across geographies to improve lives, and even to help undo the damage to the world that resulted from the previous three industrial revolutions.

Blessing to mankind

Like the revolutions that preceded it, the Fourth Industrial Revolution has the potential to raise global income levels and improve the quality of life for populations around the world.

- ✓ Education and access to information can improve the lives of billions of people. Through increasingly powerful computing devices and networks, digital services, and mobile devices, this can become a reality for people around the world, including those in underdeveloped countries
- ✓ The Social media revolution embodied by Facebook, Twitter, and Tencent has given everyone a voice and a way to communicate instantly across the planet. Today, more than 30% of the people in the world use social media services to communicate and stay on top of world events.
- ✓ In the physical realm, advances in biomedical sciences can lead to healthier lives and longer life spans. They can lead to innovations in neuroscience, like connecting the human brain to computers to enhance intelligence or experience a simulated world which means robot power with human problem-solving skills.

Greater consumer welfare and efficiency

An interesting fact is how mobile devices on a daily basis connect billions of people globally with unparalleled access to information as these devices continuously improve processing power and storage capacity.

- ✓ Digital technologies have enhanced consumer welfare by providing access to goods and services more cheaply, faster and with more convenience — think e-books, Uber cabs, social media, etc. Their impact has been to transfer enormous amounts of value-add to consumers, freeing up their buying power for other goods and services, while squeezing the profit margins of disrupted industry incumbents.
- ✓ By gaining access to the digital world, consumers will be benefited in several ways. With the advent of new technology, we get to use more and more efficient products.
- ✓ In the future, technological innovation will also lead to a supply-side miracle, with long-term gains in efficiency and productivity.

- ✓ Transportation and communication costs will drop, logistics and global supply chains will become more effective, and the cost of trade will diminish, all of which will open new markets and drive economic growth.
- ✓ Online shopping and delivery services—including by drone—are already redefining convenience and the retail experience. The ease of delivery can transform communities, even in remote places, and jumpstart the economies of small or rural areas.
- ✓ For consumers, businesses that are transparent about their data collection practices and that prioritize consumer privacy can win our loyalty.

A solid foundation of strategic infrastructure

Companies such as General Electric need to work together, and in cooperation with the government, on affordable and reliable sources of electricity, clean water, sanitation and healthcare. These infrastructure decisions and their implications last for decades; for lifetimes. Digital solutions, especially, can unlock value across India's economy and eliminate major inefficiencies.

Advances in automotive safety through Fourth Industrial Revolution technologies can reduce road fatalities and insurance costs, and carbon emissions. Autonomous vehicles can reshape the living spaces of cities, architecture, and roads themselves, and free up space for more social and human-centered spaces

1. **Traditional manufacturing as well as digital technologies**

India must take a pragmatic approach to quickly boost old-school manufacturing, and at the same time it should adopt new digital industrial technologies that will secure long-term competitiveness. These digital advances can help India increase the efficiency of its traditional industries, while helping it to develop newer cutting-edge technologies.

Digital technology can liberate workers from automatable tasks, freeing them to concentrate on addressing more complex business issues and giving them more autonomy. It can also provide workers with radically new tools and insights to design more creative solutions to previously insurmountable problems.

2. Jobs

To create more job vacancies, India must first participate in global markets. In producing goods that can be traded with the rest of the world, the country can more rapidly generate high-paying jobs, while also allowing workers to learn valuable skills.

Technological innovations can create a true global village, bringing billions more people into the global economy. They can bring access to products and services to entirely new markets. They can give people opportunities to learn and earn in new ways, and they can give people new identities as they see potential for themselves that wasn't previously available.

3. Human capital development

Training and development programmes are great for building local capability and ensuring a long-term vision for the country. India needs to strike the right balance between equipping its workforce with digital skills (by boosting education in data science and coding) and traditional manufacturing skills. It includes

- creating highly skilled sustainable jobs
- making use of research and manufacturing networks across the country
- developing local supply chains (small and medium-size companies will be central to this)
- investing significantly in training and development.

4. Safety and security

Technological advances are also broadening the scope of surveillance. Advances in computing power and artificial intelligence can potentially enable law enforcement agencies to track suspected terrorists by analyzing social networks, government records, and other data.

In the future, billions of 3D-printed "smart dust" cameras floating in the air can monitor the activities of humans. From traffic reports to natural disasters, such technology can keep us safer.

5. **Integrating MSMEs into global value chains**

One of the major opportunities of the 4IR is the potential of 'disruptive technologies' to empower MSMEs, as they provide most of the employment in a country. These enterprises are often constrained by lack of access to business and financial services. 'Blockchain technology'

has the potential to dramatically increase the security of cross-border financial transactions and logistics even in countries where these services are relatively underdeveloped. This technology has the potential to benefit even the smallest firms of a country. The rise of online marketplaces also provides platforms for MSMEs to access regional and global markets.

The 4IR, therefore, provides an opportunity to meet its goal of greater inclusion by integrating MSMEs into global value chains. But it also presents a challenge to the region to invest in human capital to continue to trade and attract investment, and to enable innovation-driven economies.

6. **Sustainable natural resource champion**

The efficient and responsible harnessing of natural resources with the support of sustainable infrastructure is what will make a difference for our nations to realize the clean energy vision.

Digital technologies if deployed strategically can strike the much needed balance between green and growth, resource and infrastructure and profits and people. India's focus on renewable energy target of 175 GW by 2022 entails a greater focus on digital technology for faster integration and managing the resultant intermittency in the resource. Given below are a few ways where industrial IoT or digital technology can contribute to creating a potent mix of resources and infrastructure for a better quality of growth.

- ✓ **Water**

  Water is the most undervalued natural resource and India is one of the most water-challenged nations in the world given the population pressure.Digital technology with flow meters can play a major role like partnering civic bodies to measure hence manage their city water distribution systems better and increase water revenues. Automation of sewerage treatment plants to intercept and treat sewerage water for re-use before it enters the water bodies is another key area.

- ✓ **Air pollution**

  The government has mandated continuous emission and effluent quality monitoring systems for certain categories of industries. There is also a huge potential to equip Indian cities adequately with pollution measurement systems for efficient management.

- ✓ **Oil and gas**

India is the third largest consumer of energy and importer globally. Efficient extraction and more value per unit of energy extracted is imperative for the energy security of the country. As India has ambitious aims of becoming a gas trading hub in the region, digital technology can play a key role to realize this ambition combining standardization, quality, and terminal facilities. From remote monitoring of oil and gas fields to process optimization and safety, digital technologies can take the industry to the next frontiers of technology. Digital technologies act at multiple levels from rendering efficiencies in the process – upstream, midstream and downstream to facilitating data modelling and availability at certain levels of access.

- ✓ **Mining**

  As per a recent Accenture report, IoT and digital technology is estimated to yield 12 to 15 percent to EIBITA in the mining sector. Currently industrial IoT entails integration of operations, remote monitoring, for safety and maintenance however one is yet to leverage predictive analytics. Drones are being encouraged and set to help in volumetric analysis, lease boundary and thermal analysis, combining regulation requirements and environment management. With digitalization of the value chain, more accurate demand and delivery modeling, mechanisms like remote monitoring can help reclaim and recycle a significant quantity of the steel.

- ✓ **Clean coal technology**

  India is the world's third largest coal producing country and the fourth largest coal importer and is expected to increase its coal production to about 1 billion tons by 2020. Clean coal technology is a low hanging fruit to meet India's COP21 target. And this can be done while keeping our renewable energy journey on track.While solar generates electricity for 2,000 hours in a year, coal can give up to 7,000 hours of energy. With unprecedented drop in renewable energy prices and storage systems, this is being disrupted. However a lot can be achieved with greater focus on clean coal production.

  There are no. of areas such as Coal pre-processing, combustion stage as well as life extension and modernization of existing plants etc. where digital technology operations could enhance outcomes.

1. Industry benefits

As Industry 4.0 technology becomes smarter and more widely available, manufacturers of any size will be able to deploy cost-effective, multipurpose and collaborative machines as standard. This will lead to industrial growth and market competitiveness, with a greater understanding of production processes leading to new high-quality products and digital services.

CHALLENGES POSED BY THE FOURTH INDUSTRIAL REVOLUTION

Although the Fourth Industrial Revolution has the power to change the world positively, we have to be aware that the technologies can have negative results if we don't think about how they can change us. Some of the challenges posed by fourth industrial revolution are:

1. **Impact on society**

   Economists have pointed out that the 4th revolution could yield greater inequality particularly in its potential to disrupt labor markets.

- ✓ **Automation:** As automation substitutes for labor across the entire economy, the net displacement of workers by machines might intensify the gap between returns to capital and returns to labor.
- ✓ **Social Unrest**: With this revolution, it is also possible that in the future, talent, more than capital, will represent the critical factor of production. This will give rise to a job market increasingly segregated into "low-skill/low-pay" and "high-skill/high-pay" segments, which in turn will lead to an increase in social tensions.
- ✓ **Inequality:** In addition to being a key economic concern, inequality represents the greatest societal concern associated with the Fourth Industrial Revolution. The largest beneficiaries of innovation tend to be the providers of intellectual and physical capital—the innovators, shareholders, and investors—which explains the rising gap in wealth between those dependent on capital versus labor.
- ✓ **Biotechnology** can lead to controversial advances such as designer babies, gene drives (changing the inherited traits of an entire species), or implants required to become competitive candidates for schools or jobs.
- ✓ **Leading to an increased demand side expectation**

  Major shifts on the demand side will also occur as growing transparency, consumer engagement, and new patterns of consumer behaviour (increasingly built upon access to

mobile networks and data) will force companies to adapt the way they design, market, and deliver products and services.

2. **Impact on the government**

- ✓ **Technology will empower citizens**: As the physical, digital, and biological worlds continue to converge, new technologies and platforms will increasingly enable citizens to engage with governments, voice their opinions, coordinate their efforts, and even circumvent the supervision of public authorities. That is, it will be easier for citizens to participate in the public life.
- ✓ **Gain new technological powers** to increase their control over populations, based on pervasive surveillance systems and the ability to control digital infrastructure.
- ✓ **Diminishing role in policy making**: On the whole, however, governments will increasingly face pressure to change their current approach to public engagement and policymaking, as their central role of conducting policy diminishes owing to new sources of competition and the redistribution and decentralization of power that new technologies make possible.
- ✓ **Ability based survival**: Ultimately, the ability of government systems and public authorities to adapt will determine their survival. If they prove capable of taking up a world of disruptive change, subjecting their structures to the levels of transparency and efficiency that will enable them to maintain their competitive edge, they will endure. If they cannot evolve, they will face increasing trouble.

3. **Impacts on national and international security**

The history of warfare and international security is the history of technological innovation, and today is no exception as the Fourth Industrial Revolution will also profoundly impact the nature of national and international security, affecting both the probability and the nature of conflict.

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- ✓ Modern conflicts involving states are increasingly hybrid in nature, combining traditional battlefield techniques with elements previously associated with non state actors.

- ✓ As new technologies such as autonomous or biological weapons become easier to use, individuals and small groups will increasingly join states in being capable of causing mass harm.
- ✓ This new vulnerability will lead to new fears. But at the same time, advances in technology will create the potential to reduce the scale or impact of violence, through the development of new modes of protection or greater precision in targeting.
- ✓ Artificial intelligence, robotics, bioengineering, programming tools, and other technologies can all be used to create and deploy weapons

4. Impact on people

- ✓ The Fourth Industrial Revolution will change not only what we do but also who we are. It will affect :

i. our identity and all the issues associated with it:
ii. our sense of privacy,
iii. our notions of ownership,
iv. our consumption patterns,
v. the time we devote to work and leisure,
vi. how we develop our careers, cultivate our skills, meet people, and nurture relationships.

- ✓ Also, the revolutions occurring in biotechnology, which are redefining what it means to be human by pushing back the current thresholds of life span, health, cognition, and capabilities, will compel us to redefine our moral and ethical boundaries too.
- ✓ Social media can erase borders and bring people together, but it also can also intensify the social divide. And it gives voice to cyber-bullying, hate speech, and spreading false stories. We have to decide what kind of social media rules we want to create, but we also have to accept that social media is reshaping what we value and how we create and deploy those rules.

5. Impact on employment

The future of jobs has become a major issue of concern.

- ✓ Increasing productivity and efficiencies leading to improved customer experience has encouraged industry to push for technological innovation and find solutions through

robotics, automation, cloud computing, 3D printing, Internet of Things, machine to machine and human to machine learning.

- ✓ Due to this reason, the manufacturing and services sectors, which have been the traditional job creators are seeing tremendous transformation at the shop floor today with reduced human interface.
- ✓ The world today is at an inflection point due to rapid technological advancement leading to economic, social and political turmoil. These advancements threaten to ruin jobs and increase the rich and poor divide further.
- ✓ Innovations in robotics and automation can lead to lost jobs, or at least jobs that are very different and value different skills.
- ✓ Artificial intelligence can be a disruptive force, dislocating people from jobs and surfacing questions about the relationship between humans and machines.
- ✓ In addition, being always connected can turn into a liability, with no respite from the continuous overload of data and connections

6. **Impact on privacy**

We value the ability to control what is known about us, and yet we are living in a world where tracking every individual's personal information is key to delivering more intelligent, personalized services. For example:

- ✓ Face book tracks what you do so that it knows which content and advertisements are most relevant to you.
- ✓ Smart phones track your location, and you can share that information with apps that recommend places to eat or shop.
- ✓ Retailers analyze your purchase history to recommend products and offer coupons to stimulate more sales

A WAY FORWARD FOR INDIAN ECONOMY

Providing development opportunities to more than a billion people sustainably is a tall order for any nation. If deployed with the combination of right mindset and human resource, digital technology could be the means to propel India as a natural resource champion, building a more

inclusive and sustainable nation. Some of the steps that can be taken to be hand in hand with fourth industrial revolution are:

- ✓ By providing universal access to affordable education and job training.
- ✓ By continuing to ensure basic protection for workers as the changes take place. Governments have, along with the private sector, an obligation to strengthen these core protections.
- ✓ By modernizing infrastructure. Governments have fundamental responsibilities to build roads, bridges, railways, ports, broadband. And all of this can have profound impact on economic growth, generating well-paying jobs and bringing opportunity to areas where it does not exist.
- ✓ By having a more progressive tax code.
- ✓ By expanding access to capital. Existing capital and the tools that support entrepreneurship should be made widely available to people who haven't had access to it before.
- ✓ As the pace of technological change quickens, we need to be sure that employees are keeping up with the right skills to thrive in the Fourth Industrial Revolution. That applies to both technical and soft skills. There will be changes in both areas.
- ✓ Companies need to be thinking about enabling their employees to both code in new coding languages, but also to change their mix of soft skills. As AI begins to impact the workforce and automation replaces some existing skills, we're seeing an increased need for emotional intelligence, creativity, and critical thinking, for instance.
- ✓ By creating awareness that this revolution coming, and it may arrive quicker than we think.
- ✓ By investing in the data analysis capabilities and technical infrastructure organisations will prepare itself for the fourth industrial revolution.
- ✓ By focusing on training people for the jobs of tomorrow business and government will be at ease to adapt it. Talent development, lifelong learning, and career reinvention are going to be critical to the future workforce

- ✓ To address these challenges of to political polarization, social fragmentation, and lack of trust in institution, leaders in the public and private sectors need to have a deeper commitment to more inclusive development and equitable growth that lifts up all people

CONCLUSION

People have a deep relationship with technologies. They help us in how we create our world, and we have to develop them with care. More than ever, it's important that we begin right. The innovations in artificial intelligence, biotechnology, robotics, and other emerging technologies are going to redefine what it means to be human and how we engage with one another and the planet. Our capabilities, our identities, and our potential will all evolve along with the technologies we create.

The fourth industrial revolution has profound implications for public policymakers and other actors. Together, they must be proactive in building on beneficial aspects of technological change, while minimizing adverse impacts among those already on the margin.

For the Fourth Industrial Revolution to generate trust, everyone contributing to it (including you) must collaborate and feel a connection to common objectives. More transparency into how we govern and manage this technology is key, as are security models that boost our confidence that these systems won't be hacked, run amok, or become tools of oppression by those who control them.

In its most pessimistic, dehumanized form, the Fourth Industrial Revolution may indeed have the potential to "robotize" humanity and thus to deprive us of our heart and soul. But as a complement to the best parts of human nature—creativity, empathy, stewardship—it can also lift humanity into a new collective and moral consciousness based on a shared sense of destiny. It is incumbent on us all to make sure the latter prevails. We should thus grasp the opportunity and power we have to shape the Fourth Industrial Revolution and direct it toward a future that reflects our common objectives and values.

In the coming decades, we must keep the advances of the Fourth Industrial Revolution on a track to benefit all of humanity. We must recognize and manage the potential negative impacts they can have, especially in the areas of equality, employment, privacy, and trust. We have to consciously build positive values into the technologies we create, think about how they are to be

used, and design them with ethical application in mind and in support of collaborative ways of preserving what's important to us.

This effort requires all stakeholders—governments, policymakers, international organizations, regulators, business organizations, academia, and civil society—to work together to steer the powerful emerging technologies in ways that limit risk and create a world that aligns with common goals for the future.

The world we create through technologies can shape our lives and is the one we pass on to the next generation. Undoubtedly, the capability of advancing technology has the potential to, and certainly will, transform the world. It brings both benefits and obstacles that must be harnessed to truly succeed in the fourth industrial revolution.

"This is the most dangerous time for our planet. The very technology that has been an enabler for mankind in the past has the potential to destroy the world with economic inequality and climate change challenges"(Stephen Hawking).

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RETHINKING ENVIRONMENTAL EDUCATION

Dr. Neelam Gulati
Associate Professor
DAV Institute of Management, Faridabad
Email: neelamgulati2000@gmail.com

ABSTRACT

Environmental Education (EE) is a process in which individuals gain awareness of their Environment and acquire knowledge, skills, values, experience and also the determination which will enable them to act - individually and collectively - to solve present and future environmental problems.

Environmental education is a learning process that: Increases peoples' knowledge and awareness about the environment and associated challenges; Develops the necessary skills and expertise to address these challenges, including critical thinking skills; and Fosters attitudes, motivation, and commitment to make informed decisions and take responsible action. Environmental education 'prepares all citizens with essential skills that contribute to healthier, more environmentally sustainable and economically prosperous communities'.

The present paper focuses on conceptual framework of environmental education and its crossover with multiple other disciplines. The paper also contains the core themes, goals and scope of environmental education. It also mentions about the essentials of EE with an attempt of Competencies Framework for Environmental Education. The paper also talks about the legislations for EE with the barriers to Environmental Education in India. In the end paper studies why rethinking environmental education is need of hour and how it can be done.

Keywords*: Environment, environmental education, sustainability*

INTRODUCTION

"If you plan for a year, plant rice, if you plan for the years, plant trees, but if you plan for a century educate the people." Anonymous

Man, as a part and parcel of the environment, has to recognize the role and importance of environment in order to protect it and to get protection from it, for this, he needs environmental education.

DEFINITION

International Union for the Conservation of Nature (IUCN; 1971) "... the process of recognizing values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the interrelatedness among men, his culture and his biophysical surroundings. EE also entails practice in decision-making and self-formulation of a code of behaviour about issues concerning environmental quality."

Thus Environmental education and awareness is essential for Protection of the atmosphere , Protection of land resources, Conservation of biological diversity, environmentally sound management of biotechnology and hazardous wastes , Prevention of illegal traffic in toxic products and wastes, Improvement in living and working conditions of the poor by eradicating poverty and stopping environmental degradation.

Environmental Education should enable people learn how hazardous environmental pollution, population explosion and resource depletion could be…The best place to start such learning is "School". Environmental Education implies establishing proper ecological equilibrium which entails proper use and conservation of resources in a sustainable manner.

It can be said that Environmental Education is a process that allows individuals to explore environmental issues, engage in problem solving, and take action to improve the environment. As a result, individuals develop a deeper understanding of environmental issues and have the skills to make informed and responsible decisions.

The components of environmental education are:

- **Awareness and sensitivity** to the environment and environmental challenges
- **Knowledge and understanding** of the environment and environmental challenges
- **Attitudes** of concern for the environment and motivation to improve or maintain environmental quality
- **Skills** to identify and help resolve environmental challenges
- **Participation** in activities that lead to the resolution of environmental challenges

Environmental education does not advocate a particular viewpoint or course of action. Rather, environmental education teaches individuals how to weigh various sides of an issue through critical thinking and it enhances their own problem-solving and decision-making skills.

Protection of environment is apparently considered to be an important goal under all stages of education as stated above. Special courses have also been designed to achieve this goal.

However, there is no visible positive impact on the ground. Several reasons can be attributed for the prevailing situation, which includes our lack of concern and commitment for the environment as on individual and lack of skills to tackle environmental problems, due to ineffective environmental courses. To overcome such barriers it is essential to relook and redesign environmental courses that are being imparted in the school and higher education throughout the country.

FOCUS:

Environmental education focuses on:

1. Engaging with citizens of all demographics to;

2. Think critically, ethically, and creatively when evaluating environmental issues;

3. Make educated judgments about those environmental issues;

4. Develop skills and a commitment to act independently and collectively to sustain and enhance the environment; and,

5. To enhance their appreciation of the environment; resulting in positive environmental behavioral change (Bamberg & Moeser, 2007; Wals et al., 2014).

RELATED FIELDS:

Environmental education has crossover with multiple other disciplines. These fields of education complement environmental education yet have unique philosophies.

- **Citizen Science (CS)** aims to address both scientific and environmental outcomes through enlisting the public in the collection of data, through relatively simple protocols, generally from local habitats over long periods of time (Bonney et al., 2009).
- **Education for Sustainable Development (ESD)** aims to reorient education to empower individuals to make informed decisions for environmental integrity, social justice, and economic viability for both present and future generations, whilst respecting cultural diversities (UNESCO, 2014b).
- **Climate Change Education (CCE)** aims in enhancing the public's understanding of climate change, its consequences, and its problems, and to prepare current and future generations to limit the magnitude of climate change and to respond to its challenges (Beatty, 2012). Specifically, CCE needs to help learners develop knowledge, skills and values and action to engage and learn about the causes, impact and management of climate change (Chang, 2014).

- **Science Education (SE)** focuses primarily on teaching knowledge and skills, to develop innovative thought in society (Wals et al., 2014).
- **Outdoor Education (OE)** relies on the assumption that learning experiences outdoors in 'nature' foster an appreciation of nature, resulting in pro-environmental awareness and action (Clarke & Mcphie, 2014). Outdoor education means learning "in" and "for" the outdoors.
- **Experiential Education (ExE)** is a process through which a learner constructs knowledge, skill, and value from direct experiences" (AEE, 2002, p. 5) experiential education can be viewed as both a process and method to deliver the ideas and skills associated with environmental education (ERIC, 2002).
- **Garden-based learning (GBL)** is an instructional strategy that utilizes the garden as a teaching tool. It encompasses programs, activities and projects in which the garden is the foundation for integrated learning, in and across disciplines, through active, engaging, real-world experiences that have personal meaning for children, youth, adults and communities in an informal outside learning setting.
- **Inquiry-based Science (IBS)** is an active open style of teaching in which students follow scientific steps in a similar manner as scientists to study some problem (Walker 2015). Often used in biological and environmental settings.

CORE THEMES OF EE

1. Lifelong learning

The potential for learning about sustainability throughout one's life exists both within formal and non formal educational settings.

2. Interdisciplinary approaches

Education for sustainability provides a unique theme to integrate content and issues across disciplines and curricula.

3. Systems thinking

Learning about sustainability offers an opportunity to develop and exercise integrated systems approaches.

4. Partnerships

Partnerships forged between educational institutions and the broader community are key to advancing education for sustainability.

5. Multicultural perspectives

Achieving sustainability is dependent upon an understanding of diverse cultural perspectives and approaches to problem solving.

6. Empowerment

Lifelong learning, interdisciplinary approaches, systems thinking, partnerships, and multicultural perspectives empower individuals and institutions to contribute to sustainability.

GOALS OF ENVIRONMENTAL EDUCATION

a) Goals of Environmental Education

1. To improve the quality of environment
2. To create an awareness among the people on environmental problems and conversation.
3. To create an atmosphere so that people participate in decision making
4. To develop capabilities to evaluate the development programmes

b) Scope of Environmental Education would include:

1. Awareness , understanding
2. Real Life Situations
3. Conservation of resources and
4. Sustainable development

c) Major Environmental Issues

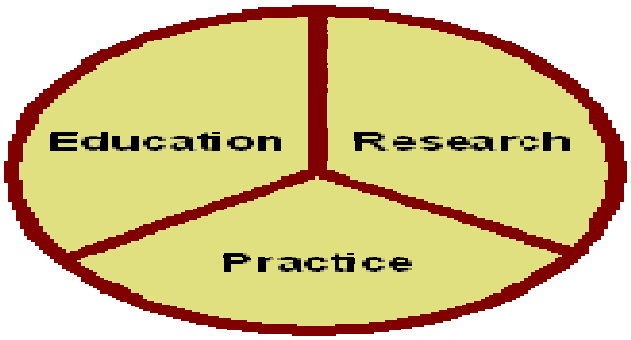
- Climate Change
- Environmental degradation
- Intensive farming
- Land degradation
- Nuclear issues
- Overpopulation
- Ozone depletion
- Pollution
- Resource depletion

ESSENTIALS OF EE FOR SUSTAINABILITY

Environment Economy Society Institutions	• living in harmony with nature • proper use of natural resources • responsibility towards other societies • responsibility towards future generations • common but differentiated responsibilities of individual countries • precautionary principle
Environment **Economy** Society Institutions	• integration of environmental protection into processes of development • change in unsustainable patterns of production and consumption • new technologies • open economic systems, fair market conditions • developing countries conditions • internationalization of environmental costs
Environment Economy **Society** Institutions	• human development • concern for human health • eradication of poverty and ensuring equity • demographic policies • role of citizens and states, public participation • indigenous people and major groups • international co-operation
Environment Economy Society **Institutions**	• environmental legislation • environmental impact assessment • co-operation among states regarding laws • information, science and capacity building

EE FRAMEWORK

A useful framework for environmental education programmes and projects is the triple foci of education, research and practice. Education helps in building awareness among the target audience, primarily using knowledge and information as its resources. Research helps in assessment of the environment, using a number of problem issues as starting points. Practice helps in developing the appropriate action, using a number of skills and expertise for the purpose



PRINCIPLES OF RESPONSIBLE MANAGEMENT EDUCATION (PRME)

The UN-supported initiative 'Principles for Responsible Management Education' (PRME) addresses the responsibilities of management education institutions in preparing current and future business professionals for the challenge of conducting more responsible and sustainable business. The PRME initiative, launched by UN Secretary General Ban Ki-Moon in 2007 at the Global Compact Leaders Summit, was developed by an international group of deans, university presidents and representatives of 60 business schools.

The PRME initiative offers principles for business and management schools to follow and provides an environment for information sharing and learning. This model can be applied in Environment Education.

Though management education, as a discipline, has established itself by providing knowledge for optimizing resources and maximizing economic returns through knowledge and skills of business management, it is still grappling with the challenge of developing appropriate curriculum for imparting management & environmental education for responsibility and sustainability.

COMPETENCIES FRAMEWORK FOR ENVIRONMENTAL EDUCATION:

The competency framework developed on the principles of PRME can be applied in the development of environmental curriculum, pedagogy, teaching–learning material, co-curricular activities, internship training and faculty development and administration of the institute. Competencies for PRME can be classified into four broad clusters as discussed below:

1. Cluster of Cognitive Competencies: Cognitive competencies (C) comprise knowledge of responsible management, corporate social responsibility and sustainability linked with domain knowledge.

2. Cluster of Affective Competencies: Affective competencies (A) involve emotional/ social/spiritual competencies such as empathy, relationship orientation, humaneness, compassion, generosity, service to community/society.

3. Cluster of Moral Competencies: Moral competencies (M) consist of honesty, integrity, conscience, values and virtues.

4. Cluster of Behavioural Competencies: Behavioural competencies (B) comprise skills and behaviour for responsibility such as initiatives for social, economic and environmental sustainability, ethics, transparency, and standing up for what is right, etc.

BUILDING BLOCKS OF ENVIRONMENTAL EDUCATION:

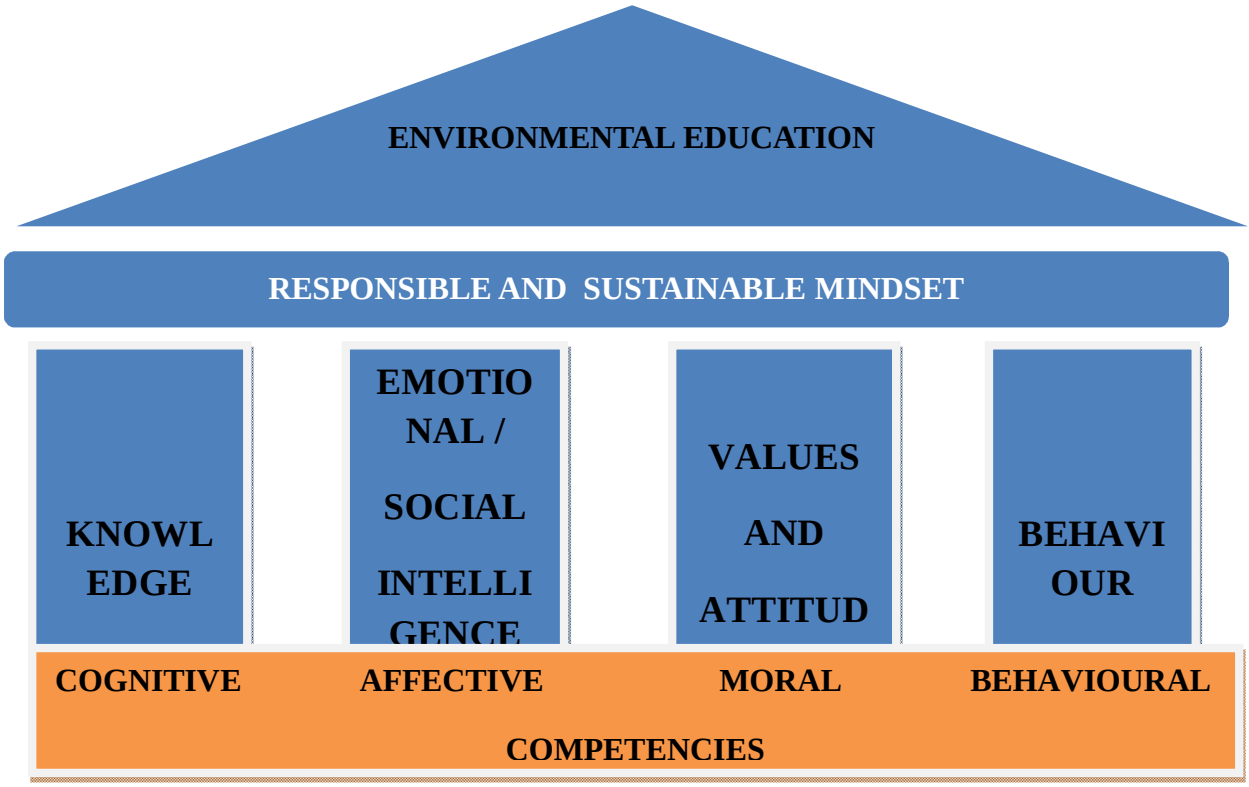


Figure: Building Blocks of Environmental Education

PROVIDING ENVIRONMENTAL EDUCATION AT DIFFERENT LEVELS OF EDUCATION

Level	Objectives
Primary Education	Awareness of environment (Knowledge)
Secondary Education	Relevance for real-life situation of environment (Understanding)
Higher Secondary Education	Conservation of natural resources of environment (Skills)
College & University Education	Sustainable development by solving problems of environment (Attitude and Evaluation)

SUSTAINABLE DEVELOPMENT

Sustainable development is a development that meets the needs of the present without comprising the ability of future generations to meet their own needs (World Commission, 1987)

It is based on following PRINCIPLES

- ✓ Symbiotic relationship between consumerist human race and producer natural systems.
- ✓ Environmental mistakes of the past need not be repeated.
- ✓ Healthy environment is essential for sustainable development and healthy economy.
- ✓ It should stand for broader goals of social transformation.

LEGISLATION FOR ENVIRONMENTAL EDUCATION

It is also observed that there has been a surge in the number of environmental courses being offered by colleges and universities, including management institutes. This trend is being seen more conspicuously since the 90s and more so ever since sustainable development and climate change began to occupy the limelight globally.

Supreme Court Verdict- Besides what is trending globally, we are bound by the 1991verdiet of the Supreme Court of India, directing all educational institutions to make environment a compulsory subject for all stages of education, including schools, colleges, universities, technical institutions.

Nodal Agencies-The nodal agencies appointed by the Supreme Court of India, such as the university Grants Commission (UGC) for higher education, all India Council for Technical Education (AICTE) for technical education, and the National Council of Educational Research and Training (NCERT)[4] for school education to implement the verdict appear to follow the Supreme Court's order, at least on paper.

National Policy on Education- We also have the National Policy on Education 1986 (ref. 5) and the National Policy on Education 1986 (as modified in 1992)[6], which strongly advocate for the inclusion of environmental education (EE) in all stages of education.

Environmental laws- Besides, there are several laws and acts enacted towards environmental protection, the most prominent being the Environment Protection Act of 1986 enacted based on the provision under Article 253 of the Constitution of India following the United Nations Conference on the Human Environment held at Stockholm in 1972.

At present, no other area of education has ever received so much prominence and importance as significantly as we see in the case of EE, thus establishing its exclusive status

EE- LONG WAY TO GO

So far our education system has not been able to achieve the goals of Environment Education

With such overt attention and energy invested to achieve this goal, it is naturally expected that such efforts would bring about environmental literacy across the country, and the result would be reflected in our attitude towards the environment and in addressing environmental issues. It was anticipated that ultimately these would give the environment some respite from its unprecedented exploitation and degradation. But the not – so – desirable result is all around for all to see.

Unfortunately, our existing approach to environmental topics in the courses and curriculum did not seem to have any impact in any way on the ground. Nothing seems to have improved in spite of having made environmental studies a compulsory subject in school and higher education for years now, if not for decades. Instead, environmental problems appear to be getting worse by the day. We observe increasing deterioration of our environment, by it the forests, our waters, air,

soil, etc. This is a matter of serious concern and a huge challenge for the nation. Who do we blame for this debacle? In this situation, it will be worthwhile to ponder over the possible reasons for this state of affairs.

BARRIERS TO ENVIRONMENT EDUCATION

One thing is clear – each one of us, as an individual, is not seriously concerned about the environment. This is evident from the fact that though we are aware of many environment–friendly practices, we hardly put them into practice. Some examples are:

1. Using Polythene- using polythene bags is not environment – friendly. Yet we go shopping intentionally empty – handed relying on the substandard polythene bags to be provided by the shopkeepers.

2. Choice of products- How about our choices in buying products? Do we take into account environmental impacts when we buy electronic equipments gadgets, electrical appliances, etc.? Do we even consider using energy – efficient bulbs in our homes?

3. Unconscious buying - Our buying is purely based on our purchasing capacity. If my family does not have two or three cars, then it is not because l do not 'want' it, it is because l cannot 'afford' it. 'Need' is not even an option that we keep in our decision – making process.

4. Attitude- This attitude is what is turning out to be one of the strongest forces that hinder protection and conservation of the environment.

Somehow we fail to realize, or our education has failed us to realize that the more we consume, the more the production consequently the more the exploitation of resources and ultimately the more deterioration of the environment.

More We Demand
More We Consume
More the Production
More the Exploitation of Resources

LOW IMPORTANCE TO EE IN EDUCATIONAL INSTITUTIONS

If we glance through the syllabus of school education, inspective of the state, we will find adequate topics related to the environment spread all over the course of different subjects beginning class III till class XII. Then we have the UGC guidelines to make environmental

studies compulsory for all students, irrespective of the course they offer. AICTE follows similar guidelines. With these arrangements in place for all education systems throughout the country, it is quite surprising, why it is that we are not able to see any positive results around us or even in our own attitude towards the environment. To our own surprise, the reason is rather simple. We are all aware of the hard and hidden truth. Teaching environmental topics is becoming few and far between in schools. It receives little to no attention because there are so – called 'more important' topics in science. The trend is worse when it comes to higher education. The compulsory environmental studies course is simply there without any earnestness shown by students and teachers alike.

Unpreparedness of Teachers

Unfortunately, it is not about knowing environmental facts and figures that will do any good to our environment but taking some environmentally – responsible action that will contribute in healing our environment. It is about making students feel responsible about nurturing the environment and empowering them with the necessary skills to address environmental issues besides knowing facts and figures about the environment. Unfortunately, this aspect has been completely ignored so far in our teaching – learning process.

However, we know that EE is interdisciplinary in nature, and hence to do justice to the subject/course, teachers must necessarily consider certain subject areas in their teaching – learning process of environmental topics or environmental studies.

a) Such areas include:

(i) Environmental Science-So as to know the scientific facts, figures and processes related to the environment,

(ii) Social Sciences- so as to understand social milieu, constitutional provisions and social issues associated with environmental problems, including historical facts and legal aspects,

(iii) Psychology- so as to understand the thought process or mental capacity of students of different age groups which will enable teachers to look for possible ways to influence the students towards environment – friendly habits, thinking, attitude to behavior, or how persuasion can work in this regard.

b) These will contribute in encouraging students to inculcate environment – friendly actions. However, no such courses are offered at present which would cater to all the areas mentioned. Therefore, it would be appropriate to offer basic training for a stipulated duration to all such teachers who would be teaching environment related courses. Besides, ethics and values are fundamental to EE and hence environmental courses can be most effective amongst the students when teachers themselves are role models. For example, no student would take a teacher seriously who preaches to use public transport but himself moving around in the least fuel efficient and most polluting car, carefree.

Passionate teachers having genuine concerns for the environment is what will make a difference in transacting the course and ultimately impact students' attitude towards the environment.

c) Rigorous role of teachers in environmental education

- To arouse the children's interest in the environment and to raise challenging problems
- To discuss the approach to problems or topics
- To arrange visits
- To provide materials needed for practical work
- To arrange for visiting speakers
- To initiate and develop discussion and debate; and
- To provide facilities for displays and exhibitions of the work carried out.

NEED TO CHANGE OVERALL APPROACH IN EE

One might say that clean energy has much to do in every individual's daily life, as in using solar energy for heating or lighting, etc. But whenever climate change and clean energy are included in our school or college courses, the focus is towards the large-scale production of solar or wind or hydro energy which will be worked out by the Government or by some big industries. Measures to be adopted at the individual level are hardly reflected.

And this brings in a sort of disconnect between what students are taught and the issues facing a common citizen in their vicinity.

This make students feel that environmental issues are Government's problem that would be taken care by the Government.

They do not find the need to be concerned about. Therefore, at the end of such a course what the students achieve is information-based knowledge on climate change and clean energy without any exposure, experience or expertise on how they can apply such knowledge in their daily lives and con-tribute in their little own ways to tackle the issues.

a) EE should motivate Individual efforts

Therefore, our curriculum on environmental courses should focus on local environmental issues which students face daily and empower then with the necessary skill to resolve such issues. Further, activities which involve exposure of the students to nature must also form a regular feature in the curriculum.

b) Project based EE –based study or active participation in some environment-related areas is the way out to make EE relevant and effective in the present scenario instead of the theory – based EE.

For this, students till the high school can take up projects which could be related to waste management in their vicinity, energy or water consumption in their schools and homes, toxic chemicals pre-sent in different commodities of daily use, etc. For students in colleges, they can take up some studies covering topics such as consumption of electronic items, plight of people working in small recycling units, issues of the slum-dwellers, municipality waste collection and management, biomedical wastes, conservation of local water bodies such

Only locally relevant projects must be taken up by the students so that students are physically present in the site/field and not substitute it with internet-based study. Besides, such projects should lead to certain measures to address the issues. Students can also be engaged in educational centres such as zoological or botanical gardens, protected areas and other nature centres as volunteers or as interns to interact and educate the visitors about the animal and plants and their role in the ecosystem. Similarly, students can also be engaged in museums to explain about the artifacts and other important historical accounts.

INTERNATIONAL SCENARIO- NEED FOR INVOLVEMENT

We cannot wait for the Government to solve all environmental problems. Government takes decisions at the policy level. But ultimately it is we, the citizens, who have to put the policies into practice. And for that matter every individual action counts. For example, in the recently concluded COP21 meeting held at Paris, it was reiterated that countries will continue pursuing efforts to limit the temperature increase to 1.5 C. just because countries have agreed does not mean that temperature will automatically be controlled.

Everybody has to contribute to see it happen – individuals, institutions, industries, etc. There is no short cut to achieve it. It has to be a sustained effort by all stakeholders.

ROLE OF JUDICIARY

The most convenient solution often thought of to tackle environmental problems is to bring in the role of judiciary. But we know that laws or imposition of penalties can never be a long term solution to our environmental problems. Because there will be people who will always get away by dodging, by resorting to fraudulent practices or by paying the penalties or worse still, by evading law, especially those who are rich and powerful.

EE TO DEVELOP ATTITUDE FOR ENVIRONMENTAL PROTECTION

Neither teaching environmental science in schools and colleges will ever be a fool-proof solution. It is neither our improved economic condition nor our increased knowledge about the environment that is going to contribute in restoring the environment. Some of the 'saviours' of our environment like Sundarlal Bahuguna, Saalumarads Thim makka, Prajagati Mansukhbhai Ragha vjibhai, Jadav Payeng, Rajendra Singh, the late Kallen Pokkudan are neither wealthy nor have the 'right' environ-mental science education nor do they have the best international publications in their name. All they have is the right environmental attitude – concern and the passion to take care of the environment they live in and the community they belong to.

RETHINK AND REDESIGN EE

Therefore, the need of the hour is to relook and redesign all environmental courses, both for students and teachers, so that they bring about attitudinal change amongst the students towards the environment and at the same time provide them with the necessary skills to be able to contribute effectively, besides imparting environmental knowledge.

Our education need to take us from ‘knowing’ about the environment to the level of ‘doing’ for the environment. These aspects must form the basis for all environment-related courses being offered throughout the country, irrespective of the stage of education. All concerned stakeholders need to seriously consider to move in this direction if we are sincerely committed to make some impact in our efforts to protect the environment through the medium of education.

THE WAY AHEAD FOR ENVIRONMENTAL EDUCATION

EE is as complex and complicated as the term 'environment' itself. It cuts across many disciplines, sectors, realms, eco-systems and spheres. Because of this EE needs to be planned and implemented systematically for which some suggestions are given below:

- Distill best practices and lessons
- Review and revise the existing curriculum
- Reorient the pedagogical approach
- Encourage traditional non-media
- Synergize various efforts
- Establish resource centers
- Develop national policies

CONCLUSION

• The frontier attitude of industrialized society towards nature has not only endangered the survival of all life forms but has also threatened the very existence of human life.

• The realization of such potential danger has necessitated the dissemination of knowledge and skills for environmental protection at all stages of learning need to sensitize with a missionary zeal.

• And through environmental education the environmental ethics can be inculcated in the children through formal and non-formal education.

1. Awareness of environmental Issues
2. Knowledge
3. Attitude
4. Skills
5. Evaluation Ability

6. Participation

Environmental education, properly understood, should constitute a comprehensive lifelong education, one responsive to changes in a rapidly changing world. It should prepare the individual for life through an understanding of the major problems of the contemporary world, and the provision of skills and attributes needed to play a productive role towards improving life and protecting the environment with due regard given to ethical values.

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TALENT DEVELOPMENT IN HOSPITALITY SECTOR: ISSUES AND CHALLENGES

Rajeev Ranjan Mishra
Research Scholar
Faculty of Hospitality & Tourism
Amity University, Uttar Pradesh
rajeevmishra1976@rediffmail.com

Dr Piyush Sharma
Associate Professor
Faculty of Hospitality & Tourism
Amity University, Uttar Pradesh
psharma3@amity.edu

Dr. Sanjeev Kumar
Assistant Professor
IHTM, M.D.University
Rohtak
sanjeev.rawal30@gmail.com

ABSTRACT

Aim of the study *- The purpose of this paper is to explore the concept of talent development, define its scope and recognize the issues associated with formulating talent development strategies in hospitality organizations.*

Design/methodology/approach *– The paper reviews the relatively scant and fragmented literature on talent development processes.*

Findings *–The literature review uncovered that talent development is usually discussed as part of a wider talent management process. The literature highlights issues concerning who is the talent to be developed, what skills/competencies ought to be developed, who drives development and what is the appropriate pace of development*

Research limitations/implications *–The paper is exclusively theoretical in nature; however, it does identify gaps for further research*

Practical implications *– The paper raises a number of important questions that should be considered by organizations when they engage in talent development.*

Keywords: *Talent, Talent development, Hospitality*

Paper type *Literature review*

INTRODUCTION

The hospitality industry is one of the fastest growing businesses all over the world that produces billions of money and offers plethora of new career and employment avenues to individuals with different backgrounds. The importance of tourism and hospitality employment in both developed and developing countries is attested to by the World Travel and Tourism Council (WTTC), who

suggest that travel- and tourism-related activities is anticipated to support over 370 million jobs, or 11% of jobs worldwide by 2026 *(Travel & Tourism Economic Impact 2016, World)*.

In contemporary times, the hospitality industry has emerged as a bustling industry with myriad categories, but customer service is the unifying factor shared by all segments of the industry. With increasing competition and the need to both attract and retain customers paramount for business, high quality of customer service becomes critical.

Keeping in mind the nature of actions in hospitality industry where a direct contact between employees and guests is necessary for providing and realizing the services, the success of service realization and guests' satisfaction depend the most on human factor i.e. the employees. Thus while the physical product is important, for most guests the quality of their experience is likely to be also reliant to a large degree on the human touch provided by its employees. While this is valid for almost every business, this industry depends squarely on customers' being happy.

Baum *et al*., (1997) contends that, all the interactions between the tourists and the employees of the hospitality industry play a crucial role in 'making or breaking the tourist experience' - an opportunity to win or lose the repeat business that determines bottom-line performance. This statement sums up the importance of 'human factor' for organizational effectiveness, success, competitiveness and profitability of tourism and hospitality related business establishments.

Hospitality industry in future would be more inclined towards technology but service would still hold the key to its success as technology cannot provide the level of service that is integral to the expectations of customers. This can only be met by employing a highly motivated and talented staff across functions and roles in a hotel.

This necessitates the stressed need and importance for appropriate talent development practices within the process of providing services. Training has such an impact upon employees that their standard of performance was directly related to the image of their organization in the hospitality industry and branding of their organization. Customer's satisfaction and level of business and profits to the organization largely depended on the employee's performance besides the infrastructure edge of their organization (Rana and Sharma, 2015).

A study commissioned by Hilton Worldwide on 'Creating opportunities for youth in hospitality' revealed that every year, 120 million youth become the industry's potential recruits, yet the hospitality sector—like other employers—is challenged to hire people whose abilities and skills

match its needs. Companies must not work only to attract and retain talent, but also equip employees with the necessary skills to become leaders.

As a result, growing numbers of hotels globally as well as in India are likely to make significant investments in talent development activities, so that talented employees possess the competencies to successfully implement business strategy. They have internal training programs for entry-level workforce. Further, such organizations also have continuous performance evaluations and tailored training programs as part of learning and development initiatives throughout the year. Gandz (2006) highlighted that talent development activities are typically carried out by organizations to make sure that there are zero talent outages, to guarantee planned succession rather than replacement, and to enhance the organizations' repute as a talent magnet.

The idea of developing talent is not new; the need for talented employees has always been existent right from times immemorial. However, the crisis for talented employees has struck the corporate world only today, due to the changing paradigms of workforce in the present era. Moreover, employees nowadays, adopt a more pro-active stance, seeking out organizations with the best professional development criteria (Mirvis and Hall, 1994; Roehling *et al*., 2000, Sullivan, 1999; Tanskey and Cohen, 2001). All these factors have brought talent development - as a discipline of study, at the helm of affairs.

"Talented Workforce build an organization and are the gateways to success"- human resource managers, the world over, have come to understand this reality and are burning the midnight oil in working out procedures towards this end and within a short span of time 'Talent Development' has become the mantra for the success of hotel.

However, in the Indian context, talent development as a concept is quite young, leaving room for a lot of ambiguity and lack of clarity to exist for practicing professionals. Moreover, there are relatively scant and fragmented academic papers that focus primarily on talent development in the hospitality industry. It is with this intention that this paper was proposed.

An extensive review of literature was carried out to explore further into this area. A detailed analysis of the work done in this regard reveals that companies are facing talent crunch in this competitive era which has put pressure on them to attract the best talent and ensure that employees join the company and choose to stay in the organization rather than finding opportunities elsewhere.

REVIEW OF LITERATURE

Defining Talent for Development Purposes

Talent is an ambiguous term. A discussion on talent development would be incomplete without an understanding of the word "Talent". According to Iles *et al*., (2010) and Kim *et al*., (2012) the concept of talent has been of great interest to researchers and practitioners alike over the last two decades. This interest partially stems from the 'great contribution to the organization success' which can be delivered by 'talent'. However, Iles *et al*., (2010) have highlighted the lack of consensus concerning what talent may fall within the scope of a talent development process. They argued that the term talent should not be used by professionals merely because it is fashionable, or has been adopted by high-reputation organizations, or to gain a greater credibility for profession. Tansley (2011) and CIPD (2007) revealed that the word 'talent' has been used since ancient times; and further noted that it has various interpretation and identification which are all dependent on time, people, and organizations. Clake and Winkler (2006a) highlighted that talent has the following characteristics in varying degrees: it is organizational specific; highly influenced by the type of industry and the nature of its work; dynamic, and so likely to change over time according to organizational priorities. Hence, an employee may be considered to be talented in relation to one task but not necessarily in relation to another task. Gladwell (2010) proposed that talent is equal to ten years or 10,000 hours invested in a specific field.

Gallardo-Gallardo *et al*., (2013), Michaels *et al*., (2001), Tansley (2011) and Williams (2000) stressed that a clear understanding of the definitions and conceptualization of the term 'talent' is essential for the success of organizations and it is argued that this is particularly more-so for the hospitality industry as it is heavily labor intensive; with a varied labor force ranging from housekeepers to top managerial positions. Also, Duncan *et al*., (2013) and Baum (2008) highlighted that hotels rely a lot on low skilled or unskilled workers; and thus the lack of clarity of the concept of talent is more 'pronounced' within this industry.

Objective versus Subjective perspective of Talent

Principally, talent is often understood from either an *objective* perspective (characteristics) or a *subjective* perspective (people as talents). Some researchers have an objective view toward talent describing the characteristics of being a talent rather than talented individuals. Capabilities (Thijssen & van der Heijden, 2003), competencies (Lehmann, 2009; Siikaniemi, 2012; Thijssen

& van der Heijden, 2003), and managerial skills (Claussen *et al*., 2014) are some of main characteristics describing talents from an objective perspective. Michaels *et al*., (2001) portrayed talent as entirety of a person's capabilities, their natural gifts, skills, expertise, learning, knowledge, understanding, experience, intelligence judgment, attitude, demeanor, character and drive. However, some of other definitions with subjective perspective have to do with high-performing employees (McDonnell *et al*., 2010), high-potential employees (McDonnell *et al*., 2010), individuals who can make a significant difference to the current and future performance of the company (Stewart & Harte, 2010; Morton 2004), people who are able to meet current and future leadership requirements (Rhodes *et al*., 2008), and managers in general (Sheehan, 2012). Zikmund (2000) described talent as all those employees who can proliferate organizational performance either through their instant contribution or, in the more extended-term, by displaying the highest levels of potential.

Managing Talent in the Hospitality Industry

Grobler & Diedericks (2009) said that tourism being labor intensive, the management of employees working in the industry is a critical function. According to Baum & Kokkranikal (2005) the continued success of any organization in this industry is dependent on the employees' contribution and commitment. The hospitality industry has always found it hard to attract suitably motivated, trained and qualified employees that are able to deliver the service promises that organizations make to their current and potential customers. The hospitality industry has a poor reputation as a source of permanent employment, offering low pay, low-status nature of job, anti-social working hours, menial work, seasonal employment, the lack of opportunity for promotion from within, and limited opportunities for career progression (Kusluvan and Kusluvan, 2000; Baum, 2002; Wood, 1995; Choy, 1995; Martin *et al*., 2006; Guerrier, 1999; Pizam, 1999; Riley, 1996; Twinning-Ward and Baum, 1998). Therefore, according to Jurowski & Liburd (2001), local people prefer to be involved through equitable collaborations which aim at maximizing the monetary and social advantages to employees as well as the local community. According to O'Leary and Deegan (2005), poor image of the industry to qualified graduates and higher labor turnover is an indication that the tourism and hospitality industry will face greater challenges in talent management than other sectors. Furthermore, Jithendran and Baum (2000) mentioned that this coupled with ambiguous attitudes to investment in staff development, rigid

employment and an unsustainable approach to its development work to restrict the success of talent management in tourism and hospitality organizations. Considerably, many applicants to work in the sector do so with expectations of temporariness (Baum *et al*., 1997) as they wait for better paying career avenues. Furthermore, King *et al*., (2003) disclosed that alumnae from the tourism and hospitality industry have no plan of making a career in the industry upon graduation. This is a major hindrance to talent management as this constitutes a leakage of key skills and abilities to other sectors in the economy. However, Baum (2006) specified the fact that the unfavorable notion of the industry should be viewed with restraint as some industry professions are considered thrilling.

Concept of Talent Development

There is surprisingly little published research on global talent development issues and literature that details the scope and sets the limits of the concept (Cohn *et al*., 2005; Younger and Cleemann, 2010; Garavan *et al*., 2009; Cook, 2010). However, it is acknowledged that Talent Development (TD) represents an important component of global talent management (Scullion and Collings, 2011; Barlow, 2006; CIPD, 2011; Novations, 2009; Cappelli, 2009).

Dessler (2009) viewed TD as an integral part of talent management, which is a planned and coordinated process for identifying, attracting, recruiting, hiring, managing, developing and retaining employees in an organization. These two concepts are also often linked to, and sometimes used interchangeably with, career development (Collings *et al*., 2009), which involves a lifelong series of training and related activities that contribute to a person's career success and fulfillment (Dessler, 2009).

Talent development, according to Evans *et al*., (2002) involves developing leaders via processes such as coaching, feedback, training, mentoring and challenging employees. Davis *et al*., (2007) defined TD as the process of changing an organization, its employees, its stakeholders, and groups of people within it, using planned and unplanned learning, in order to achieve and maintain a competitive advantage for the organization. Mehdiabadi *et al*., (2016) defined TD as a comprehensive system that consists of a set of values, activities, and processes with the aim of improving all willing and capable individuals for the mutual benefit of individuals, host organizations, and society as a whole.

Garavan *et al.*, (2012) stated that talent development focuses on the planning, selection and execution of development strategies for the entire talent pool to ensure that the organization has both the current and future supply of talent to meet strategic objectives and that development activity are in sync with organizational talent management processes.

Thunnissen *et al*., (2013) stressed that talent development along with talent attraction and talent retention has been seen as the three dominant strategies or practices within TM. However, TD has not received enough attention in the dialogue among management scholars on the topic of talent. One exception is the "make or buy" debate that is a long-lasting debate in the literature (Cappelli, 2008; Cappelli & Keller, 2014). Pfeffer (2001), as one of the supporters of "make" approach, warns that mere attention to attract and retain but neglect the development of talented employees could harm the organization. Moreover, according to Garavan *et al*., (2012), focusing on acquiring talents from external sources is not a successful long-term strategy; instead, organizations should pursue the strategy of developing talent from within, to ensure that employees possess industry –and firm-specific knowledge and skills (Lepak and Snell, 1999) in order to be competitive.

Stahl *et al*., (2012) claimed that "one of the biggest challenges facing companies all over the world is building and sustaining a strong talent pipeline" and one sure way of building talent pipeline is through talent development. A study by Govaerts *et al*., (2010) revealed that in order to retain employees, it is important to pay attention to talent development. He also stressed that organizations should allow people to learn more and do more in what they are good at.

Focus of Talent Development: Technical or Generic Competencies

Whether talent development processes should emphasize on the development of technical or generic competencies or both represents a critical arguable point within the literature. Managers in the nascent stages of their careers usually place more emphasis on technical competencies whereas giving generic competencies less attention. As a result, very often, they fell short of the expectations required of the job. This has resulted into an increased focus on generic competencies. The shift to generic competencies is something that has happened in the past 10-15 years. The term "generic competencies" emphasizes a range of qualities and capabilities that are important in the workplace. These include skills such as problem solving and analytical skills, communication skills, teamwork competencies and skills to identify access and manage

knowledge. Generic competencies also include personal attributes such as imagination, originality and intellectual rigor and personal values such as perseverance, honesty and patience (Garavan *et al.*, 2009; Sandberg, 2000). Generic competencies provide more significant development challenges as compared to technical competence. They tend to be holistic, to overlap, and interweave (Capaldo *et al*., 2006), and they are intrinsically related to the kind of person that one is. They are clearly related to issues such as self-confidence and self-esteem of the learner. It is therefore clear that the new workplace places emphasis on skills that go beyond the technical and include a full spectrum of soft skills. Talented employees are likely to demonstrate these generic competencies in combinations that meet the demands of a unique and incessantly changing work environment (Garazonik *et al*., 2006). It suggests that on-going talent development processes need to be flexible, adaptable, and capable of sociability and in tune with the evolving context. Subsequently, talent development must increasingly be work-based in order to foster capabilities to deal with the temporarily or dynamism of work context.

Approach towards Talent Development – Inclusive or Exclusive

The implication of variation in meaning of talent means it can mean whatever organizations want it to mean (Gallardo-Gallardo *et al*., 2013) and therefore, this understanding of talent determines what groups of employees are to be developed. For example, some organizations will include all categories of employee in their talent definition, while others will focus on selected few.

Talent can be regarded as being exclusive to a few high-performing individuals or can be viewed as a quality that all employees possess to some extent and that can be developed and managed through general strategies (Collings and Mellahi, 2009; Lewis and Heckman, 2006). Downs & Swailes (2013) argue that talent-related strategies are typically an exclusive process with the main focus on a few percent of individuals in organizations known as key employees or stars; despite the fact that "talent exists in all sectors of a workforce, organizational talent programs usually focus on management and leadership capabilities"

Berger and Berger (2003) are more inclusive and consider it is about how talent is managed generally and assumes that all people have some talent which can be identified and liberated. They do, however, suggest that an organization that effectively promotes talent management categorizes staff members and concentrates development investment in key, high performance and high potential individuals. Baum (2008) stressed that managers need to interpret talent in

inclusive terms, ensuring that they view the total workforce in terms of their potential to take on additional responsibility and be promoted within their department and the wider organization

Talent development in hospitality organizations needs to focus on inclusiveness and an open-minded approach to training and development which provides opportunities for all staff to participate and enhance their skills and knowledge sets. Training and development are key to the underpinning of talent management in hospitality and tourism organizations but the investment in training must be inclusive of all staff and not selectively focused at executive levels.

Pace of Talent Development

Defenders of an integrated talent management approach emphasize the need to expedite the development of talent in order to counter the prevailing and foreseen business pressures (Abell, 2005; Backus *et al*., 2010; Korotov, 2007). But a traditional approach emphasizes a focus on combining classroom development, e-learning and on-the-job development enhances the competencies of talent to perform efficiently and improve their potential. Conger (2010) is a particularly strong supporter of the blended approach. He highlights four components of formal development: individual skill development, socializing development interventions, action and strategic learning initiatives. Conversely, traditional talent development approaches are frequently passive rather than active, they tend to be slow, they emphasize natural experiential learning, and the combination of development strategies needs to be carefully managed to engage the employee in a genuine experiential development process (Tansley *et al*., 2006). Traditional learning timeframes are typically five to seven years (Williams-Lee, 2008).

Accelerated talent development programs focus on ensuring that talent is capable to perform, and there is a strong weight age on speeding up the learning curve. Such programs are premised on a highly motivated learner; ongoing intensive training, extensive use of simulation tools, structured projects and experiences to drive learning and self-managed development processes. Crucial objectives that push accelerated development include the enhancement of knowledge and skills (Lombardo and Eichinger, 2000); identify development (Ibarra, 2003); the development of new networks (Wang-Cowham, 2011) and the development of new stories about self (Ibarra and Lineback, 2005). Accelerated development time frames are considerably shorter typically between one to three years.

CONCLUSION

Based on this review of the domain of talent development it is possible to draw a number of tentative conclusions. Talent development, in the context of hospitality and tourism industry is, as we have seen, a somewhat challenging concept. It, therefore, follows that managing a defuse interpretation of talent is also challenging and cannot be viewed as the relatively simple process that can apply within large, hierarchical and homogeneous organizations. Talent development is a significantly under-developed and under-researched concept. It is almost invariably highlighted as a key component of talent management, which in turn is put forward as one of the most significant challenges facing organizations today. There is also a degree of skepticism as to whether talent development differs from learning and development or whether it represents a significant paradigm shift in terms of how learning and development is conceptualized and practiced in organizations. It is our view that there is scope in the talent development concept. It raises a number of important questions concerning who should be developed, to what degree and in what way. These represent fundamental questions that we have considered in this paper and to which we have in some cases provided the most tentative of conclusions. However, our review does point to a number of conclusions and useful avenues for future research.

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AN ECHO OF GLOBALISATION IN BEVRAGES BUSINESS IN INDIA

Aashi Yadav
Student
GD Goenka University
Sohna, Faridabad
aashiyadav12@gmail.com

Dr. Karina Bhatia
Assistant Professor
GD Goenka University
Sohna, Faridabad
kareenabhatia@gmail.com

ABSTRACT

While various global companies have set the benchmark for quality excellence and innovation, Coca-Cola appears to be at the forefront. Cited as one of the most valuable companies in the world, Coca-Cola has grown into a massive global industry with innumerable products such as Coke Zero, Minute-Maid, and Fanta etc. without straying from its timeless and basic ideals. The present study aims to conduct an analysis on the global strategies adopted by the company.

Aim of the research paper:

The study explores regional differences in business strategies adopted and excelled by Coca-Cola to achieve success around the globe. While many studies have discussed the growth of the company, few have analysed the same through frameworks which provide a wholesome understanding of the business strategies of the company.

Findings of the study:

The results of this study highlight the levels of Adaptation and Aggregation adopted by the company since its inception. The study also shows how Coca-Cola has exploited cultural differences to its advantage.

Key words: *Globalisation, Adaptation, Aggregation, Cultural differences*

INTRODUCTION

The Coca-Cola Company is world's leading soft drink maker and operates in more than 200 countries around the world. It sells a variety of sparkling and still beverages. It has a very strong brand recognition across the globe. According to B*usiness Insider*, approximately 94% of the world population is aware of the red & white logo of Coca Cola. Despite having grown into a

massive global industry with innumerable products such as Coke Zero, Minute-Maid, Fanta etc., Coca-Cola has never strayed from its timeless and basic ideals.

Coca-Cola's history has been rather adventurous, from a small company in Atlanta, United States to a global leader in the soft-drink industry with a presence in 200+ countries. Coco-Cola may be widely as a standard-bearer of global business, but it has had its doubts about an idea it once took for granted. Ten years ago, globalisation was the way forwards, with standardised products and the aim of creating mirror markets. Today, the picture looks very different. Even Coca-Cola has had its doubts about an idea it once took for granted. It was a Coke CEO, the late Roberto Goizueta, who declared in 1996: "The labels 'international' and 'domestic'…no longer apply." His globalization program, often summarized under the tagline "think global, act global," had included an unprecedented amount of standardization. By the time he passed away in 1997, Coca-Cola derived 67% of its revenues and 77% of its profits from outside North America. However, this strategy faced numerous obstacles due to the fact the all markets are fundamentally different.

Today, Coca-Cola is one of most well-known brands in the world. This company has continued to gain momentum and growth, capitalizing on the rapidly expanding beverage industry and ranking as the largest beverage company in the world. With its push for global market share, Coca-Cola now operates in over 200 countries with over 84,000 suppliers. Currently, over 70% of Coca Cola's business income is generated from non-US sources (Coca-Cola Company, 2012). In over a century, Coca-Cola has grown the company into a multi-million dollar business.

Even companies with substantial global experience and success can fall prey to visions of apocalypse. Coca-Cola has a broader presence than just about any other company in the world, owns what is reckoned to be the world's most valuable brand and is much more profitable overseas than at home. The road to success has not always been easy for Coca-Cola. Many countries have banned the use of Coca-Cola products, claiming that these products are "threatening public health" and "encouraging obesity." Many labor practice suits have been filed against the mega beverage company with accusations of "child labor sweatshops" and "discrimination in providing health care benefits to workers." In addition, the beverage industry has been flooded with competitors introducing new soft drink products, such as Pepsi, along with

soft drink alternatives, such as Gatorade, bottled water, fruit juice, and energy drinks. Coca-Cola has faced the challenge by introducing new beverage brands including Sprite, Fanta, Minute Maid, Simply Orange, Fresca, Vitamin Water, Smart Water, Odwalla, and Powerade.

In light of the obstacles Coca-Cola has overcome, the company has remained true to its commitment to provide quality, refreshing, and satisfying products to consumers. In order to ensure each product tastes the same across the globe, Coca-Cola continues to keep the beverage recipes secret with tightly controlled manufacturing facilities. Coca- Cola has never lost sight of its goal to be the best beverage company in the world.

RESEARCH OBJECTIVE

The objective of the research paper is to understand the adaptation of a company for globalization.

ANALYSIS

CAGE Framework

The Cage Framework is an acronym for four broad components of distance: Cultural, Administrative, Geographic and Economic. These four components often intertwine, It is useful to distinguish between components as they have different bases and present different challenges and obstacles. The framework can be applied to the Coca-Cola Company to better understand the global and local distances it faces while serving one of the world's most consumed beverage.

Cultural Distance

Culture as used here refers to the attributes of a society that are sustained mainly by interactions among people, rather than by state. Cultural differences between countries generally tend to reduce economic interactions between them.

Firstly, Coca-Cola offers an array of standardized non-alcoholic beverages. This caters to countries such as India and China, which have large non-alcoholic and fairly young population. Adhering to the customs and trends prevalent in the specific countries, Coca-Cola is working towards maintaining the global domination.

Also, its products come in varied sizes and packs. For example, it has introduced in smaller cans in Middle-Eastern countries such as Saudi Arabia. It has also heavily focused on family packs and share packs in India. Coca-Cola is tapping onto the rich family culture and life and is featuring that as a selling point. Coca-Cola advertisements in India also show family units, where coke features as a welcome drink and ice-breaker. Most Indian families are able to identify with the cleverly devised advertisements.

Coca-Cola has also minimised linguistic content, their advertisements often use local languages such as Mandarin, Hindi and Japanese in response to large Asian Markets. However, Coca-Cola has had to overcome local barriers, some people are loyal to domestically produced products such as Frooti and Rasna in India.

Furthermore, Asian markets have been relatively slow in achieving high innovation levels and offering new and exciting products. Coca-Cola offers exotic products of the west to relatively less-developed Asian countries such as Philippines and Vietnam.

Administrative Distance

Administrative attributes encompass laws, policies, and institutions that typically emerge from a political process and are mandated or enforced by governments. International relationships between countries, including treaties and international organisations, are included as well, on the grounds that these relationships are sustained by the countries that create or support them.

Coca-Cola has had to maintain strict food and beverage standards due to stringent policies placed around the world. Coca-Cola has to simply with the food regulations of each country it has presence in. Particularly countries like China have huge legal barriers in place in makes entry of new westernised firms especially difficult. When the company was expanding religiously, the late 1990’s, it had to tackle pressure from the domestic companies along with the specific governments.

The company also works and functions differently than most other firms. For example, Brazil, India and Argentina have different work ethic than Americans, hence to sustain their plants in such nations were challenging in the initial phase.

In nations where Coca-cola has set up plants, it is an employer of large proportions. Hence, it is tightly monitored.

Geographic Distance

The geographic attributes of countries that can effect cross-border economic activity mostly grow out oh natural phenomena, although some human intervention may also be involved. Geographic attributes that can be included are physical distance, presence or absence of common land border, differences in time zones and climates, access to oceans, topography and within country distance to the border.

Geographic Distance has been minimized the company with various measures. Firstly, tapping onto huge markets due to high population in India and China, they have set up production plants. China itself had 43 bottling plants and 2 concrete factories by 2014. However, as an issue with most developing firms, there are gaps in communication and transportation. These missing links in transport and communication covert to delayed deliveries and misunderstandings. Countries like Canada and U.K. have a stellar transport and communication chain.

Economic Distance

This distance refers to differences that affect cross-border economic activity through economic mechanisms distinct from the cultural, administrative and geographic factors.

Firstly, economic distance is minimised as all income levels in most countries can afford their products. They have particularly dropped price points in India and China to appeal to the large lower middle-class sections. The nature of demand does not vary with income differences. There are also high economies of scale in Asian markets where the raw materials and labour is cheap compared to western counterparts. Hence, new plants have been set up in Myanmar, Philippines and Vietnam. However, distribution and business systems are different in most cases as compared to the United States. Thus, Coca-Cola needed to adapt to the different scenario in each nations. As a solution, the higher management at the headquarters gave more power to individual country heads to make decisions. In order to become more active and agile in the global market, they have also introduced country specific flavours, 30 new flavours in Japan including Matchaflavour.

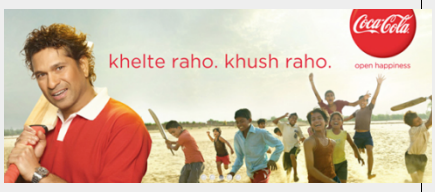
“ AAA” Framework

Pankaj Ghemawat’s AAA framework offers three generic approaches to global value creation. Adaptation strategies seek to increase revenues and market share by tailoring one or more

components of a company's business model to suit local requirements or preferences. *Aggregation* strategies focus on achieving economies of scale or scope by creating regional or global efficiencies; they typically involve standardising a significant portion of the value proposition and grouping together development and production processes.

Arbitrage is about exploiting economic or other differences between national or regional markets, usually by locating separate parts of the supply chain in different places.

Adaptation	Aggregation	Arbitrage
According to the company's Annual Report, the company sells beverage products in more than 200 countries. It should be noted that Coca-Cola has not modified the taste of the base product except where it changes due to the quality of water and sugar available. This may be why the taste of Coca-Cola may seem different in Europe, America and Asia.	Coca-Cola implemented aggregation strategy to expand beyond US and to achieve worldwide economies of scale. As a proof, The Coca-Cola company offers more than 350 brands aside from its Coca-Cola beverage to suit customer preferences	Coca-Cola is a prime example of Economic and Geographic arbitrage. It outsources and produces majorly in China with 39 facilities across the country.
Coca-Cola has adapted its packaging, marketing and branding strategies to be more successful in different countries including India and China.	The company has a long history of acquisitions. Coca-Cola acquired Minute Maid in 1960, The Indian Cola Brand Thumbs Up in 1993, and Barq's in 1995. In 2001, it acquired the Odwalla brand of fruit juices, smoothies, and	Besides this, it has manufacturing plants with local bottling rights in most of the countries to reduce its cost of production.

	bars: and in 2007, it acquired Fuze beverage.	
Bottling History: Adaptation		
	Coca-cola has also announced its presence in Burma, a new geographical location as they lift their suspension on Western sanctions. The companies regional portfolio expands all across the globe	
		

CONCLUSION

The Coca-Cola Company has had some issues in adapting to various cultural differences and markets in the 1970's and 1980's. However, it recovered spectacularly when it catered to specific markets such as China and India. The company took advantage of economies of scale in the

asian market and expanded their global presence. The company is a prime example of economic and geographic arbitrage, where it has opened numerous plants in 83+ countries. Coca-Cola is one brand with different variants, all of which share the same values and visual iconography. People want their Coca-Cola in different ways, but whichever one they want, they want a Coca-Cola brand with great taste and refreshment.

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A STUDY OF GLOBALISATION STRATEGIES OF FAST FOOD CHAINS IN INDIA

Mahi Balusu
Student
GD Goenka University
Sohna, Haryana
Email: mahibalusu@yahoo.com

Dr. Karina Bhatia
Assistant Professor
GD Goenka University
Sohna, Haryana
Email: kareenabhatia@gmail.com

ABSTRACT

Over the past years KFC has outperformed all its competitors and has become one of the most famous fast food chains in today's time. The cutting-edge technology, research and creative strategies have helped it in serving customer needs better. KFC has been successful taking over the local markets and serving the needs of the local consumers. This study aims at analysing how KFC has captured the markets around the world and the specific strategies it has used to devise country specific menus. The Adaptation strategies of KFC are commendable and so is their sensitivity to various cultural needs. While many of its competitors and their strategies have been studied in detail previously, very few have focused on KFC and its business strategies.

Aim :

Aim of the study is to find out the integration global strategies of the global fast food chains in India.

Findings of the study:

The results of this study show how KFC has been the most successful in integrating itself to the domestic markets with varying cultural demands.

Keywords :

Adaptation, Research, Innovation, Country-specific-menus, Cultural-barriers, Fast-food-chain

INTRODUCTION

Globalisation is the process of the integration of markets, economies, industries, cultures and policy-making around the world. It has increased the interconnectedness of the national economies and there has been a tremendous increase in trade in all kinds of goods and services.

The biggest companies are no longer national firms but multinational corporations with subsidiaries in many countries. The dependency of all the countries around the world has increased as a result of their free movement of capital and also improved communication and transportation. But Ghemawat on the other hand reasons that we are not as connected as many perceive because of the law of distance — meaning that differences among groups of people determine the ability and willingness of different groups of people to interact with each other. These differences can be cultural (e.g., different tastes), geographical (e.g., physical distance and barriers), administrative (e.g., in the European Union or not in the European Union), or economic (e.g., differences in affordability and/or living standards). These differences help in proving that globalisation today is not as it seems and the world is not as close as it seems.

To prove this Ghemawat showed the statistics of the percentage of all telephone calls that are international (2%), the percentage of all citizens in a given country who are recent immigrants (3%), the percentage of all foreign direct investment (10%), and finally, the percentage of all exports relative to GDP (30%). In most cases people overestimated the categories by a significant amount. He believes that the world is not flat. The CAGE Distance Framework was developed by Pankaj Ghemawat identifies the Cultural, Administrative, Geographic and Economic differences or distances between countries that companies should address when crafting international strategies. It may also be used to understand patterns of trade, capital, information, and people flows.

According to Ghemawat the CAGE framework makes distance visible for managers, helps to pinpoint the differences across countries that might handicap multinational companies relative to local competitors and can also shed light on the relative position of multinationals from different countries. In addition to this Ghemawat also developed the AAA framework which offers three generic approaches to global value creation. Adaptation strategies seek to increase revenues and market share by tailoring one or more components of a company's business model to suit local requirements or preferences. Aggregation strategies focus on achieving economies of scale or scope by creating regional or global efficiencies; they typically involve standardizing a significant portion of the value proposition and grouping together development and production processes. Arbitrage is about exploiting economic or other differences between national or regional markets, usually by locating separate parts of the supply chain in different places.

In this study I have taken the company KFC and analysed the CAGE and AAA framework of the company. KFC Corporation is the largest fast-food chicken operator, developer, and franchiser in the world. KFC, a wholly owned subsidiary of PepsiCo, Inc. until late 1997, operates over 5,000 units in the United States, approximately 60 percent of which are franchises. Internationally, KFC has more than 3,700 units, of which two-thirds are also franchised. In addition to direct franchising and wholly owned operations, the company participates in joint ventures, and continues investigating alternative venues to gain market share in the increasingly competitive fast-food market. KFC was founded by Colonel Harland Sanders, an entrepreneur who began selling fried chicken from his roadside restaurant in Corbin, Kentucky during the Great Depression. Sanders identified the potential of the restaurant franchising concept, and the first "Kentucky Fried Chicken" franchise opened in Utah in 1952. KFC popularized chicken in the fast food industry, diversifying the market by challenging the established dominance of the hamburger. By branding himself as "Colonel Sanders", Harland became a prominent figure of American cultural history, and his image remains widely used in KFC advertising. In the early 1970s, KFC was sold to the spirits distributor Heublein, which was taken over by the R.J. Reynolds food and tobacco conglomerate; that company sold the chain to PepsiCo. The chain continued to expand overseas, however, and in 1987, it became the first Western restaurant chain to open in China. It has since expanded rapidly in China, which is now the company's single largest market. PepsiCo spun off its restaurants division as Tricon Global Restaurants, which later changed its name to Yum! Brands.

RESEARCH OBJECTIVE

The objective of Research Paper is to studythe globalisation strategies of the Fast Food Chain Industry in India.

RESEARCH METHODOLOGY:

Research Design is Exploratory Research Design. The Secondary Data is used. The analysis is descriptive analysis. Data Analysis Procedure for the study is the different menus all around the world of KFC have been studied.

DATA ANALYSIS

The AAA Frameworkof KFC is analysed. It includes study of the following strategies:

Adaptation at KFC

Kentucky Fried Chicken or KFC is synonymous for chicken. This brand of fast food is most famous for its variety of chicken, but to cater to different markets world-wide different strategies have been adopted. A few of the markets and their different menus for local requirements are discussed in the study. The first is Asian Market. In the Asian market the food consumed is comparatively spicy and the rice intake is very high. But there are still differences country-wise. The country-wise specifications are analysed.

In India, The local requirements in India are very different from the other parts of the world because of the wide disparities in the cultures. KFC was the first fast food chain to enter India in the 1990s and the first outlet was opened in Bangalore in 1995. In the initial stages KFC was repeatedly ransacked as people were worried about the influence of the Western culture and the dilution of the indigenous traditions. KFC was allegedly accused of using illegally high amounts of monosodium glutamate and also that it sold food that was cooked and fried in pork fat. But later on when the market cooled down in 1999 KFC built up its products to cater to the taste buds of Indians. The taste preferences in India are comparatively more spicy and tangy and hence KFC develops specific sauces to suit the tastes. It also accommodates more vegetarian food items on the menu as beef was a taboo for the Hindus and pork for Muslims.

KFC also realised that it had to cater to the thirty-five percent of the Indian population which is vegetarian. KFC offers a wide range of vegetarian products, which include the tangy, lip-smacking Paneer Tikka Wrap ‘n Roll, Veg De- Lite Burger, Veg Crispy Burger. There are munchies such as the crisp golden veg fingers and crunchy golden fries served with tangy sauces. You can also combine the veg fingers with steaming, peppery rice and a spice curry. The mayonnaise and sauces also do not have egg in them. Not just the vegetarian menu but also the standard chicken is being modified to suit the spicy pallets of Indians. For example, chicken strips are served with a local sauce, or the sauce of the wrap is changed to local tastes. In 2012, KFC India also launched an oven product called Fiery Grilled Chicken to increase its popularity. All of the KFC restaurants in India now have ovens and oven prepared products. These changes helped KFC build their brand name in India.

In China, the Chinese culture and traditions are very different from the Western culture and traditions. A typical Chinese meal includes a starch, which is usually rice, noodles, or mantou, also known as steamed buns, and an accompanying dish of vegetables, fish, or meat. Furthermore, rice is traditionally served in its own bowl while the accompanying dishes are served on communal plates shared by everyone at the table. Dessert is typically not consumed after meals; however, dessert snacks and sweet foods, such as basi fruit dishes consisting of fruits such as bananas and apples coated in sugar syrup, do exist and are usually served with the rest of the meal. Cold beverages are also not customary, as it is believed that cold liquids are harmful to the digestion of hot foods. To cater to the Chinese lifestyle the menu adapted by KFC in China includes rice congee, egg custard tarts and tree fungus salad, with an average of 50 different menu items per store. Another very popular item is the Dragon Twister, a wrap that includes fried chicken, cucumbers, scallions, and duck sauce, similar in preparation to Peking duck. Sander's classic friend chicken is also offered along with spicy tofu chicken rice, fried dough sticks, egg tarts, and soy milk drinks. In addition to its more diverse menu, Chinese outlets are typically two to three times larger than American and European outlets, giving them the ability to serve more guests depending on the large population. Many are open 24 hours a day and provide delivery services as well.

In Japan, KFC Japan's menu has scored a home run in developing a menu that perfectly suits the local tastes. The menu comprises of the specific items like: Kentucky for Christmas. Japan has a very famous Christmas meal even though Christmas is not celebrated in Japan, the meal has become a very well followed tradition. The holiday meal that people have been known to stand in line for hours to order includes a festive bucket of fried chicken, a side, cake and even champagne.The menu also includes Kentucky Fried Rice Bowls. The Japanese flavoured rice bowls include Teriyaki and Spanish Salpicao as well as the more traditional Kentadon bowl, which combines crispy pieces of chicken with deep fried shiitake mushrooms, sweet potatoes and spicy green peppers. Served on a bed of rice and drizzled with a piquant sweet sauce, it's like a bucket of KFC and a bowl of tempura.

Japanese Menu also include Terrine and Ballotine. KFC Japan also has offered a fancy feast of terrine – like a cold, meat loaf-fruit cake hybrid in chicken and beef variations – and the roasted ballotine prepared with apricots, plums, cranberries, oranges and chestnuts stewed in white wine,

rolled up with chicken, tied with twine, roasted and topped with more fruit. Menu also includes Biscuits That Look Like Doughnuts . These biscuits are usually more bland when compared to the US and are available with a topping of soft serve ice cream and maple syrup and are also available in pumpkin flavour during Halloween. The menu also includes The Bistro Hamburg.

The Bistro Hamburg is a 30 percent pork, 70 percent beef patty covered in a mushroom demi-glace with lettuce and mayo on a bun. The menu also includes Kentucky Fried Salmon. Since the success of Kentucky Fried Fish a panko-crusted, deep fried salmon fillet with its generous drizzle of tartar sauce has been introduced.In Japanese menu, Kentucky Chicken Rice is also included. KFC Japan's Kentucky Chicken Rice sandwich, is a ketchup-soaked rice patty layered with cheese and sauce between two fried chicken fillets. In Menu also includes KFC Bento Lunches.

Different flavours of boneless chicken packaged in a two-tiered plastic bento box was introduced which became a raving success. Complete with a set of chopsticks, the box holds the meal on top and a tray of rice underneath. Sides include a scoop of potato salad and a bite-sized egg omelette. The menu also includes Kentucky Fried Soup. The deep fried corn potage fritters at KFC have become a sensation in Japan.

In South Korea, South Korea's Zinger Double Down King went the extra mile by adding a beef patty to the classic Double Down recipe (bacon and cheese between two fried chicken fillets). In Philippines, Philippines' Double Dog (hot dog cradled in a fried chicken fillet), was a very popular special item. In Thailand, KFC introduced the 'Wing Zeed,' which was a spicy, fried, chili lime chicken, doused with lime juice. On the side, you can also get unique KFC items like a shrimp donut, which is a donut shaped piece of shrimp that is breaded and fried. You can also order an egg tart, which is a crispy egg pie with custard filling. In Arabia, KFC Arabia offers Ramadan meals and specials. Unlike McDonald's, their Ramadan special includes ten mini Krispy Kreme doughnuts which are not found anywhere else. In Singapore, at KFC in Singapore, not only can you get a 'Rosata Twister (an egg wrapwith cheese, vegetables, and chicken, waffles, or pancakes) in the morning, but you can also get cheese fries. Their breakfast menu continues with a porridge, which they claim is a local favorite. For lunch, Singaporeans can order a chicken and rice combo with a special sauce. In Malayasia, chicken meatball soup is sold. In

multiracial Malaysian markets, KFC also has different limited-time products to cater to different festive seasons such as Ayam Kicap Meletup for Eid al-Fitr seasons and Golden Treasures for Chinese New Year in 2015.

In American Market, KFC's core product offering is pressure fried, on-the-bone chicken pieces seasoned with Colonel Harland Sanders' "Original Recipe" of 11 herbs and spices. The product is typically available in either two or three piece individual servings, or in a family size cardboard bucket, typically holding between 6 and 16 chicken pieces. Poultry is divided into 9 different cuts (2 drumsticks, 2 thighs, 2 wings, 1 keel, and a backbone-based breast cut divided into 2 pieces). The product is hand-breaded at individual KFC outlets with wheat flour mixed with seasoning in a two- to four-minute process.The basic model for KFC in the United States, not necessarily duplicated elsewhere, is a focus on low prices, a limited menu (29 items on average) and places an emphasis on takeout.America's infamous Double Down sandwich includes bacon and cheese between two fried chicken fillets and the flavours used in America are more subtle and less spicy compared to Asia. Grilled chicken is also very popularly sold. Some locations in the US sell fried chicken livers and gizzards. A small number of US outlets offer an all-you-can-eat buffet option with a limited menu. In the US potato wedges are sold instead of French fries. In African Market, Jollof rice, a spicy dish native to West Africa, is one way in which KFC is improvising to win over palates in Africa's largest economy, Nigeria.

In European Market, in Germany, the 'Indian Zinger Menu' was introduced like in Denmark. But unlike Denmark, Ben & Jerry's ice cream is available for dessert. KFC Germany also offers three grilled products: Grilled KFC Gourmet Chicken, Grilled Chicken Salad and Yummy Twister. These lighter menu options are displayed on dedicated special green menu board spaces. In London, KFC London uses revised slang in their 'Wicked Variety Bucket' to attract customers. A 'Cajun Box-master' meal, with chicken breast, hash-brown, cheese, and Cajun sauce wrapped in a tortilla has also been introduced in the British market. In Denmark, the 'Indian Twister Menu' was introduced, which contains Indian inspired menu items like a chicken wrap with curry sauce and jalapeños or black pepper potatoes. For dessert, a hot vanilla tart was considered as a delicacy. In France, French KFC sticks with the Colonel's original recipe when it comes to the chicken, but have more interesting options for dessert: tiramisu and sweet pie are just two items you can find on the menu. KFC France launched a new oven cooked sandwich in

2013 called the Brazer Parmesan, which offers a more balanced choice to customers. In Australian Market , KFC diners can try 'The Parmy,' or the latest promotion from the international chain. A 'Parmy Stacker' comes with two chicken schnitzel filets, 'Parmigiana' sauce, and cheese on an oatmeal bun. For dessert, you can order a Sara Lee chocolate and caramel mousse, which is only found in Australia. At KFC Australia, they are passionate about great tasting food and are continually investigating how they can improve products and provide broader menu choices. In 2013, they launched a permanent grilled menu, ensuring that customers can enjoy more options when visiting KFC Australia.

Aggregation at KFC

Even though KFC caters to the local needs through adaptation it also maintains a few standardized products with aggregation. A few core components of KFC are observed in every country. The chicken pieces set up with Sanders equation of 11 flavours and also herbs is available everywhere and acts as a base. This leads to economies of scale due to large scale production of one type of chicken and thus a harmonious combination of adaptation and aggregation.

Arbitrage at KFC

There are different types of arbitrage and KFC has included it in its framework. The Cultural Arbitrage, favourable effects related to country or place of origin have long supplied a basis for cultural arbitrage. For example, an association with French culture has long been an international success factor for fashion items, perfumes, wines, and foods. Similarly, KFC has been mainly associated with the U.S. fast food culture and has gained its popularity because of that. KFC headquartered in Louisville, Kentucky, United States was founded by Col. Harland Sanders and KFC is known mainly for fried chicken, which is usually served in a bucket. The influence of the western culture has now increased the demand for KFC and made it one of the most popular fast-food chains in the world.

The Administrative arbitrage, Legal, institutional, and political differences between countries or regions create opportunities for administrative arbitrage.When KFC was not accepted in India in 1995 then KFC began concentrating on other parts of the world without any wait. But then they

reclaimed their market again in 1999 and since then 350 outlets have been developed all over India till date. The political situation did help KFC in coming back but mostly the acceptance of the people and a change in their attitudes helped it in gaining popularity.

CAGE FRAMEWORK OF KFC

The CAGE Framework of KFC in India includes:

The cultural distance, Culture affects the choices and behaviour of people. Various languages, ethnic societies, religion, social values, can become a hindrance to successful business transition. In India majority of people follow Hinduism and cows are considered auspicious. Hence beef was not tolerable by the Indians as it is widely consumed in the US. The second largest population of Muslims consider pork a taboo and only prefer to eat halal meat. The vegetarian population in the country is the largest in the world and twice the whole population of the US. This was a significant socio-cultural change for KFC to tackle. The company responded by introducing the tangy, lip-smacking Paneer Tikka Wrap 'n Roll, Veg De- Lite Burger, Veg Crispy Burger. There are munchies such as the crisp golden veg fingers and crunchy golden fries served with tangy sauces. The veg fingers were also combined with steaming, peppery rice and a spice curry. The mayonnaise and sauces do not have egg in them.

Not just the vegetarian menu but also the standard chicken is being modified to suit the spicy pallets of Indians. For example, chicken strips are served with a local sauce, or the sauce of the wrap is changed to local tastes.Asian menus also offer rice meals and culture appropriate sides to suit the local needs better and these have been catered to in India by the introduction of the rice bowls. These changes helped KFC build their brand name in India.

The administrative distance, India is being more liberal after 1991 and is allowing more opportunities to enter the Indian market from abroad after the LPG (Liberalisation, Privatisation and Globalisation) scheme in 1991. At that time, KFC received permission from the Indian government to open 30 outlets across the country. From 30 outlets, the number has grown to 296 today. When the first KFC was set up in Bangalore it faced a lot of unrest and to prevent further onslaughts on the KFC outlet, the management of the KFC outlet demanded a police van to be permanently parked outside for almost a year. Even after this the brand could not survive

and hence it was discontinued but it came back again in 1999. KFC started expanding outside Bangalore in 2004 and by 2008-09 they had 34 outlets in India and gained more popularity due to the specific menus. The operations of KFC are affected by the government policies on the regulations of fast food operation. Currently the government is controlling the marketing of fast food restaurant because of health concern such as cardiovascular and cholesterol issue and obesity among the young and children in the country. As a certified fast food operator, there are many regulations and procedures that KFC should follow. For example is the Halal certification that becomes a concern to Muslim consumers. KFC should protect its integrity and consumer confidence by ensuring all materials and process are as claimed or must followed and any violation will have dire consequences.Other legal requirements include operating hours, business registration, tax requirement, labor and employment laws and quality & environment certification in which the outlet has been certified. The legal requirement is important because the offenders will be fined or have their business prohibited from operating which can be disastrous.

In geographic distance, physical distance between nations still remains a very important factor in shaping up of the diverse business strategies. The greater the physical distance the more the cost associated with communication and transportation. India is a very attractive market to the US because of its large population and diverse culture. Most KFC restaurants are located in the source communities such as shopping malls, the petrol, and lodging en route.

In economic distance, the consumer wealth and income and the cost of the labour are the economic factors which affect the business strategies. The entire pricing agenda depends on it. KFC in India has partitioned the business sector into urban and semi urban areas because the fast food market in India is highly competitive, KFC faces a wide number of direct and indirect competitors. McDonalds has already introduced a Salad plus line which targets the ‘healthy food’ conscious Indians, which is a direct competitor. KFC will have to tackle this by introducing a new and healthy product line.

CONCLUSION

After the above analysis of the CAGE and AAA Framework of KFC we can clearly see how the differences across nations impact the business strategies. The more the disparate conditions the more the need for building up better strategies to tackle the problems. Business leaders must figure out which elements will meet their companies' needs and prioritize accordingly. KFC in particular has worked a lot on its Adaptaion and Aggregation but not so much on its Arbitrage strategies. The CAGE framework for KFC revealed the differences in the cultural factors in India and also showcased how the administrative situation in India supported its growth. The economic and geographic factors along with the various legal requirements in India helped KFC grow and gain more popularity.

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COMPREHENSIVE STUDY OF POLICY CHALLENGE DUE TO RAPID GROWTH IN IMMIGRANT POPULATION: A CASE STUDY OF SINGAPORE

Amit Yadav
Student
GD Goenka University
Sohna, Haryana
amitjeemain@gmail.com

Nipun Agarwal
Student
GD Goenka University
Sohna, Haryana
nipun.agarwal126@gmail.com

Dr. Karina Bhatia
Assistant Professor
GD Goenka University
Sohna, Haryana
kareenabhatia@gmail.com

ABSTRACT

The immigration is a big issue in all developed economies. The study is to analyse the impact of immigration on the economy and its effect on the polices adopted by the government of the country. The immigration has increased tremendously due to globalization. A number of people migrate due to better infrastructure, health facilities, education and standards of living. The effects can be both positive and negative.

Aim: *The aim of the study is to policy challenge due to rapid growth in immigrant population in Singapore.*

Methodology: *The methodology used for the study is descriptive analysis of the secondary data taken from the various published reports.*

Findings: *Singapore is an attractive destination for highly skilled people and students. The policies of the government for immigration are very tough. The people are highly scrutinized before immigration.*

Keywords: *Immigration, Policy, Impact, Economy*

INTRODUCTION

The history and fortunes of Singapore, an island nation between Malaysia and Indonesia, have always been closely intertwined with migration. As a British trading colony established in 1819, most of the city's population growth until the World War II was due to immigration. Supported by a fledging colonial economy, Singapore drew in large numbers of laborers from China, India, and the Malay Archipelago. Consequently, its population quickly grew from a few hundred to

half a million by the 1931 census. Immigration temporarily ceased during the Japanese occupation of 1942 to 1945, and Singapore's road to self-governance in the 1950s and 1960s saw the passing of new ordinances that limited immigration to only those who could contribute to its socioeconomic development. Stricter citizenship and immigration laws were imposed following Singapore's independence from Malaysia in 1965, leading to the dwindling of the city-state's non resident population (i.e. non permanent noncitizen residents) to 2.9 percent of the total population.

It was not until the 1980s, when Singapore became more industrialized, that the question of migration returned. The state's non resident population started increasing again, beginning a trend that continues to this day. In the last decade in particular, large infusions of new immigrants — and correspondingly new cultures — have begun to chisel away at the nationalist foundations the country had earlier laid. Coupled with concurrent waves of emigration among Singaporeans, the city seems to be returning to its former role as a transit point of the world.

RESEARCH OBJECTIVE

The study is to analyse the impact of immigration on the economy and its effect on the policies adopted by the government of the country.

DATA ANALYSIS

Immigration to Singapore

The population of Singapore can be divided into two categories of people according to the permanency of their stay: Citizens (including naturalized citizens) and permanent residents are referred to as “residents,” while immigrants who are in Singapore temporarily (such as students and certain workers) are considered “non residents.” Permanent residents (PRs), while typically immigrants as well, have been granted the right to reside permanently in Singapore and are entitled to most of the rights and duties of citizens, including eligibility for government-sponsored housing and mandatory military service for young adult males, though not the right to vote in general elections.

The non resident population increased at an unprecedented pace in the first decade of the 21st century, according to the 2010 Singapore census. During this period, it accounted for 25.7 percent of the total population, up from 18.7 percent in the previous decade (Table 1). As of 2010, the nonresident population stood at 1,305,011 out of a total population of 5,076,732.

Table 1: Changing Proportion of Citizens to Foreign Nonresidents in Singapore, 1947-2010

Census Year	1947[1]		1957			1970		1980		1990		2000		2010	
	No.	Percent	No.	Percent		No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total	940,824	100	1,445,929	100	Total	2,074,507	100	2,413,945	100	3,016,379	100	4,027,887	100	5,076,732	100
Total born in Singapore and Malaysia	571,331	60.7	1,055,184	73	Total resident population	2,013,563	97	2,282,125	94.5	2,705,115	89.7	3,273,363	81.3	3,771,721	74.3
	-	-	-	-	Citizens	1,874,778	90.4	2,194,280	90.9	2,595,243	86	2,985,886	74.1	3,230,719	63.6
Others (excluding nonlocally domiciled services personnel	369,493	39.3	14,725	27	Permanent Residents	138,785	6.7	87,845	3.6	109,872	3.6	287,477	7.1	541,002	10.7
					Total nonresident population[2]	60,944	2.9	131,820	5.5	311,264	10.3	754,524	18.7	1,305,011	25.7

Source: Compiled from Del Tufo, 1949; Arumainathan, 1970; Singapore Department of Statistics, various issues.
Notes:
[1]Singapore attained independence in 1965, the year when the term "citizenship" was first used, drawing a clear boundary between Singaporeans and foreigners. Prior to independence, the census classified the resident population according to place of birth. The numbers of people born in Singapore and Malaysia will be used as a proxy for citizens here. "Others" denotes those numbers born outside of Singapore and Malaysia. "Nonlocally domiciled services personnel" refers to the officers and foreigners working for the British administrative service, as well as other temporary workers and their families. [2]The "Total nonresident population" refers to individuals who hold passes for short-term stay in Singapore: these include the employment pass, work permit, dependent's pass, and long-term social visit pass. This category excludes tourists and "transients."

In 2008, annualized growth of the nonresident population peaked at some 19.0 percent, while that of the resident population steadied at just 1.7 percent. Population growth rates for both nonresidents and residents, however, have begun to ease since the 2008-09 Great Recession, with 4.1 percent growth among the former and 1.0 percent among the latter in 2010.

According to the 2010 census, about 14.3 percent of the 3,771,721 residents of Singapore are PRs. Between 2005 and 2009, the PR population grew an average of 8.4 percent per year — much faster than the comparatively modest 0.9 percent average growth observed for Singapore citizens. This trend seemed to come to a rather abrupt finish in 2010, however, when the annualized growth of PRs fell to 1.5 percent while that of Singapore citizens held steady at 0.9 percent.

Despite the increasing share of PRs among the resident population, which itself rose from 8.8 percent of the total population in 2000 to 14.3 percent in 2010, the ethnic composition of Singapore's residents has remained relatively stable since 1990. Albeit, the percentage of Chinese fell below 75 percent of the total resident population for the first time ever in 2010, while the share of Indians rose from 7.9 percent to 9.2 percent. These particular ethnic composition shifts are largely due to widening discrepancies between citizens' and PRs' ethnic profiles (Table2).

Table 2: Resident Population by Ethnic Group and Status, 2010

	Total	Chinese		Malays		Indians		Others	
	3,771,721	2,793,980	74.1%	503,868	13.4%	348,119	9.2%	125,754	3.3%
Singapore citizens (85.7%)	3,230,719	2,461,852	76.2%	487,758	15.1%	237,473	7.3%	43,636	1.4%
Permanent residents (14.3%)	541,002	332,128	61.4%	16,110	3.0%	110,646	20.4%	82,118	15.2%

Source: Department of Statistics, 2011

In terms of the overall migrant stock, the proportion of Singapore's population born outside of the country increased from 18.1 percent in 2000 to 22.8 percent in 2010. The majority of immigrants were born in Malaysia (386,000); China, Hong Kong, and Macau (175,200); South Asia (123,500); Indonesia (54,400); and other Asian countries (90,100).The increasing share of the foreign born among Singapore's population is a direct consequence of policies to attract and rely on foreign manpower at both the high and low ends of the labor spectrum to overcome the limitations of local human capital. Indeed, the foreign born constituted approximately 34.7 percent of Singapore's labor force in 2010, up significantly from 28.1 percent in 2000. (Table 3)

Table 3: Foreign Workers in Singapore, 1970-2010

Year	Total labor force	No. of foreign workers	Percent of total labor force
1970	650,892	20,828	3.2
1980	1,077,090	119,483	7.4
1990	1,537,000	248,200	16.1
2000	2,192,300	615,700	28.1

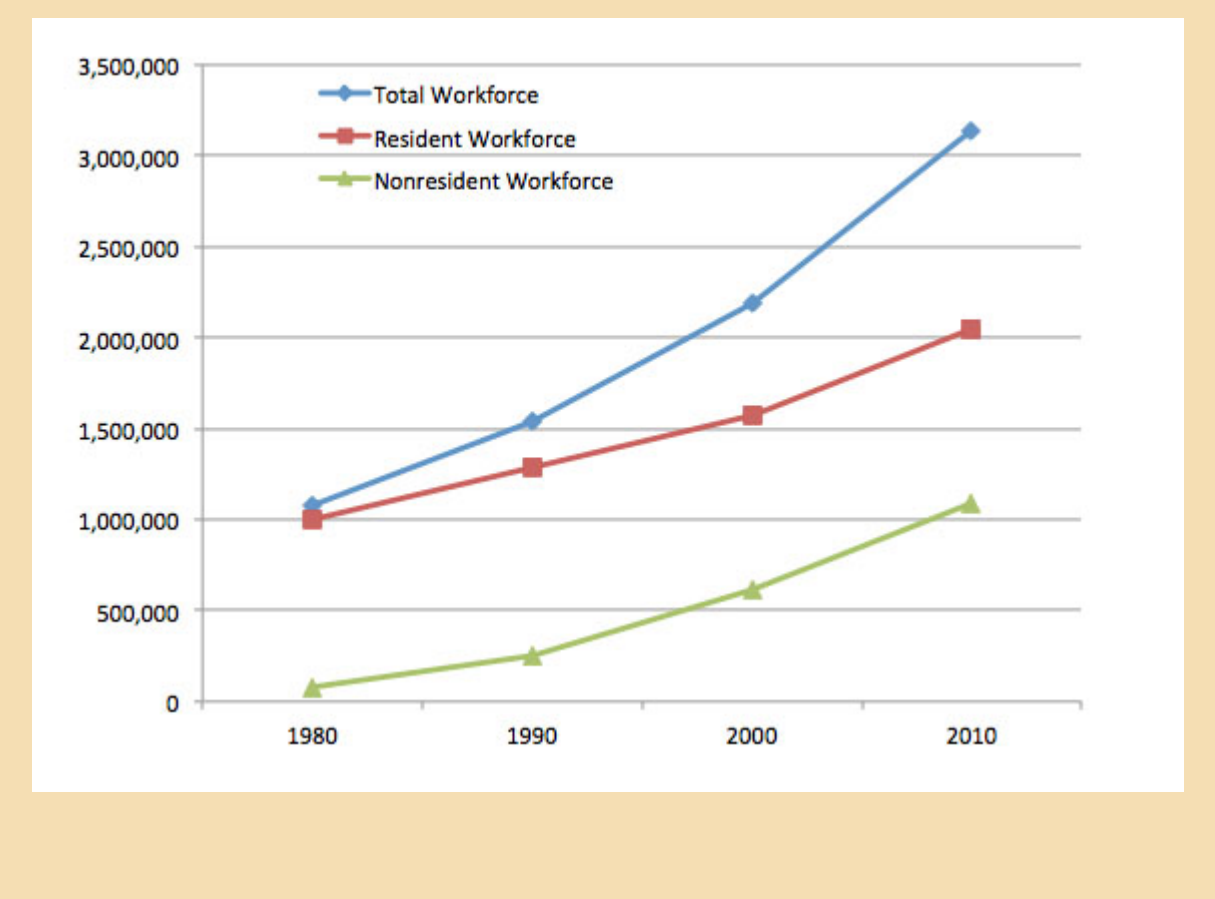
2010	3,135,900	1,088,600	34.7

Source: Compiled from Rahman, 1999:7 (for 1970 and 1980), Singapore Department of Statistics, 2001:43 (for 1990) and Singapore Department of Statistics, 2011:48 (for 2000 and 2010).

The most rapid (absolute) increase in the foreign-born proportion of the labor force occurred in the 2000s when, following decades of healthy growth, Singapore's nonresident workforce increased 76.8 percent from 615,700 in 2000 to nearly 1.09 million in 2010. (Figure 1)

About 870,000 of these new arrivals are low-skilled workers primarily in the construction, domestic labor, services, manufacturing, and marine industries. Since 2008, some foreign born have also been admitted as performers for work in bars, discotheques, lounges, night clubs, hotels, and restaurants. The remaining 240,000 are skilled and generally better-educated S-pass or employment pass holders, along with a small number of entrepreneurs. The size of this group has also increased rapidly due to intensive recruitment and liberalized immigration eligibility criteria.

Figure 1: Singapore's Total Resident and Non resident Workforce, 1980-2010



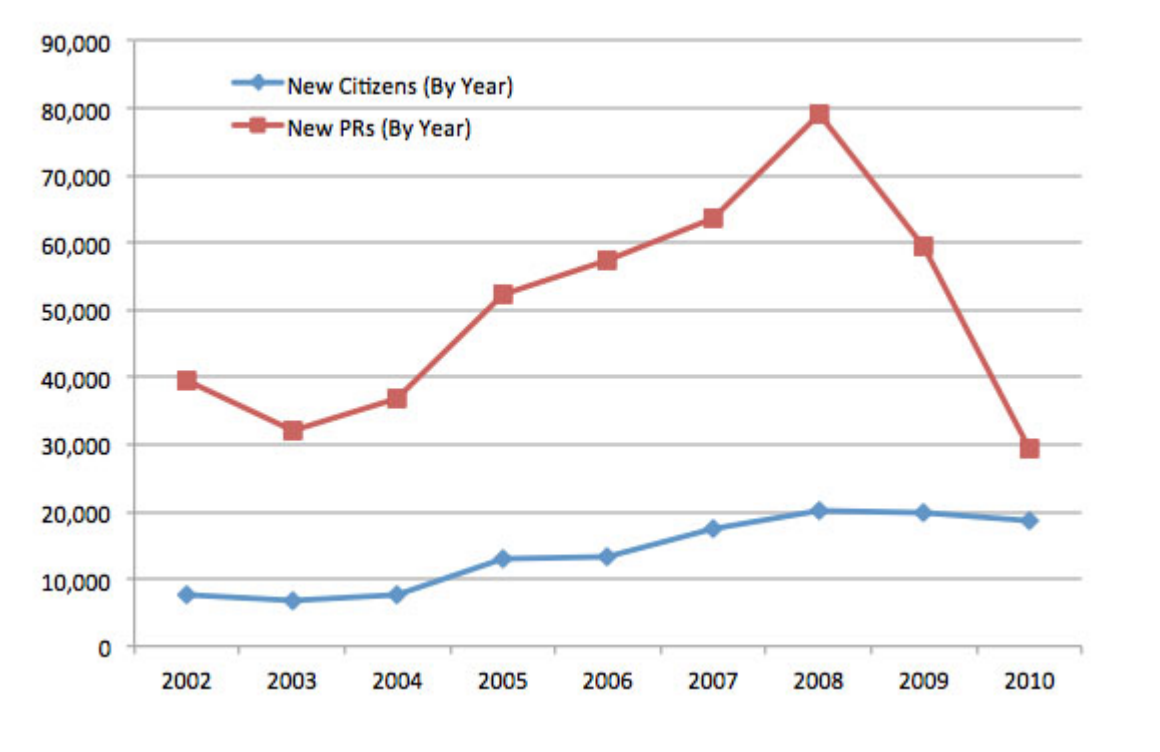
A third immigration flow of increasing importance is that of international students. In 2010, 91,500 nonresidents came to study in Singapore on foreign-born student passes, comprising 13.1 percent of all students in the country. While this represents a slight decrease in enrollment from 96,900 in 2008, the government of Singapore has made the recruitment of foreign students a priority since 1997 (see section on Recruitment of Foreign Students, below).

With respect to citizenship, eligibility for the foreign born is limited to those who are at least 21 years of age and who have been PRs for at least two to six years immediately prior to the date of application. According to Singapore's Immigration and Checkpoints Authority (ICA), citizenship applicants must also be "of good character," intend to reside permanently in Singapore, and be able to support themselves and their dependents financially.

According to media reports, 20,153 immigrants became citizens in 2008, continuing an upward trend from 17,334 in 2007; 13,200 in 2006; 12,900 in 2005; and 7,600 in 2004. In 2009 however, the number of new citizens fell slightly to 19,928. This slump was also mirrored in the annual uptake of permanent residency, which more than doubled from 36,900 in 2004 to 79,167 in 2008

but suffered a decrease to 59,460 in 2009. Sharper declines were recorded for both citizenship and permanent residency in 2010, ahead of the May 2011 general elections (Figure 2).

Figure 2: New Citizens and Permanent Residents in Singapore, 2002-2010



Low-Skilled Foreign Workers

Singaporeans are reluctant to take up low-skill jobs that pay low wages, so foreign-born workers often fill these positions. To guard against excessive permanent migration of those with less skills, however, government policy since the 1970s has ensured that unskilled and low-skilled migrants remain a transient workforce, subject to repatriation during periods of economic downturn.

Low-skilled foreign-born workers are managed through a series of measures, including the work-permit system, the dependency ceiling (which regulates the proportion of foreign to local workers), and the foreign-worker levy. These measures are expected to be tightened between July 2012 and July 2013 (see Table 4). Workers are only allowed to work for the employer and

in the occupation indicated in their work permit, though a sponsored transfer of employment is permissible and subject to work pass validity. The termination of employment of a foreign-born worker results in the immediate termination of the work permit, in which case the immigrant must leave Singapore within seven days.

Work-permit holders are also subject to a regular medical examination that includes a general physical checkup, a chest x-ray, and a test for HIV/AIDS. They may not marry Singaporeans or PRs without the approval of the controller of work permits, and failure to get approval may result in repatriation. Female work-permit holders (typically domestic workers) who, through the compulsory medical screening process, are found to be pregnant are also subject to repatriation without exception.

On top of these controls, employers of work-permit holders are also required to post a S$5,000 (US$3,820) security bond for each (non-Malaysian) foreign-born worker. All employers of foreign-born domestic workers must also take out medical insurance (S$15,000, or US$11,450) and personal accident insurance (S$40,000, or U.S.$30,535) coverage for each such worker, since employees in this sector are not entitled to workman's compensation.

Table 4: Eligibility Schemes and Conditions for Work-Permit, S-Pass, and Employment-Pass Holders

Type of Pass	Pass	Eligibility	Eligible for Dependent's pass?[6]	Eligible for Long-Term Social Visit pass?[7]	Subject to Dependency Ceiling?[8]	Subject to Foreign Levy?[9]
P[1]	P1	Foreigners whose basic monthly salary is more than S$8,000.	YES	YES	NO	NO
	P2	Foreigners whose basic monthly salary is more than S$4,500 and up to S$8,000.	YES	YES	NO	NO
Q[2]	Q1	Foreigners whose basic monthly salary is at least more than S$3,000 and who possess recognized degrees, professional qualifications, or specialist skills.	YES	NO	NO	NO
S[3]		A category of work pass for mid-level skilled foreigners earning a minimum monthly salary of S$2,000 introduced in 2004.	YES (if monthly basic salary is equal or more than S$2,800).	NO	YES (subject to a sub-quota of up to 25%)	YES (ranges from S$160/US$123 to S$250/US$192 per month)
R[4] (Work Permit)		Work pass issued to a skills qualified[5] or unqualified foreigner below 50 (non-Malaysian) or 58 (Malaysian) years of age, who earns a monthly basic salary of not more than S$2,000.	NO	NO	YES (subject to quotas of up to 87.5%)	YES (ranges from S$160/US$123 to S$470/US$362 per month)

Source: Adapted from materials from the Ministry of Manpower.

Notes:

[1]**P passes** are for foreigners who hold acceptable degrees, professional qualifications, or specialist skills and are seeking professional, administrative, executive, or managerial jobs. Minimum eligible salary for the P2 pass was raised from S$4,000 to S$4,500 in January 2012. There was no change of eligibility criteria for P1-pass applicants.

[2]**Q-pass** holders earn smaller salaries than P-pass holders and are usually required to show evidence of "acceptable" degrees, professional qualifications, or specialist skills. Minimum eligible salary for this pass was raised from S$2,500 to S$2,800 in July 2011, and again from S$2,800 to S$3,000 in January 2012. Older applicants may need to command monthly salaries higher than S$3,000.

[3]**S-pass** holders are mid-level applicants on a points system that takes into account multiple criteria including salary, education qualifications, skills, job type, and work experience. Employers are required to take out medical insurance coverage of at least S$15,000 (US$11,450) for applicants. Minimum eligible salary for this pass was raised from S$1,800 to S$2,000 in July 2011. The dependency ceiling sub-quota will also be reduced to 20% from July 2012, while the levy rate will steadily rise to between S$300 ($231) and S$450 (US$346) by July 2013.

[4]**R-pass** holders' recruitment is subject to foreign-worker levies, dependency ceilings, and a security bond. A medical examination as well as medical insurance coverage (since January 2010) are additional requirements for their employment. Foreigners earning between S$1,800 and S$2,000 and who were previously eligible for the S pass now have to apply for this pass effetive from July 2011. The dependency ceiling quota will also be reduced for manufacturing and services employees from July 2012, while levy rates will generally rise for most sectors to up to S$750 (US$577) by July 2013.

[5]**A skills-qualified work-permit holder** is one who possesses at least an SPM (Sijil Pelajaran Malaysia, or the Malaysian Certificate of Education) qualification or its equivalent, an NTC-3 (Practical) (National Technical Certificate Grade 3) trade certificate, also known as ITEs or Institute of Technical Education Skills Evaluation certificate (Level 1), or other recognized trade certifications that is relevant to his/her occupation.

[6]**Dependent's passes** are issued to the children (under age 21) and spouses of S-Pass and Employment-Pass holders, entitling them to come to live in Singapore with the pass holder.

[7]The **Long-Term Social Visit pass** accords long-term visit entitlements to parents, parents-in-law, step-children, spouses (common law), handicapped children, and unmarried daughters over age 21.

[8]The **Dependency Ceiling** is expressed as the maximum percentage of foreign workers a company is allowed to employ as part of its total workforce. It varies according to sector and type of permit.

[9]The **Foreign Levy** is a pricing mechanism to control the number of foreign workers in Singapore. It is paid monthly by the employer of the worker to the government.

Highly Skilled Foreign Labour

The other burgeoning sector of foreign labor — skilled workers — is usually referred to as "foreign talent" in both government and public discourse. Currently, skilled workers and professionals account for 22.0 percent (about 240,000) of Singapore's total nonresident workforce, eclipsing the 14.6 percent recorded for 2006.Traditionally, most skilled professionals have come from the United States, Britain, France, and Australia, as well as Japan and South Korea. Due to policies instituted in the 1990s to recruit the highly skilled in nontraditional source countries, however, the majority of skilled workers (apart from Malaysians) are now from China and India.

Given Singapore's aspirations to become a major player in the globalized world, the nation's main economic strategy is based on being home to a highly skilled workforce. In addition to investing heavily in information technology and human capital to meet global competition, the government has focused on developing Singapore into the "talent capital" of the global economy.To reach this goal, Singapore has liberalized some of its immigration policies (while tightening others related to low-skilled immigration) and made it easier for skilled migrants to

gain permanent residency and citizenship. Various state programs have been launched to facilitate the inflow of talent to Singapore, including company grant schemes to ease the costs of employing skilled foreigners, a housing scheme to aid in the short-term accommodation needs of skilled foreign-born, various recruitment missions abroad, and regular networking and information sessions held in major cities worldwide. Recent urban development policies aimed at branding Singapore as a culturally vibrant "Renaissance City" or "A Great Place to Live, Work, and Play!" are also partly driven by this goal.

Unlike lower-skilled, lower-paid foreign workers, highly skilled workers hold P, Q, or S employment passes (i.e., not work permits) that are much less restrictive and confer greater benefits (see Table 4). For example, dependents who accompany many employment pass holders can also seek employment at all work levels by obtaining a letter of consent (dependents of S pass-holders must apply for a separate work pass). Additionally, P, Q, and S employment pass holders may apply to become PRs or citizens — a privilege not accorded to the lower-skilled with work permits. To introduce more flexibility, a new subcategory of visas was introduced in 2007. The Personalized Employment Pass (PEP) is open to all current employment pass holders who have worked in Singapore for at least two to five years and who draw a minimum annual salary of S$34,000 (U.S. $27,032). Overseas professionals who wish to immigrate to Singapore and whose last drawn monthly salary overseas was at least S$8,000 (U.S. $6,107) are also eligible. PEP holders can take on employment in any sector of the economy, may be accompanied by their family members, and are permitted to stay in Singapore for up to six months if unemployed between jobs.

Around the time of the May 2011 general elections, the government of Singapore was facing widespread public disapproval of its liberal immigration policies for the highly skilled. This, coupled with difficult global economic conditions since the Great Recession, brought about a slight reversal of Singapore's policy stance towards skilled labor in the second half of 2011.In two rounds of policy tightening with regards to employment pass and S-pass eligibility criteria between July 2011 and January 2012, it was decided that skilled foreigners must command 11 percent to 20 percent higher salaries before being granted the right to work in Singapore. And in December 2011, a provision allowing certain foreign-born professionals (those who possess or had possessed selected university degrees and/or skilled migrant visas for other countries) to

apply for an employment pass eligibility certificate so that they could remain Singapore for up to a year to look for employment was also scrapped. As a result, foreign-born students in Singapore now have three months after graduation to land a job before having to return to their countries of origin. Additional measures to tighten the demand for S-pass workers are also expected to be phased in between July 2012 and July 2013.

Recruitment of Foreign Students

The global demand for international higher education has been projected to rise from around 2.2 million students in 2005 to 3.7 million by 2025, and the government of Singapore has taken steps to increase the number of foreign students who come to the city-state for study. Singapore has long attracted students from Malaysia and Indonesia but has been making specific efforts to develop the country into an international education hub for primary- through university-level students since 1997. Singapore is focusing on its strengths including its English-speaking environment, high educational standards, and reputation for public order and safety — in the recruitment of foreign-born students from China, India, Southeast Asia, and other areas. Specifically, it has used the tagline "Singapore: The Global Schoolhouse," and the message that Singapore combines the best of Asian and Western education systems.

A government economic review panel recommended a target of 150,000 foreign-born students by 2012 more than double the 2005 figure of 66,000 estimating that this would create 22,000 jobs and raise the education sector's contribution to the gross domestic product from the current 1.9 percent (S$3 billion or U.S. $2.29 billion) to somewhere between 3 and 5 percent. As part of this effort, state agencies have designated an "arts and learning hub" in the central area of Singapore city; encouraged the creation of private schools; wooed reputable universities, like INSEAD and New York University's Tisch School of Arts, to set up branch campuses or programs in partnership with local universities; and set up the Singapore Education Services Center as a one-stop information and service center (equivalent to the British Council) for foreigners wishing to study in Singapore.

Emigration from Singapore

In the same way that immigration has gathered pace, more and more Singaporeans are packing up their bags and moving abroad. Temporary emigration or circular migration — for education, training, business, and work experience — has not only encouraged since the 1990s as a way through which the city-state can become more globally oriented and competitive but is also associated with prestige and elitism. One of the reasons why an overseas experience has been so valued is the pervasive way in which mobility has been celebrated in Singapore. A large proportion of civil servants and political leaders received their education in top universities abroad, and globalization has reinforced the view that mobile citizens, as bridge-builders, are indispensable to Singapore's economic development. Closely related, there is also the perception that foreign-born expatriates in Singapore are more valuable than local workers because of their exposure to foreign markets, thus allowing them to command higher salaries.

As of June 2011, an estimated 192,300 Singaporeans live overseas. The top destinations for Singaporean expatriates include Australia (50,000), Great Britain (40,000), the United States (20,000), and China (20,000). Many Singaporeans migrate as highly skilled workers and are employed in specialist sectors such as banking, information technology, medicine, engineering, and science and technology. Additionally, a generous proportion of them are students pursuing their first and/or postgraduate degrees. Some Singaporean students abroad have been sponsored by government scholarships and are obligated to return upon finishing their studies. In the last decade, however, the trend for Singaporeans to emigrate permanently without necessarily contributing or returning to Singapore emerged and has government officials worried. With an average of about 1,200 highly educated Singaporeans (including 300 naturalized citizens) giving up their citizenship each year in favor of others, it is feared that, due to a lack of dual citizenship provisions, the country could be facing a brain-drain crisis rather than reaping the benefits of circular migration. In fact, it was reported in 2010 that about 1,000 Singaporeans a month were applying for a “Certificate of No Criminal Conviction” — a prerequisite to getting permanent residence overseas. In some social surveys among Singaporean youth, more than half of those surveyed would leave the country to build their careers if given the chance.

In response to this problem, the Singapore government has implemented a number of measures to reconnect with overseas Singaporeans in the hope that some will return in due course. Initiatives include linking up overseas Singaporeans with prospective employers in Singapore;

updating them on the latest national developments; and setting up recreational clubs and social events (e.g., Singapore Day) for them in foreign cities. These tactics aim to keep overseas Singaporeans tied to Singapore, whether practically or emotionally.

Ongoing Issues, Challenges and Social Change

Having greatly liberalized its borders in the past few years, it is not surprising that Singapore's migration reality has become more complex. The influx of large numbers of new immigrants into the city-state seems set to continue, even as emigration accelerates and fertility rates fall to a new low (1.15 children per female in 2010, down from 1.60 in 2000). In this context, attracting skilled foreigners to live, work, and settle — while keeping low-skilled workers under thumb — will likely remain a priority for the foreseeable future.

With the prospect that increased immigration could bring new challenges to Singapore socially, the government is working hard to maintain a state of harmony within what is already a multicultural nation. In several high-profile ministerial speeches in 2011, including Prime Minister Lee Hsien Loong's National Day rally speech as well as former-Minister Mentor Lee Kuan Yew's recent reminders about the nation's reliance on immigrants for growth, Singaporeans were encouraged to take a long-term view; continue to welcome talent; and, at least for a while, to “accept the discomfort” of having more foreigners around. While not expected to relinquish their cultures and languages, immigrants have been urged to participate in local events so that they can learn more about the traditions of their adoptive communities.In 2009, Singapore's National Integration Council was established to promote interaction and national solidarity between locals and newcomers. Notably, a S$10-million (U.S. $7.95-million) Community Integration Fund was created to sponsor activities that foster bonds between Singaporeans and immigrants. Additionally, 2011 saw the launch of the Singapore Citizenship Journey, an enhanced orientation program for new citizens comprised of online elements, field trips to heritage sites, and community sharing. The People's Association, which appoints “Integration and Naturalization Champions,” further engages new citizens through home visits, grassroots activities, and community work.

Social integration is, however, far from smooth on the ground. To some locals, newcomers — particularly the ubiquitous Mainland Chinese — are commonly seen as uncouth and prone to

objectionable behaviors like littering, eating on public transit, and talking loudly on the phone. Similarly, South Asian construction workers and Filipino domestic workers have also been singled out as targets of public backlash. With criminal activity rising, including several high-profile murders in mid-2011, foreigners have also been blamed for the deterioration of public safety in Singapore. Immigrants have responded with their own set of rejoinders. A spate of online disputes in 2011 involving Mainland Chinese immigrants ridiculing Singaporeans as “ungracious,” “disgusting,” and “inferior” reveals the extent of social discord despite the state's efforts toward immigrant integration. In August 2011, an immigrant family from China went so far as to lodge a complaint against their Singaporean-Indian neighbors for the smell of curry emanating from their cooking. In response, a Facebook page urging Singaporeans to prepare curry on a designated Sunday drew over 57,600 supporters. Ironically, Singaporeans of different ethnicities have become more united in this time of discord with immigrants.

Another point of contention relates to the belief that immigrants compete with Singaporeans for jobs. While the state insists that only jobs unfilled by citizens are assumed by foreigners, the government is still frequently criticized for not curtailing the uptake of managerial and professional positions by non-Singaporeans. Suspicions that the labor market is giving preferential treatment to the foreign born — described as “cheaper” and “harder-driving and harder-striving” than Singaporeans — are not helped by certain official statements. In particular, unemployment figures are routinely published as an aggregate comprising citizens and PRs, which obfuscates the actual unemployment rate among Singaporeans.Paradoxically, a more tolerant side of Singapore emerges when it comes to the rights of unskilled and low-skilled foreign workers. Civil-society action has sought to address the adverse working conditions of foreign-born domestic workers — about 200,000 in Singapore today, mostly women and mainly from the Philippines, Indonesia, and Sri Lanka — since the early 2000s. Many have benefited from the social and advocacy support offered by nongovernmental organizations like Humanitarian Organization for Migration Economics and Transient Workers Count Too. Not only have these groups raised public awareness about the plight of foreign domestic workers, state agencies are now more inclined to attend to cases of abuse.

Similar help has also been extended to the other 670,000 work-permit holders. Some issues being addressed include workplace safety, wage and foreign-levy policy, accommodation standards,

and the regulation of unsafe truck transport for migrant workers.While their efforts are comprehensive in scope, the success of civil society in Singapore remains tied to the will of a strong state. Foreign-born domestic workers, for instance, have long been deprived of regular days off as part of their employment. This particular aspect of domestic work will change beginning January 2013, when a new law mandating days off will take effect. But such extended, hard-fought battles highlight the difficulty that advocacy groups face in lobbying within a depoliticized space. They also hint at how citizens' distrust towards immigrants can further rigidify officially sanctioned surveillance curbs on foreign workers.

On the policy front, the question of increasing numbers of Singaporeans taking flight and the corresponding need to recognize dual citizenship remains an outstanding issue. Slippages between immigration policy goals and reality exert another constant strain. The various categories of work permits, as well as alternative passes that allow foreigners to enter as dependents, job seekers, entertainers, and private-school students before switching to worker status, suggest that Singapore's immigration policies go beyond mere talent-scouting or the filling in of unpopular job sectors, as often touted by officials.In contrast to this openness, the emerging trend of working-class men who are disadvantaged in the local marriage market turning to foreign brides from nearby countries faces greater institutional hurdles. While the state has been anxious to stop the decline of marriage and fertility, marriage migrants from less-developed countries are not automatically granted residency or citizenship papers and may have to confront a long and uncertain pathway to citizenship. For couples with at least one Singaporean child however, the foreign spouse may be eligible to apply for a three-year Long Term Visit Pass-Plus, a new immigrant pass that will be available beginning April 2012. These policies reflect the clinical approach that Singapore adopts, whereby migration policies are frequently made based on particular economic criteria and rationale, rather than on strictly humanitarian or family-reunification grounds.

CONCLUSION

Singapore comes of age in its development, new opportunities and problems have once again opened up the former colonial city to mobilities. While Singapore has long depended on external resources to satisfy its needs — for its workforce, jobs, education, talent, and even marriage —

the country's goal to augment its population today presents much more complex risks, uncertainties, and challenges, often exacerbated by inconsistent policy outcomes. Indeed, the streams flowing through the highly globalized city have become decidedly more turbulent in recent years. With wisdom, perhaps the nation's political leaders can weather the storm that is now brewing.

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INTERNATIONAL MIGRATION: THE IMAGE OF CIVIL WAR: A CASE STUDY OF SYRIA

Tanya Nadeem
Student
GD Goenka University
Sohna, Harayana
tanyanadeemmir@gmail.com

Dr. Karina Bhatia
Assistant Professor
GD Goenka University
Sohna, Haryana
kareenabhatia@gmail.com

ABSTRACT

The civil war in Syria is studied through newspaper articles, books and documentaries available on the internet. This involves study of mass migration of Syrians and the factors that had led to displacement of people. The paper includes the consequences and the repercussions that have escalated into one of the biggest migrations of recent times. The problems faced by the refugees are studied and also who have been providing relief and citizenship to them has also been studied.

Aim of the study:

The aim of the study is to study the consequences of the Civil War in Syria.

Research Methodology:

The methodology used is Qualitative as the study is of secondary data.

Research Findings:

The research findings include the risks that migration can put people through, the consequences of migration for the world.

Keywords: *Civil War, Migration, Refugees and Religion*

INTRODUCTION

Syria or The Syrian Republic of Syria, a nation in the Middle East has been a subject of level headed discussions and discourse everywhere throughout the world in light of the condition that the nation is in. Since the beginning of the Syrian Common War which began in 2011 on account

of the conflicting interests of the Syrian President, Bashar al-Asad and his partners and the individuals who are against his legislature. The Syrian turmoil swelled into a full war after a more extensive rush of 2011, Bedouin Spring Challenges became out of discontent with the Assad Government and swung to an outfitted clash after dissents requiring his expulsion were fiercely smothered. This war is being battled by numerous gatherings, including the Syrian government and its nearby partners, a relationship of Sunni Middle Easterner infamous gatherings, the Kurdish Syrian Popularity based Powers, Salafi-jihadi gatherings which incorporate Al-Nusra Front and the Islamic Territory of Iraq and the Levant, and various countries in the locale and past which are either being straightforwardly included, or rendering backing to some gathering.(Syrian Civil War, 2018)

The battle has murdered a huge number of individuals and harmed numerous also. One of the most concerning issue that the country is confronting is that of Evacuee Movement. The general population of the nation who have been rendered destitute because of the extreme war have no other choice however to move to more secure puts in request to discover asylum and work. Around 11 million Syrians have fled their homes since the underlying flare-up of the common war in Walk 2011. The war is in its seventh year now and 13.5 million individuals are in outright need of compassionate help in the nation itself. Among those getting away from the contention, a large portion of the general population have looked for asylum in neighbouring nations or inside Syria itself. As indicated by a report by the Assembled Countries High Magistrate for Evacuees (UNHCR), 4.8 million individuals have fled to Turkey, Lebanon, Jordan, Egypt and Iraq, and 6.6 million are uprooted inside Syria itself.(Syrian Civil War, 2018)

OBJECTIVES

The objectives of the paper is to understand the background of a war that is still continuing, to understand the damage civil wars can create, to be able to analyse the role of religion in migration, to understand how big the problem of migration is in today's world and to devise strategies to accommodate the refugees in other (except war zone) parts of world

IMPORTANCE OF STUDY

The Syrian Emergency is globally perceived as the biggest exile and uprooting emergency of our times. Late surges of evacuee and haven petitioners are trying the limit of states which offer shelter to displaced people and disintegrating customs of welcome in accepting nations for exiles and transients alike. Subsequent to inviting vagrants in September 2015, European states are currently ending up more stringent, declining to share resettlement load and neglecting to make a move that could help in lessening of the quantity of displaced people.Psychological oppressor assaults in Europe have made the nation hesitant to acknowledge transients. This prospect, clubbed with interior political disturbance in Europe, have made different European states less eager to oblige transients.(Ignatieff, M., Keeley, J., Ribble, B., & McCammon, K., 2016)

Greece is as of now home to about sixty thousand vagrants in terrible living conditions, and Italy is thinking that it is hard to deal with a consistently expanding rising number of individuals rolling in from the focal Mediterranean course. Threatening vibe and lack of concern towards outcasts and a steady dread that England is surrendering control of it's outskirts cleared path for an English exit from the European Association.USA takes pride in itself on its giving and agreeable universal displaced person approaches. It has been a torchbearer in vagrant resettlement and one of the mainbenefactors to evacuee associations. This persuasive and accommodating part would be in question if the legislature permits security fears over late psychological militant episodes to takeover resettlement approach.(Ignatieff, M., Keeley, J., Ribble, B., & McCammon, K., 2016). With such strict laws for the Displaced people, coming days don't look splendid. The quantity of kids exiles is at an unsurpassed high, posturing dangers more than ever. Along these lines it turns out to be essential to think about and possibly take care of this emergency that the "non changeless" individuals from the general public are confronting

BACKGROUND

The contention in Syria began as a counterbalance of the 2011 Middle Easterner Spring uprising. Begun on April 29th in the town of Daraa by a gathering of 13 year old young men who composed in favor of their school "The Administration must go!" this development began as an uprising for majority rules system. However, over the most recent five years, it has turned into a cauldron of different aspects like the contending rebel gatherings, psychological oppressor components, global forces, and religious groups - all with a great many Syrians executed and

more millions dislodged.The underlying turmoil in Syria started with a series of transformations in the center east, commonly known as the Middle East Spring. Agitation began in Syria when the inhabitants in the little Syrian town of Dara'a, rampaged to challenge the torment of young men, who set up hostile to government spray painting on their school building. President Bashr Al Assad reacted with strict anction,killing numerous and making showings rapidly spread the nation over like fierce blaze.(“Conflict Background.” , 2017). Till Walk 2011, Bashar al-Assad had been administering Syria with an iron clench hand. After the underlying challenge in Walk 2011, President Assad began to be unforgiving on the shows the nation over. After April 2011, he began to send enormous tanks into towns and having powers start shooting at regular citizens.As his military powers kept on mistreating and slaughter shows all through the late spring of 2011, a huge number of administration troopers began to split far from the legislature to dispatch assaults against them. As the resistance began getting to be more grounded by the day, the UN cautioned the world that Syria was very nearly a common war and called for quick activity.(“Conflict Background.” , 2017)

In August 2011 after the common war had authoritatively begun, the Syrian National Board was framed with a specific end goal to battle the Syrian government. Their fundamental objective was to end President Assad's residency and build up a popularity based Syria. Tragically for the Syrian individuals the resistance was an entire blend of political gatherings, ousted individuals, grass-root coordinators and furnished activists, isolated on different fronts including ideological, ethnic or partisan lines. Moral divisions in Syria likewise assume a urgent part in the contention. The Assad family, and a great part of the country's tip top, particularly the military, have a place with the Alawite group, a minority in a for the most part Sunni nation. While the Assad government has the upside of squashing capability and units of steadfast, tip top troops, the agitators ought not be thought little of. They are profoundly energetic and, after some time, socioeconomics should tip to support them. Alawites constitute around 12 percent of the 23 million Syrians. Sunni Muslims, the restriction's spine, make up around 75 percent of the populace.(“Conflict Background.” , 2017). By February 2012, the Assembled Country and the Security Gathering attempted to pass determination denouncing President Assad's assault on his regular people. In any case, nations like Russia and China hindered all endeavors. With Russia and China blocking Security Chamber endeavors to stop human rights infringement in Syria, the

loss of life in Syria started to quickly ascend from the earlier year. From 400 passings in June 2011 to more than 3,000 in June 2012. Now, the UN assesses that more than 10,000 have passed on and thousands more dislodged by the battling. In urban areas all through Syria, including the capital, Damascus, and the biggest city, Aleppo, the resistance had blended around equipped gatherings recognizing themselves as components of the Free Syrian Armed force.("Conflict Background." , 2017) From constructs in outcast camps in light of the Turkish side of the fringe, the stream of weapons, medicinal supplies and cash expanded.

As the contention would proceed with not a single end to be seen, things have turned out to be more confounded than any other time in recent memory. The presentation of Muslim Jihadists, Al Qaeda and world super powers would rapidly raise the slaughtering and devastation in Syria. The nation spirals into a Common war as viciousness runs widespread through the nation. Radical units are framed and the battle to control the urban communities are begun between revolt powers and administrative powers. Damascus and Aleppo see the most battling and most elevated non military personnel losses of life By June 2013, the UN and different sources report that 90,000 individuals have been slaughtered hitherto amid the Syrian Common War. This number would twofold in the following year and has now come to more than 450,000, sources at the UN report. The Syrian clash is currently multifaceted, with numerous moving parts.(Ignatieff, M., Keeley, J., Ribble, B., & McCammon, K., 2016)

These moving parts are something beyond pressures amongst revolt and administrative powers. The nation faces ethnic pressures, the presentation of world forces, jihadist gatherings, the Islamic State and other psychological oppressor associations. An UN commission of request, examining asserted human rights infringement since Walk 2011, has affirmed proof to demonstrate that the two sides of the contention have perpetrated atrocities since the beginning of the contention. These atrocities incorporate murder, torment, assault and implemented vanishings. Different wrongdoings incorporate agitator powers have blocked access for sustenance, water and wellbeing administrations for regular citizens.UN Security Gathering discharged determination in 2014 requesting all gatherings end the "unpredictable work of weapons in populated zones". Since the arrival of the determination, sources propose in excess of 6,000 regular folks have been executed by barrel bombs dropped by government flying machine on revolt held zones. The UN has recommended that regular citizens have been straightforwardly

focused on. Notwithstanding those atrocities carried out by revolt and administrative powers, the Islamic State has been blamed for swaying dread on northern and eastern Syria and carrying out atrocities determinedly against the regular citizens in the regions they involve.

US military intercession turned into a risk after the passing of hundreds in August 2013 from the nerve specialist sarin. The danger constrained President Assad to consent to expel and pulverize the greater part of Syria's substance weapons. The expulsion was a joint mission drove by the UN and the Association for the Preclusion of Concoction Weapons (OPCW). The annihilation was finished a year later. Indeed, even with the endeavors of the worldwide group, substance assaults are as yet being accounted for by both the legislature and the Islamic State. As the Syrian emergency is in its fourth year, in excess of 6.9 million individuals have been dislodged by UNHCR. Over portion of these evacuees are kids. As the displaced person numbers hit more than 5 million, the Syrian outcast emergency in now the greatest of our time. Of the 4.6 billion dollars expected to give satisfactory care to these refugee's, just around 300K million has been gotten by the worldwide group. Leaving a staggering hole of 4.3 billion dollars required.(“Conflict Background.” , 2017). As per the UN: Ladies and kids make up 3/4 of the displaced person populace and displaced people have minimal more than the garments on their backs while touching base at outcast camps. Around 6.5 million people dislodged inside Syria starting at 2015.An expected 9 million aggregate people have fled their homes starting at 2015More than 1 million individuals have enrolled from 2012 to 2013.(Syrian Civil War, 2018)

A report distributed by the UN in Walk 2015 assessed the aggregate financial misfortune since the beginning of the contention was $202bn. It is evaluated that four in each five Syrians live in destitution with 30% of them in miserable neediness, Right now in a condition of fall or Syria's instruction, wellbeing and social welfare frameworks. The furnished insubordination has advanced essentially since its origin. Common conservatives are currently dwarfed by Islamists and jihadists, whose fierce strategies have caused far reaching concern and activated agitator infighting. Benefiting from the bedlam in the district, Islamic State - the radical gathering that became out of al-Qaeda in Iraq - has taken control of gigantic swathes of an area crosswise over northern and eastern Syria, and in addition neighboring Iraq. Its numerous outside warriors in Syria are currently engaged with a "war inside a war", doing combating renegades and jihadists from the al-Qaeda-subsidiary Nusra Front, who question their strategies, and also Kurdish and

government powers. In September 2014, a US-drove coalition propelled air strikes inside Syria with an end goal to "corrupt and eventually pulverize" IS, helping the Kurds repulse a noteworthy attack on the northern town of Kobane. However, the coalition has kept away from assaults that may profit Mr. Assad's powers or interceding in fights amongst them and the revolutionaries. In the political field, resistance bunches are additionally profoundly isolated, with equal collusions doing combating for amazingness. The most noticeable is the direct National Coalition for Syrian Progressive and Resistance Powers, upheld by a few Western and Bay Middle Easterner states. Be that as it may, the coalition has little effect on the ground in Syria and its supremacy is dismissed by different gatherings, leaving the nation without other option to the Assad government.(“Conflict Background.” , 2017)

LAWS RELATED TO REFUGEES IN INDIA

India has a government set up and is portrayed as an Association of States. This association is considered as a State in worldwide law. The Association lawmaking body, i.e., the Parliament alone is given the privilege to manage the subject of citizenship, naturalization and outsiders. India has not passed a displaced person particular enactment which manages the passage and status of exiles. It has dealt with the displaced people under political and authoritative levels. The outcome is that displaced people are dealt with under the law relevant to outsiders in India, unless a unique arrangement is made as on account of Ugandan outcasts (of Indian beginning) when it passed the Nonnatives from Uganda Request, 1972. (“REFUGEE LAW: THE INDIAN PERSPECTIVE.” ,). In India evacuees are considered under the ambit of the term 'outsider'. The word outsider shows up in the Constitution of India (Article 22, Para 3 and Passage 17, Rundown I, Calendar 7, in Area 83 of the Indian Common Methodology Code, and in Segment 3(2)(b) of the Indian Citizenship Act, 1955, and also some different statutes. Institutions overseeing outsiders in India are the Non-natives Demonstration, 1946 under which the Focal Government is engaged to control the passage of outsiders into India, their essence and takeoff there from; it characterizes an 'outsider' to signify 'a man who isn't a national of India'. The Enlistment Demonstration, 1939 manages the enrollment of outsiders entering, being available in, and withdrawing from India. Additionally, the Visa Demonstration, 1920 and the International ID Act, 1967 manages the forces of the legislature to force states of identification for section into

India and to issue travel permit and travel reports to control takeoff from India of nationals of India.

Since these authorizations don't make any refinement between honest to goodness exiles and different classes of outsiders, displaced people run a danger of capture by the movement experts and of their arraignment on the off chance that they enter India without a legitimate visa/travel records. When a displaced person is confined by traditions, migration or police experts for commission of any of the offenses under the prior specified establishments, he is by and large given over to the police and a First Data Report is held up against him. As indicated by the arrangements of these statutes the evacuee may confront constrained extradition at the set up ocean ports, airplane terminals or the section focuses at the global fringe, on the off chance that he is distinguished without legitimate travel reports. He may likewise be kept and investigated pending choice by the regulatory specialists in regards to his request for displaced person/haven. An evacuee likewise faces the possibilities of indictment for infringement of the Enrollment of Non-natives Act, 1939and Principles made there under and in the event that he is discovered blameworthy of any offense under this Demonstration he might be rebuffed with detainment which may reach out to one year or with a fine up to one thousand rupees or with both. Notwithstanding, much of the time the courts have taken a permissive view in the matter of discipline for their unlawful section or illicit exercises in India and furthermore, by discharging prisoners pending assurance of displaced person status, staying expelling and giving them a chance to approach the Unified Countries High Magistrate of Exiles (hereinafter alluded to as UNHCR), outcasts keep on running the danger of dread, detainment and arraignment for the infringement of the Outsider's Demonstration, 1946 and the Non-natives Order,1948. The Indian Incomparable Court has additionally held that the administration's entitlement to expel is supreme:(“REFUGEE LAW: THE INDIAN PERSPECTIVE.” ,)'… the energy of the Legislature in India to remove non-natives is supreme and boundless and there is no arrangement in the Constitution chaining this carefulness… the official Government has unhindered appropriate to oust an outsider.' The inquiry that emerges here is whether outcasts as an extraordinary class of outsiders groups a bigger number of rights than outsiders when all is said in done?

Sacred System for Assurance of Outcasts

The Constitution of India ensures certain Central Rights to displaced people. Specifically, ideal to fairness (Article 14), ideal to life and individual freedom (Article 21), appropriate to assurance under discretionary capture (Article 22), ideal to secure in regard of conviction of offenses (Article 20), opportunity of religion (Article 25), ideal to approach Incomparable Court for implementation of Essential Rights (Article 32), are as much accessible to non-natives, including displaced people, as they are to residents. The established rights ensure the human privileges of the evacuee to live with poise. The liberal elucidation that Article 21 has gotten now incorporates ideal against isolation , ideal against custodial brutality , ideal to medicinal help and shield .The Preeminent Court has taken plan of action to Article 21 of the Constitution without enactment to direct and legitimize the stay of evacuees in India. In NHRC v. Province of Arunachal Pradesh , the Legislature of Arunachal Pradesh was solicited to play out the obligation from protecting the life, wellbeing and prosperity of Chakmas living in the State and that their application for citizenship ought to be sent to the specialists concerned and not withheld. In different cases it was held that displaced people ought not be subjected to detainment or extradition and that they are qualified for approach the U.N High Magistrate for allow of exile status. In P. Nedumaran v. Association of India the requirement for intentional nature of repatriation was accentuated upon and the Court held that the UNHCR, being a world organization, was to find out the willfulness of the evacuees and, subsequently, it was not upon the Court to consider whether assent was deliberate. Thus, as per B. S. Chimni, the Incomparable Court has failed in finishing up in Louis de Raedt v Association of India that there is no arrangement in the Constitution shackling the outright and boundless energy of the legislature to oust nonnatives under the Outsiders Demonstration of 1946. ("REFUGEE LAW: THE INDIAN PERSPECTIVE." ,). In reality Article 21 of the Indian Constitution imposes certain limitations: any activity of the State which denies an outsider of his or her life and individual freedom without a technique built up by law would fall foul of it, and such activity would absolutely incorporate the refoulement of displaced people. In this manner, the writer opined that the Court ought to have continued to test the legitimacy of Nonnatives Go about as against Article 21.

Joining Worldwide Law in Local Law

Worldwide law has acknowledged and characterized outcasts as a unique class of outsiders. Does this acknowledgment by Universal law import any lawful result on the Indian Government

without any enactment regarding the matter?Without a doubt India has not endorsed the 1951 Tradition and the 1967 Convention to it, notwithstanding, it acquiesced to different Human Rights settlements and traditions that contain arrangements identifying with assurance of outcasts. As a gathering to these settlements India is under a legitimate commitment to secure the human privileges of outcasts by taking fitting authoritative and regulatory measures under Article 51(c) and Article 253 and furthermore under similar laws it is under the commitment to maintain the standard of non-refoulement. India is an individual from the Official Board of trustees of the workplace of Joined Countries High Chief for Exiles which puts a good, if not legitimate commitment, on it to fabricate a productive organization with UNHCR by following the arrangements of the 1951 Outcast Tradition.

With respect to receiving global traditions in household laws, in Vishaka v. Province of Rajasthan , the Court watched that dependence can be put in global laws. In this manner, the inquiry that emerges is whether India can allude to the 1951 Tradition in translating the household enactment and whether it is extremely important to endorse these traditions. It is to be noticed that only sanctioning the 1951 Tradition does not guarantee that the haven searchers won't be kept out and furthermore Article 42 of a similar Tradition licenses reservations as for the privileges of exiles which will invalidate the point of approving the Tradition.(“REFUGEE LAW: THE INDIAN PERSPECTIVE.” ,)The answer to treat outcasts with nobility in India is to either sanction the 1951 Tradition and join it into local law or institute a uniform enactment particularly for displaced people so it isn't left to the prudence of the official and the legal to choose their destiny.

SUGGESTIONS FROM THE STUDY

Host refugees and asylum seekers in your home. Make sure you make them feel welcome and comfortable and not unwanted. Try to make them feel a part of your home. But don’t try to cut them off from their culture. Be very sensitive to their needs and emotions.Volunteer your specific skills to help refugees in your area. You could help them with anything little or big depending the kind of skill set you have. For example if you are a doctor, make sure you help them medically, or if you are a teacher you could also help the migrant children get a decent education. Helping refugees to integrate into a new culture. Moving in to a new place can be

very challenging, especially when you migrate in severe tension. The kind of emotional baggage that refugees carry with them is huge and they can be culturally very different. So the best thing is to come to common terms and accept and invite their culture as well. Employ refugees. Give them a chance to work and earn money. This will not only give them livelihood but will also make them gain self-confidence.

SUMMARY

The displaced person emergency have been developing more since the last 2-3 years with a few nations ending up more stringent with outcasts and partner dangers like psychological oppression and scourges with them. With the developing number of evacuees, more issues have developed. There is a consistent weight on world governments to give and take care of their own kin, as well as to take care of displaced people. Another huge emergency that has just expanded with time is the social detachment that a displaced person faces. He is made to abandon his beginning and end, however one thing that nobody can return to him is his genuine character. Personality that was lost in the midst of war.Other major issues includediseases like malaria and cholera that have been spreading because of the ways in which Refugees live. Medical problems and sanitation are two major issues that need to be delt with.(Syria's civil war explained from the beginning, 2018)

CONCLUSION

The Syrian Refugee problem is increasing by the day. So many issues are at hand those world organizations like the United Nations and WHO has declared Syrian Migration issue one of the greatest causes of concern for the world we are living in. It becomes very necessary to see how peace can prevail in Syria so that refugees can go back to where they truly belong and get back to a life where they are not considered to be non-permanent residents. Meanwhile what needs to be done at the moment is to create a safe haven for the refugees by making sure their basic needs are taken care of, their health and education and sanitation is taken care of. They should be made welcome by those who are giving them opportunities in their societies and not to see them as aliens. Syrian Refugee Crisis are definitely the worst but with a little contribution by people towards the refugees can make a whole lot of difference in their lives. A little ray of hope in

terms of support and care is one of the most effective ways in which we can rehabilitate them. A world that took so much away from them can also be kind enough to give them back a little.

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VIRTUE - A Bi-annual Refereed Journal invites academicians and professionals to contribute research papers, articles, abstracts of doctoral dissertations, major research project reports, case studies, comprehensive bibliography, and book reviews. The following are the guidelines for contributors/authors:

The contribution must be original, neither published nor under consideration for publication anywhere else.

Cover Page: Paper should have a cover page providing the title of the paper, the name(s), designation, official address, phone/fax number, email address of all the author(s). The next page should contain an abstract of not more than 150 words, along with five key words. The main text should not contain the author's name. The main text of the paper should start from the next page.

Manuscripts of the Papers: The text of the paper must be typed in 12 size font, Times New Roman) in 1.5 lines space (on one side of A4 paper in case of hard copy) with left and right margins of 1.5" and 1" respectively. Ideally the length of the paper should not exceed 10,000 words, including tables, references, etc.

Papers can be both conceptual and empirical but would be tested on relevance to the main theme and subthemes and must contribute to the theory.

References: Complete references should be given at the end of the paper and before annexure. These references should be cited in the style as prescribed. At the end of the text, references should be listed in the alphabetical order of the last names of the authors.

Examples of how the references are to be listed at the end are given below:

If it is a book written by single author: Chakraborty, S. K. (1993), *Managerial Transformation by Values: A Corporate Pilgrimage, 4th ed. (*New Delhi: Sage Publications), pp. 41.

If it is book written by more than one author: Kotlar, Phillip, Gary Armstrong, Prafulla Y.Agnihotri, and Ehsan ul Haque (2010), *Principles of Marketing: South Asian Perspective*, 13th ed. (New Delhi: Dorling Kindersley (India) private Limited), pp. 41

If it is an article in a journal: Hannan, M.T. and Freeman, J. (1977), The Population Ecology of Organizations, *American Journal of Sociology, 82* (5), pp. 21-24

If it is an article in an edited book: Kanter, R.M. (1988), When a Thousand Flowers Bloom in B. Staw and L. Cummings (eds), *Research in Organizational Behavior,* (Greenwich, CT: JAI Press), pp.169-211

For thesis and M Phil Dissertations: Sharma, Deepa, *Corporate and Public Redressal Systems for Consumer Grievances,* unpublished Ph.D. thesis, Delhi University, Department of Commerce, Delhi, 2008, pp. 42-49

All other sources other than 'references' (as indicated above) must be included under the heading of 'Bibliography'. Websites that may have been referred should be included under a separate heading).

Footnotes, figures, tables and **graphs**: These should be in standard format. They should be numbered serially and should appear at desirable place in the text itself, with proper reference made in the text. Wherever necessary, the source should be indicated at the bottom.

The contribution should be sent as an e-mail attachment to editorvirtue.davim@rediffmail.com

The contribution received for publication shall be referred to subject experts, for review and evaluation, after a preliminary review in the editorial office.

Correspondence and proofs for correction, if required, will be sent to the first author, unless otherwise indicated.

The forwarding letter must include a certificate from the authors to the effect that the article is original and an exclusive contribution to VIRTUE, and shall not be released for publication elsewhere unless the Editor's decision not to publish it, has been communicated to authors.

The final decision on the acceptance or otherwise of the paper rests with the Editor or Editorial Board, and it depends entirely on the standard and relevance of the paper.

The final draft may be subjected to editorial amendments to suit the journal's requirements.

The author will be supplied one copy of the journal free of charge, soon after its publication.

The copy right of the articles and other material, published in the journal, shall lie with the publisher.

Papers should be strictly according to the above given guidelines otherwise they will not be considered for publication.

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For July - Dec. Issue : 31st May of every year

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