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SURYADATTA PHILOSOPHY

ॐ सूर्यनारायणाय नमः

जपाकुसुमसंकाशं काश्यपेयं महाद्युतिम्
तमोऽरिं सर्वपापघ्नं प्रणातोऽस्मि दिवाकरम्

The worship of the Sun is as old as civilization.

I bow to you, O Surya, the Son of Kashyapa Muni, the destroyer of darkness and all sins, whose luster is like that of red Jaswand Flower. The worship of the Sun is as old as civilization.

The Sun that awakens man from darkness, the Sun that is so brilliant that it cannot be seen by the naked eye evokes awe in the human mind.In the Rig-Veda, Surya has been described as the life (atma) of all creation. Surya is praised as the God of Gods (Rig-Veda 1.50.10). Homage is paid to Surya by chanting special names while offering him salutation-Surya Namashkara. These twelve names that we use to worship Surya serve to remind us of his glory and power and to be eternally for his constant blessings in our life here on earth, as a...

मित्रः	Mitra - friend
रविः	Ravi - one who inspires the chirping of birds
सूर्यः	Surya - one who moves ceaselessly
भानुः	Bhanu - one who shines
खगः	Khaga - traveller of the sky
पूषा	Pusha - nourisher
हिरण्यगर्भः	Hiranayagarbha - lustrous as gold
मरीचिः	Mariachi - one who emits rays
आदित्यः	Aditya - son of Aditi
सविता	Savita - sustainer of life
अर्कः	Arka - worthy of worship
भास्करः	Bhaskar - usherer of light

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THE PHILOSOPHY OF SURYADATTA

Quality Policy

Quality Policy

The Suryadatta Group of Institutes is committed to Excellence in imparting Quality Education in all the courses that it offers including Management, International Business, Information Technology, Bio-Informatics and Bio-Technolgy, Journalism, Media and Mass Communication, Hospitality and Tourism besides Interior Design and Fine Arts.

The Suryadatta Group of Institutes aims at total customer satisfaction through its continual enhancement of its Educational Systems, Industry Interaction, Processes, Teaching Methodologies, Faculty Skills, Learning Resources, Inspiring Creativity, Nurturing Innovation and Quality of Service for remaining the ultimate destination in Quality Education.

The Group's unequivocal belief in the measure of its Success lies in the empowering of its products, the Students, into dynamic Professionals and sensitive human beings, making invaluable contributions to Society as Catalysts for Change.

The Quality Policy shall be strictly adhered to and implemented in letter and spirit, with continual monitoring at the highest level of Management for consistency in approach and effectiveness in all its dimensions.

NSF ISR

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Quality of Education has always been of world-class standards at all the Institutes belonging to 'SURYADATTA EDUCATION FOUNDATION'. This approach of ours has paid us rich dividends in the form of recognition from the student community and the Industry as well.

To enhance the quality of education, establishment and implementation of quality systmes such as ISO 9001 : 2008 Accredited by NSF - ISR & ANAB is a very important step adopted by our Institution towards achievement of our vision, mission and objectives.

Establishment of the systems ensures consistency in the performance of the processes and satisfaction of the customer, who are the students, parents, industry and society.

SURYADATTA Group of Institutes has got the ISO certification of a leading certifying body. This is the beginning of its journey towards achieving World Class Quality Systems. Eight of the Institutes operating under the banner of SURYADATTA Group have implemented ISO 9001 : 2008 Accredited by NSF - ISR & ANAB.

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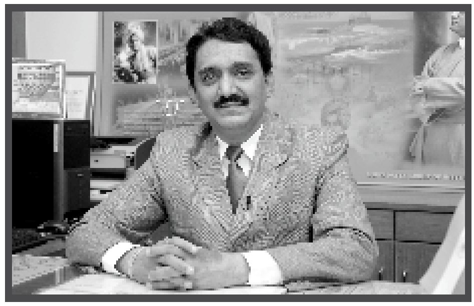
From the Chairman



Dear Friends,

India is a key player in the rapidly changing global economy. Many factors have fallen in place for Indian economic growth. There has been a steady flow of reforms focused on areas like governance, ease of doing business and fiscal prudence. In this scenario, there is an urgent need for world class business leaders trained in B-Schools.

For young managers, the entire world ought to be their market place, with global barriers shrinking. And India is truly is at its best, as the undisputed leader of knowledge capital. The young Managers of tomorrow need to ride this wave by putting their expertise to good use in the Industry. This scenario has resulted into the launch of independent programs in foreign countries. International placements and job opportunities have also received an impetus.

World over, management as a stream of education and training has acquired exciting dimensions. Therefore there can never be a surplus of institutions imparting quality management education as this discipline has come to be seen as mandatory for those who with their career graphs to soar.

The Suryadatta Group has emerged as a reputed brand devoted to quality management education by Industry leaders with proven track records. The Suryadatta Group is a virtual melting point of aspiring managers comprising a diverse social, geographical and lingual mix from across the Country, bringing with them all the advantages typical of a hybrid group. Its novel curriculum aims at providing a level-playing field for its students when they foray into the corporate world. It also provides its students with the tools and techniques for bringing about a synergy between functional knowledge and the right management approach.

Combining the best of Indian sensibilities with a Western outlook in its teaching methodologies, given its reputation for quality higher education, the Suryadatta Group of Institutes provides a constantly challenging and dynamic learning environment, set amidst state-of-the-art infrastructure, driven by creativity and competition, supported by state-of-the-art technology and an eclectic pedagogy. Suryadatta's unique feature is its "Holistic approach" to teaching that lays great amount of emphasis upon the student's Intelligence Quotient, Emotional Quotient and Spiritual Quotient, through a wide array of curricular, co-curricular and extra-curricular activities. This has brought about a paradigm shift in the teaching module, broadening the overall perspective of the managers as catalysts for change in te global environment.

Let me assure you that when you leave the portals of Suryadatta, you will definitely have a greater endurance in the corporate jungle, poised to be on the cutting edge of your career as multi-faceted professional in the brave new corporate world.

Here's wishing you peace, prosperity and progress,

with warm regards and good wishes,

Prof. Dr. Sanjay B. Chordiya
Founder President & Dean Academics

Business Environment for survival of commerce and management

Prof. Dr. Sanjay B Chordiya

Business is an activity which involves buying and selling of goods & services. Modern business covers a complex field of industry and commerce which involve activities related to both production and distribution. These activities on the one hand satisfy societal needs and desires and on the other hand bring profits to business firms. All the business activities are normally motivated by profits, in case, any of these activities is carried out by some organizations for the purpose other than profit seeking, it cannot be justifiably considered as business.
The environment in which a firm functions affects the performance of the firm. Hence for survival and growth of the organization the management has to carefully study the Business Environment and adjust their strategies to suit the changing environment.

Environment by definition is something external of an individual or an organization. Therefore in strict sense, business environment refers to an external factors which have a direct or indirect bearing on the activities of business. Certain aspects of both internal and external environment pose a threat to business, other aspects provide opportunities for business growth.
Business Environment has been defined by Bayard O. Wheeler as "the total of all things external to firm which affect their organization and operation". According to Arthur M. Weimer, business environment encompasses the 'climate'or set of conditions, economic, social, political or institutional in which business operations are conduced.

Environmental scanning is the process of monitoring & collecting the information about the various current and potential changes taking place in the environment to facilitate in decision making and problem solving.

Internal Environment:
Value system, Goals and objectives, Management structure, Relationship among the various constituents, Physical assets, Capital Structure, Goodwill, Standing, Technological capabilities, Human, financial and marketing resources make the internal environment of business. Internal environment can be referred to as Strengths and Weaknesses of a firm.

External Environment

External environment can be referred to as Opportunities and Threats of a firm.

External Environment of Business consists of institutions, Organizations and forces operating outside the company. External Environment of business may be classified into Micro Environment and Macro Environment

Micro Environment
Micro environment refers to such players whose decisions and actions have a direct bearing on the company. Since modern business broadly has two

Prof. Dr. Sanjay B Chordiya
Chairman and
Founder Director

aspects, Viz, production and selling of goods.
The micro environment of business can be divided into Customers, Input Suppliers Competitors, Workers' unions, General Public and Marketing Intermediaries

Micro Environment has great relevance on Co's business operations. The players in micro-environment do not effect all the companies in an industry in the same way. Their decisions and actions often differ in accordance with the size, capability and strategies of each company

Macro environment
Macro environment of business consist of the following factors:
A. Economic Environment: National and Global
B. Non –Economic Environment: Political, Socio Cultural, Demographic, Technological, Natural

Economic Environment of the Business (National)
Business enterprise is essentially an economic institution. It conducts its activities in the market system with the objective profit maximization..In Modern economy there are five sectors contribute to the development of the economy such as The Business sector, The household sector, The capital market and The Government. These factors determine the prospects of business activity.

Global Environment
Globalization: It refers to a process of encouragement of international trade by reducing the tariff and non tariff barriers and allowing FDIs and foreign countries and following a Free Trade Policy to achieve expansion of business activities across boundaries of the nation states.
It also refers to increasing economic openness growing economic interdependence and deepening economic integration between countries in the world economy. After the establishment of World Trade Organisation in 1995, over the past twenty years the Indian economy has integrated into the global economy.
The policy measures initiated to realize the objectives of globalization are:
1. Exchange rate adjustment and rupee convertibility.
2. Import liberalisation and simplification of procedures
3. Opening up of foreign capital i.e. FDI and FII
4. Reduction of custom duties on imports
5. Double Taxation avoidance agreement
6. Government level relations between Countries

Political Environment
A stable & dynamic political environment influences business growth. An era f Coalition Government at the centre for the last three decades as affected the governance adversely. In a capitalist economic system corporate firms are very powerful, yet they have to operate within the parameters which are determined by the broad policies of the government. Ex: MRTP Act, FERA because of the experiences of the colonial era, foreign capital & the multinationals corporations were suspects.

Economical Environment
Economical Environment of a country comprises of Interest rates both on deposits and loans, Inflation rates, Foreign Exchange Reserves, Taxation Rates: both Direct and Indirect, Wage structures etc which have a direct effect on the business.

Legal environment
Govt. sets the legal framework within which business firms operate. Legislations defining :property and business organizations, laws of contracts, bankruptcy (one who's assets are used to repay debts), Labour Laws, Companies Laws, Banking Laws, Mutual obligations of labour & management, and various other Laws and regulations affect the way the business are carried out. The management has to comply with various legal requirements.

SOCIO-CULTURAL ENVIRONMENT
Business firms operate in a socio-cultural environment & their strategies needs to be

formulated keeping this factor in view. Ex: western countries are modern & liberal.
People are more receptive to new products & no prejudice against any kind of advertising. Health conscious-product injurious to health of the people can't be successfully introduced.

Technological Environment
Technology- Knowledge about machines & processes. Any business- cannot survive with outdated techniques in international competition. Four decades ago –technology of Fiat was unsophisticated. Users had no choice & thus product survived for a long period. Setting up of Maruti udyog Ltd., the situation changed due to superior technology. A business has to replace the old and obsolete machinery and technology with modern and more efficient technology.

To sum up, a successful management has to constantly watch the happenings around them and fine tune their policies from time to time to survive and grow in the changing environment.

Entrepreneurship is the process of creating something new with value of devoting the necessary time and effort, assuming the accompanying financial, psychic and social risk and receiving the resulting rewards of monetary and personal satisfaction and independence.

The word entrepreneur is derived from the French word 'enterprendre' it means “to undertake” and literally translated means “between-taker” or “go-between”. Entrepreneur is an individual who takes risk and starts something new.
Entrepreneur is a person who knows how to Arrange and use Land, Labour, and Capital to earn some income which is more than Rent, Wages and Interest and to retain the surplus as Profit.

Functions of an entrepreneur

Innovation
An entrepreneur is basically an innovator. He has to constantly innovate based on the unexpected success or failure or any unexpected outside event, process need, Changes in industry and market structure, Demographics changes and new knowledge.

Schumpeter has firmly expressed his opinion that the function of entrepreneurship is innovation.
- Innovation of new product.
- Innovation of new technology.
- Innovation of new process of production methods.
- Exploration of new markets.
- Searching for the new sources and supply.
- Innovation of industrial reconstruction method.

Sources of new ideas are consumers, Existing companies, Distribution channels, Government and Research and development. Methods of generating ideas are Focus Groups, Brain storming and Problem inventory analysis.

Risk and uncertainty bearing.
Risk is the possibility of not getting what you expect. An entrepreneur should take calculated risk. After all Profit is the reward for taking risk. Not taking risk is the biggest risk.

Organization building.
An entrepreneur has to carry out the following functions to build his organization.

- Perception of market opportunities.
- Gaining command over scarce resources.
- Purchasing inputs.
- Marketing the products.

- Dealing with bureaucrats.
- Managing human relations within the firm.
- Managing customer and supplier relations.
- Managing finance.
- Managing production.
- Acquiring and overseeing assembly of the factory.
- Upgrading process and product.
- Introducing new production techniques and products.

Economic Development

Role of Entrepreneurs in Economic Development are as under:

- Capital formation.
- Generation of employment.
- Improvement in per capita income.
- Reduces concentration of wealth.
- Balanced regional development.
- Resource mobilization.
- Improvement in standard of living.
- National self-reliance.
- Harnessing natural resources.
- Backward and forward linkages.

There are four groups of people involved in an organization. Viz. Owners, Employees, Creditors and customers. A catalyst entrepreneur aims at satisfying all the people

Entrepreneurship Qualities

An Entrepreneur has to possess an optimum mix of Knowledge, Skills and Attitude.

The following is an illustrative list of Knowledge, Skills and Attitude from which an entrepreneur has to acquire the one required for his profession.

Attitude

ACCOUNTABILITY
ACHIEVEMENT MOTIVATION
ACTIVE
ADAPTABILITY
ADVENTUROUS
ALERT
AMBITIOUS
ASSERTIVE
AUSTERITY MEASURES
BODY LANGUAGE
BOLDNESS
CLARITY OF THOUGHTS
COMMITMENT
COMMON SENSE
COMPETITION FACER
CONCENTRATION
CONCERN FOR CUSTOMERS
CONCERN FOR OTHERS' CONVENIENCES
CONCERN FOR PROFIT
CONCERN FOR QUALITY
CONCERN FOR SAFETY
CONSISTENCY
CORRECT COMPLEX
EFFICIENCY
ENERGETIC
ENTHUSIASM
FAILURE MANAGEMENT
FIRMNESS
FLEXIBILITY
FORGIVENESS
GOAL SETTING
GOOD MANNERS
GOOD MORALS
HEALTH CONSCIOUSNESS
HELP SEEKING
HONESTY
HUMULITY
INFORMATION SEEKING
INITIATIVE
INNOVATION
INTEGRITY
INTER PERSONAL RELATION
INTEREST
INVOLVEMENT
LONG TERM APPROACH
MUTUAL TRUST
NATURAL JUSTICE
OPTIMISTIC
PATIENCE
PERCEPTION

PERSISTENCE
POSITIVE THINKING
PRACTICAL APPROACH
PRESENCE OF MIND
PUNCTUALITY
QUALITY CONSCIOUS
RISK BEARING
SELF CONFIDENCE
SELF CONTROL
SELF DISCIPLINE
SELF ESTEEM
SELF MOTIVATION
SELF RELIANCE
SINCERITY
SOCIAL
SPONTANEITY
SUCCESS MANAGEMENT
TEMPERAMENT
TOLERANCE
TOUGH
VISUALISATION
VISION

Skills

ABILITY TO JUDGE ABILITY
ANALYTICAL SKILLS
BUDGETING
COMMUNICATION SKILLS
COST BENEFIT ANALYSIS
DECISION MAKING
DELEGATION
DRAFTING SKILLS
EXPERIENCE
FAST READING SKILLS
FORECASTING
HOUSE KEEPING
IMAGE BUILDING
INTER PERSONAL SKILLS
LEADERSHIP
LEADING BY EXAMPLE
LISTENING SKILLS
MARKETING SKILLS
MEMORY POWER
MOTIVATION
NEGOTIATION SKILLS
PERSUASION
PLANNING
PRICING SKILL
PRIORITISATION
PROBLEM SOLVING
PUBLIC RELATION
PUBLIC SPEAKING SKILLS
PUBLICITY
REASONING ABILITY
RESOURCE MOBILISATION
SEES AND ACTS OPPORTUNITIES
SENSE OF HUMOR
STAGE COURAGE
TEAM SPIRIT
TIME MANAGEMENT
USE OF INFLUENCE

Knowledge

GENERAL KNOWLEDGE
KNOWLEDGE OF ACCOUNTS
KNOWLEDGE OF COMPETITORS
KNOWLEDGE OF COMPUTER
KNOWLEDGE OF CURRENT AFFAIRS
KNOWLEDGE OF ENGLISH LANGUAGE
KNOWLEDGE OF HINDI
KNOWLEDGE OF LOCAL LANGUAGE
KNOWLEDGE UPDATING
QUALIFICATION
SWOT ANALYSIS
TECHNICAL KNOWLEDGE

Sharpening Your Saw in Negotiation

Dr. Hemendra Singh

Introduction

ABCL is a leading manufacturer of diesel engines in India, currently having a market share of around 52%. It had market share of 70% in 1995, which slipped down to 52% by 1999. The main reason for this falling market share was identified as lack of market sensitivity and pure 'distributing' approach. ABCL designed and implemented Project Green Chili Power 2000 to regain the market share.

The strategic components of Project Green Chili Power 2000 were:

a. Rationalization and reduction in the number of manufacturing units by reducing gensets using ABCL engines from 70 nos. to 11 nos.

b. Tripling authorized sale outlets from 50 numbers to 150 numbers & territory allocation.

c. Branding of Gensets - Green Chilly Power- built on ABCL engines.

d. Common sourcing of items like alternator, base plate, etc. to reduce cost, resulting in competitive pricing.

Although, after implementing the above strategy the current market share has dropped from 58 to 52% ABCL management is confident that it is adopting the right strategy and it is necessary to widen the product mix to fully leverage the advantages of Project Green Power 2000. It is only then, in the long run; ABCL will regain its lost share.

One of the major areas of widening the product mix is the Gensets with Higher Speed engine: the engines, which are lighter, occupy less space and have a special market of their own. In fact these higher speed engines would be the only means by which ABCL plans to put its products on the shopping list of every housewife. The market for lower KVA higher speed Gensets has already been captured by Birla Yahama and Hero Honda Gensets, which we see in many shopping centres.ABCL is keen to enter the market in 5 KVA to 22 KVA range.

A number of foreign manufactures are expected to enter this segment as well in near future. A number of local manufacturer's were selling branded/unbranded gensets with low quality but very low pricing from Rajkot, Agra etc. Consequently, ABCL is keen to decide regarding its entry in this segment at an early date. ABCL would like to have a systematic and scientific assessment of this market to make the crucial decision.

ABCL have decided to commission a market research through an independent professional research agency. Due to confidential nature of the project only one research firm was approached which had past dealings with ABCL.

Dr Hemendra Singh
Director

Objectives as given by ABCL to the consultant were as follows:

1. Consumer outlook towards higher speed Gensets
2. Potential of Indian Genset Market for higher speed Gensets with possible KVA Brackets.
3. Existing and likely market players & their relative market position with

broader Product specifications.

4. Geographical dispersion and segmentation for demand & supply

The Research Firm penned down all the inputs of ABCL Marketing team and sent an offer as detailed below:

Proposal Phase

It is proposed by the research firm to spilt the entire assignment in two phases because the time available to make the basic 'Yes – No' decision is limited to sixty days and the information required to reach correct decision in this regard needs to be collected first. This would constitute Phase I.

The information required to plan effective marketing strategy can be collected and should be collected after it is decided to go ahead with higher speed Gensets. This would constitute

Phase II

The phase wise objectives as suggested by the Research Firm shall be:

Objective of phase I:

1. The major end use segments for higher speed RPM Gensets including the KVA range.
2. Estimated demand from each end use sector during the years 2003, 2005 and 2007. Data as indicated by the ABCL, enclosed at Annexure I, specifies the information needs.
3. The major features – benefits – advantages desired by each end use segment and the price value pay off desired by each segment. The characteristics of the demand in terms of priority benefits changes from one customer to another.
4. The major competition expected in the near term.
5. A Strength – Weakness – Opportunity – Threats (SWOT) analysis of ABCL in the higher speed RPM Genset market. In Yes –No decision if imports are likely to become substantially cheaper, then the thrusts must not be inspected but ABCL must evaluate whether it is effective strategy to counter this strength. It is only then that the decision to go ahead will be meaningful.

Objective of phase II:

1. Geographical dispersion of the demand.
2. Analysis of needs of each market segment a selective drilling down to find out are there some unique need to specific segment and whether specific unique needs will give a major competitive advantage to ABCL.
3. Current and future strength of competitors in each market segment
4. Optimum channel for succeeding in the market place.

Methodology for Phase I

The methodology is described under the following headings:

1. Search through secondary sources
2. Qualitative study
3. Structured survey
4. Data compilation, analysis and report writing

Search through Secondary Sources:

a. Trade journals /Technical journals
b. Web sites of international manufactures

Qualitative Study:

This will cover:

I. In-depth discussions with ABCL executives including at least two formal in process presentations.

II. In-depth exploratory discussions with at least two customers from every possible end user segment.

III. Mystery customer visit to manufacturer /dealers of competitors for an inquiry for purchase of higher speed Gensets

Structured survey:

- **Customers**

The questionnaire for structured survey will be designed partly after completing the qualitative study. In depth exploratory discussion with at least two customer for every possible end user. The questionnaire will seek only relevant information. Although most of the questions will be closed ended, field investigators are trained and encouraged to collect as much relevant qualitative information as possible.

The questionnaire will the thoroughly pre tested before it is submitted for approval of the ABCL. The field survey will begin only after the questionnaire is approved by the ABCL.

- **Dealers**

The questionnaire for structured survey will be designed after completing the qualitative study. In depth exploratory discussion with at least ten dealers for every possible end user. The questionnaire will seek only relevant information. Although most of the questions will be closed ended, field investigators are trained and encouraged to collect as much relevant qualitative information as possible.

The questionnaire will the thoroughly pre tested before it is submitted for approval of the ABCL. The field survey will begin only after the questionnaire is approved by the ABCL.

The respondents covered /sample size/geographic coverage & end use)

	End User							Total
Location	Genset Dealer	Shop Keeper	House holds	Service provider	Area Offices	Cellular Operator	Farm Houses	
		Multi-Plexus Shops	Bungalows Societies Apartments	Hospitals Petrol pumps Hotels				
5 Metros								
Delhi, Mumbai, Kolkatta, Chennai, Bangalore.	4	10	10	11	9	3	5	52
10 Metros								
Bhubneshwar Cochin Noida Hyderabad, Indore, Jaipur Kanpur, Ludhiana Pune, Ranchi	3	10	10	10	9	2	5	49
Total = Add (number of metros*sample of the segment) + (number of cities *Sample of the segment	**50**	**150**	**150**	**155**	**135**	**35**	**75**	**750**

*(hospitals, petrol bunks, multiplexes, hotels, motels, banks)

The methodology for phase II will be finalized in consultation with you after completion of phase I.

Organizational working team

Principal Consultant (One)	
Senior Consultant (One)	
	Coordinator(One)
	EDP Staff (Two)
Field Investigators(Twelve)	

Quality Assurance
Pre-testing of questionnaires to ensure all the relevant data is collected for all the segments.

Training of field investigators for four days to students studying B School to ensure that data collection quality is good.

Selectively reconfirming of the respondents, through visit by supervisor who have been interviewed. Resurvey of 10% of the respondents particularly those in whose case the critical data is at variance with the sample. Computerized checks on patterns of responses.

Activity Schedule for Survey Activity	**Start date days**	**Duration days**	**End Date days**
Discussions with end users from each segment	1	4	5
Detailing information needs through lists of questions	5	2	7
Feedback from client on list of questions	7	2	9
Draft questionnaires	9	2	11
Pretesting of draft questionnaires	11	2	13
Feedback from client on draft questionnaires	13	2	15
Finalization of questionnaire	15	1	16
Dummy output tables	16	2	18
Training of field investigators	18	4	22
Pilot study – Mumbai	22	3	25
Modify Questionnaire if necessary	25	2	27
Clients approval	27	2	29
Field survey	29	16	45
Screening of published information	5	30	35
Mock interviews of competitors	20	20	40
Data compilation	40	5	45
Data analysis and draft report	45	6	51
In process presentation and client's feedback	51	3	54
Final report	54	4	58
Presentation of final report	58	1	59
Yes/No Decision	59	1	60
Additional needs identify	60	4	64

Activity Schedule for Survey Activity	Start date days	Duration days	End Date days
Additional information	64	4	68
Strategic Discussions	68	2	70
Analysis	70	14	84
Report Writing	84	5	89
Presentation of final report	89	1	90

Consultancy Fees
The Consultancy fees for the entire assignment will be Rs. 900,000/-(Rupees nine Lakhs only) Service tax extra as applicable at the time of billing. Currently it is 5 %.

Payment Terms
50% of the fees as advance along with the order.
Balance 50% of the fees payable within 7 days of submission of final report.

Negotiation Phase
The time frame is sacrosanct. PhaseI will be completed within 60 days of award of contract and 30 days later Phase II will be completed.

Since time and quality are essence of the contract the research firm agrees to a penalty of 1% per day subject to a maximum of 15%, for delay in completion of this project.
The locations of Pune and Noida to be changed to Nagpur and Ghaziabad.

The ABCL Marketing team called in the Research firm and asked them to justify the prices as per them the internal budget was Rupees Five Lakhs.
The senior consultant pitched in with the following explanation.

Phase I and II Lumpsum price Rs.		900,000	
Justification offered by research firm			
Sample size (nos.) Cost per contact Rest.		750 900	Adequate Rate of last order
Field work	Rs.	6,75,000	
Overheads	Rs.	1,25,00	
Senior Consultant Fees Number of days Consulting fees	 Rs. /day	 25,000 4 1,00,000	
Total fees Rs.		9,00,000	
Special Discount		10%	
Final price offered by research firm after round one Rs.		8,10,000	

Best price offered by research Firm Rs.(as a special case)	8,00,000	
ABCL team asked for break up of element wise cost of contact which was duly furnished by the firm.		
	Field day cost	
Salary Rs.	400	
Lodging/Boarding Rs.	400	
Local Travel Rs.	100	
Outstation travel Rs.	100	
Cross check Rs.	200	
Contribution Rs.	300	
Total Rs.	1,500	
No. of contacts/ day	2	

The ABCL Marketing team gave an alternative offer of Rs. 7,75,000/- which was duly accepted by the Research firm.

The ABCL team made a series of mistakes due to lack of diligence, which made ABCL, lose more than Rs. 4,00,000 in this contract.
Can you work out the solution in the light of all data furnished in this study?

Solution

	Clinical business insight for best research negotiation from ABCL point of view	
1	Sample size	
2	Cost of contact	
3	Read between lines in contract	
4	Truthful confirmation of contacts made	
	phase 1 quote	700000
	phase 2 quote	200000
	Total	900000
	initial discount(10%)	90000
	revised offer price	810000
	additional discount by research firm	10000
	Final offer	800000
	negotiated price	775000
	Discount during negotiation%	14%
	phase I Yes/ No	**602778**

	Error made in Phase I	
	cost/manday	1500
	samples per manday	2
	cost/sample	750
	sample size required for accuracy	356
	Field cost estimated	333333
	consultants fees phase I	50000
	Overheads	125000
	Total cost estimated	508333
	Error made in Phase I	**94444**
	loss due to incorrect close if phase II is not required	**172222**
	Total loss	**266667**
	Error made which could easily have been avoided	**34%**
	Additional margin earned by management firm	
	cost/manday less cost not incurred as MBA students used	400
	sample size required for accuracy	356
	Field cost not incurred	**142222**
	Therefore saving possible	408889
	negotiated price	775000
	Money which could have optimally been saved for ABCL	**53%**

A Conceptual Study and Arguments Regarding Euthanasia in India

Dr. Dhananjay Awasarikar

Abstract

The dictionary meaning of the word 'Euthanasia' is the **practice of intentionally ending human life in order to relieve him from pain or any other suffering.** Like many other terms borrowed from history, the word 'Euthanasia' has had different meanings depending on its usage or utility.

The definition offered by the Oxford English Dictionary incorporates suffering as a necessary condition, with **'Painless killing of a patient suffering from an incurable and painful disease or in an irreversible coma'** and this approach can be seen as a part of other works, such as **Marvin Kohl and Paul Kurtz's 'a mode or act of inducing or permitting death painlessly as a relief from suffering.'**

Euthanasia can broadly be classified into the following four categories, namely, **Voluntary Euthanasia, Non-Voluntary Euthanasia, Active Euthanasia and Passive Euthanasia.** Proponents and Critics of Voluntary Euthanasia policies offer various reasons for and against Official Voluntary Euthanasia policies.

This Paper, to start with, introduces and thereafter defines the concept of 'Euthanasia.' Further, it describes in brief its Historical Perspective, Present Social Status and its various Kinds. There are also presented in the Paper some arguments in favor and some arguments against 'Euthanasia.' The Paper gets concluded with the Researcher's personal views and suggestions on this subject.

Key Words – Well-Death, Dying Well. Quick Death

Introduction –

The word 'Euthanasia' comes from the **Greek** words **'eu'**-meaning good and **'thanatos'**- meaning death, which combined means **'well-death'** or **'dying well.'** Hippocrates mentions Euthanasia in the Hippocratic Oath, which was written between 400 and 300 BC. The original Oath states: **"To please no one will I prescribe a deadly drug nor give advice which may cause his death."** Despite this, the ancient Greeks and Romans generally did not believe that life needed to be preserved at any cost and were, in consequence, tolerant of suicide in cases where no relief could be offered to the dying or in the case of the Stoics and Epicureans, where a person no longer cared for his life.

The dictionary meaning of the word 'Euthanasia' is the **practice of intentionally ending human life in order to relieve him from pain or any other suffering.** The British House of Lords defines it as a **'Deliberate Intervention undertaken with the express intention of ending human life, to relieve intractable suffering.'** In the Netherlands, it is understood as **'Termination of life by a doctor at the request of a patient.'**

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Objective of the Paper–

The Objective for writing this Paper is as follows.

1. To study the Concept and Arguments regarding Euthanasia in India

Methodology Adopted for the Paper –

The methodology adopted for writing this paper is as follows.

1. The Review of Literature was done through some books and significant website (Secondary Data) in order to understand the Concept and Arguments regarding Euthanasia in India

2. The Paper is based on Secondary Data.

3. The several Inferences arrived at, various Views expressed and Suggestions put forward by the researcher are the outcome of application of Logical and Factual Interpretations of Secondary Data.

Sources of Secondary Data–

Secondary Data consists of relevant and significant Web Sites mentioned in the Section of Categorized Bibliography which is located at the end of the Research Paper.

Scope of the Paper -

The scope of this Paper extends to the Development of Conceptual Understanding regarding Euthanasia in India and Study of Arguments passed regarding Euthanasia. These Arguments include both the kinds of Arguments passed in favor and against the concept of Euthanasia.

Euthanasia - Historical Perspective

Like many other terms borrowed from the history, the word 'Euthanasia' has had different meanings depending on its usage or utility. Its first apparent usage belongs to the historian Suetonius who described how the **Emperor Augustus, "Dying quickly and without suffering in the arms of his wife, Livia, experienced the 'Euthanasia' he had wished for."** This word was first used in a medical context by Francis Bacon in the **17th century, to refer to an easy, painless, happy death, during which it was a 'physician's responsibility to alleviate the 'physical sufferings' of the body.'** Francis Bacon referred to an 'outward euthanasia'—the term 'outward' he used to distinguish from a spiritual concept—the euthanasia 'which regards the preparation of the soul.'

Euthanasia - Present Social Status

The Present Social Status of the concept of Euthanasia is inferred on the basis of **Selected Review of Pertinent Literature.**

In current usage, one approach to defining euthanasia has been to mirror Suetonius, regarding it as the **'Painless Inducement of a Quick Death'.** However, it is argued that this approach fails to properly define the word 'Euthanasia', as it leaves open a number of possible actions which would meet the requirements of the definition, but would not be seen as Euthanasia. In particular, these include situations where a person kills another, painlessly, but for no reason beyond that of personal gain; or accidental deaths which are quick and painless, but not intentional.

Thus, another approach is to incorporate the notion of suffering into the definition. The definition offered by the Oxford English Dictionary incorporates suffering as a necessary condition, with **'Painless killing of a patient suffering from an incurable and painful disease or in an irreversible coma'** and this approach can be seen as a part of other works, such as **Marvin Kohl and Paul Kurtz's 'a mode or act of inducing or permitting death painlessly as a relief from suffering.'** However, focusing on this approach to defining euthanasia may also lead to counterexamples: such definitions may encompass killing a person suffering from an incurable disease for personal gain (such as to claim an inheritance) and commentators such as Tom Beauchamp and Arnold Davidson have argued that doing such acts would constitute 'Murder Simplifier' rather than Euthanasia.

The third element incorporated into many definitions is that of **Intentionality –** the death must be intended, rather than being accidental, and the intent of the action must be a **'Merciful Death.' Michael Wreen** argued that **"Principal thing that distinguishes Euthanasia from intentional killing simplifier is the agent's motive: it must be a good motive insofar as the good of the person killed is concerned",** a view mirrored by **Heather Draper,** who also spoke to the importance of motive, arguing that **"the motive forms a crucial part of arguments for euthanasia, because it must be in the best interests of the person on the receiving end."** Definitions such as that offered by the House of Lords Select Committee on Medical Ethics take this path, where euthanasia is defined as **"a deliberate intervention undertaken with the express intention of ending a life, to relieve intractable suffering." Beauchamp and Davidson also highlight "An act of Euthanasia is one in which one person ... (A) kills another person (B) for the benefit of the second person, who actually does benefit from being killed".**

Draper argued that any definition of Euthanasia must incorporate **four** elements: **an agent, a subject; an intention; a causal proximity,** such that the actions of the agent lead to the outcome; and an outcome. Based on this, she offered a definition incorporating those elements, stating that euthanasia must be defined as **"Death that results from the intention of one person to kill another person, using the most gentle and painless means possible, that is motivated solely by the best interests of the person who dies."** Prior to Draper, **Beauchamp and Davidson** had also offered a definition which includes these elements, although they offered a somewhat longer account and one that specifically discounts fetuses in order to distinguish between abortions and euthanasia.

Kinds of Euthanasia –

Euthanasia can broadly be classified into the following four categories.

(a) Voluntary Euthanasia
(b) Non-Voluntary Euthanasia
(c) Active Euthanasia
(d) Passive Euthanasia

Let us discuss each of these kinds of Euthanasia in brief in the following lines one by one. .

(a) Voluntary Euthanasia -

It is the practice of **ending human life in a painless manner.** Voluntary Euthanasia and Physician Assisted Suicide (PAS) have been the focus of great controversy in recent years. As on today, some forms of Voluntary euthanasia are legal in Belgium, Luxembourg, Netherlands, Switzerland and the US states of Oregon and Washington.

(b) Non- Voluntary Euthanasia

Non-Voluntary Euthanasia, also known as **Mercy Killing** is Euthanasia conducted in the circumstance where the explicit consent of the patient is not available, such as when he is in a persistent vegetative state exactly against the case of **Involuntary Euthanasia** where it is performed **against** his will.

(c) Active Euthanasia -

It occurs when the **medical professionals or another person, deliberately do something** that causes the patient to die.

(d)Passive Euthanasia -

It occurs when the patient dies because the **medical professionals either undo something necessary to keep the patient alive or stop doing something** that is keeping the patient alive.

Arguments Regarding Euthanasia –

In some countries there is a divisive public controversy over the moral, ethical, and legal issues of Euthanasia. Those who are against it may argue for the sanctity of human life while its proponents emphasize Alleviating Suffering, Bodily Integrity, Self-Determination, and Personal Autonomy. Jurisdictions where Euthanasia or Assisted Suicide is legal include **Netherlands, Belgium, Luxembourg, Switzerland, Estonia, Albania, and the U. S. states of Washington, Oregon and Montana.**

Since World War II, the debate over Euthanasia in Western countries has centered on Voluntary Euthanasia within regulated health care systems. In some cases, Judicial Decisions which are Precedents and have binding legal force, Legislation, and allied regulations have made Voluntary Euthanasia an explicit option for patients and their guardians. Proponents and Critics of such Voluntary Euthanasia policies offer the following reasons for and against Official Voluntary Euthanasia policies.

Arguments in favor of Euthanasia –

Proponents of Voluntary Euthanasia emphasize that choice is a fundamental principle for Liberal Democracies and Free Market Systems. The pain and suffering a person feels during a disease, even with pain relievers, can be incomprehensible or unimaginable to a person who has not gone through it. Even without considering the physical pain, it is quite often very difficult for patients to overcome the emotional pain of losing their independence. Those who witnesses others die are 'Particularly Convinced' that the Law should be amended to allow Assisted Death.

In many countries there is a shortage of hospital space even as on today in the year 2015. Medical Personnel and hospital beds could be used for people, whose lives could be saved instead of continuing the lives of those who want to die. Furthermore, this would definitely increase the general quality of human care and shorten hospital waiting lists, at least to some extent. It is, no doubt, a burden sometimes to keep people alive who have past the point they can contribute to society, especially if the resources used could be spent on a curable ailment.

Arguments Against Euthanasia –

Critics argue that Voluntary Euthanasia could unduly compromise the professional roles of health care employees, especially the Doctors. They point out that European physicians of previous centuries traditionally swore some variation of the Hippocratic Oath, which in its ancient form excluded euthanasia.

However, since the year 1970, that is for last thirty five years, this oath has, in fact, largely fallen out of use. Moreover, some people, including many Christians, consider Euthanasia of some or all types to be **Morally Unacceptable.** This view usually treats Euthanasia to be a **Special type of Murder** and Voluntary Euthanasia as a **Special kind of Suicide,** the morality of which is the subject of active debate. If there is some reason to believe the cause of a patient's illness or suffering is or will soon be curable, the correct action is sometimes considered to attempt to bring about a cure or engage in palliative care.

As far as feasibility of implementation of Euthanasia is concerned, it can only be considered 'Voluntary' if a patient is mentally competent to make the decision, that is, he has a rational understanding of options and consequences. Competence can really be very difficult to determine, generalize or even define and describe.

Given the economic grounds for Voluntary Euthanasia, its critics are deeply concerned with a fact that patients may experience psychological pressure to consent to Voluntary Euthanasia rather than be a financial burden on their families. Even where health costs are mostly covered by public money, particularly, now-a-days in India, through several Health-Care or Medi-Claim Insurance Policies, as is the case in various European countries, critics are concerned that hospital personnel would have an economic incentive to advice or pressure people towards the consent.

Non-Voluntary Euthanasia is sometimes cited as one of the possible outcomes of the Slippery Slope argument, in which it is claimed that permitting Voluntary Euthanasia to occur will lead to the support and legalization of Non-Voluntary and Involuntary Euthanasia.

Researcher's Personal Views and Suggestions regarding Euthanasia -

Before expressing any personal view and suggesting something, on the concept of Euthanasia, it is really very necessary to ascertain the present Legal Status of Euthanasia in India.

On 7th March 2011, four years earlier, the Hon. Supreme Court of India legalized Passive Euthanasia by permitting the withdrawal of life support for the patients in a permanent vegetative state. This revolutionary judgment was delivered as a part and parcel of the verdict in a case involving **Ms. Aruna Shanbaug.** This is reported to be the last Judgment of the Hon. Supreme Court of India on the subject of Euthanasia.

Although a revolutionary judgment is arrived at by the Hon. Supreme Court of India, its practical applicability as a precedent, in some other either similar or allied cases seems to be highly doubtful after taking into consideration the current style of functioning of Judges in various Courts in India. At the same time, indeed **it is very difficult to generalize or to create a new Law in respect of Euthanasia basically because of several unique complications involved in each case.** In other words, in the opinion of the Researcher, **a question 'whether or not to legalize Euthanasia in India', should be treated as a Question of Fact and not, at all, the Question of Law.** This suggests that permission for Euthanasia should be granted on the basis of facts of the particular case in consultation with the patient, if he is in a proper position to decide, his relatives and the concerned Doctors.

Limitations of the Paper –

Like each and every Research Paper, this Research Paper also proceeds with certain limitations as follows.

1. As the study for this Paper is purely of Academic Orientation, some sort of adaptation to prevailing conditions is ideally necessary prior to its application in practice.

2. As the Research Paper Study is based on Secondary Data, all the limitations of Secondary Data have direct and deep impact on the inferences arrived at in this Paper by the Researcher.

3. In the Research Paper, the overall technical terminology is utilized only to the extent it is actually of utmost essence and significance and strictly no more, simply for want of length.

Scope for Future Research –

During the course of the study of this Paper, the researcher found out that there is an ample scope and adequate potential for research in future for the following topics related to concept of Euthanasia in India and in Foreign Countries.

1. A Critical Study of Legal Status of Euthanasia in India
2. A Study of Present Legal Status of Euthanasia in Foreign Countries

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SURYADATTA

Knowing the Unknowns - Making of Perfume Chanel No. 5

Prof. Sudhish Chatterjee

Abstract:
Chanel No. 5 is one of the most popular and sought after perfume of the world particularly by women of high society. It's a proprietary perfume from France. The fragrance was among the first to utilize synthetic fragrance molecules called 'aldehydes', and has become the most iconic example of real gorgeous jasmine and rose.

The heart of Chanel No. 5 is a field in Grasse, France—historically the home of perfumery—where the Mul family has been growing exquisite Jasmine and May Roses for the House of Chanel for generations: Each 30ml bottle of Chanel No. 5 perfume requires 1,000 jasmine flowers and 12 roses from this precious patch of land.

The French government reports that a bottle of Chanel No. 5 is sold every thirty seconds and generates sales of $100 million a year. It is often considered the world's most famous perfume

Key Words :

Perfume, Extract , Aldehyde,

Introduction :
Chanel No. 5 is one of the most popular and sought after perfume of the world particularly by women. It's a proprietary perfume from France. When Coco Chanel commissioned perfumer Ernest Beaux to create the juice that would debut as Chanel No. 5 in 1921, she famously told him that she didn't want the scent to smell like flowers, but more like a "composition."

The fragrance was among the first to utilize synthetic fragrance molecules called aldehydes, and has become the most iconic example of what's known as an abstract floral—but that doesn't mean it's not based on very real, gorgeous blooms. The creation of No. 5 debuted a brand-new kind of perfume used for the first time, a synthetic component called aldehydes. The man-made element has a complex scent which, while not found in nature, is pleasant and recognizable to the nose. It is often described as the smell of laundry that has been dried outside on a cool day. The heavy dose of aldehydes in No. 5, along with more familiar floral, is what gives the perfume its opening burst of crispness and sparkle.

Indeed, the heart of Chanel No. 5 is a field in Grasse, France—historically the home of haute perfumery—where the Mul family has been growing exquisite jasmine and May roses for the House of Chanel for generations.

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Research Paper Objectives:
a) The reasons for naming and designing the bottle of this iconic brand
b) To study about the process of making Chanel No. 5 perfume

Methodology:
The methodology adopted is entirely based on secondary data

Research Paper Scope:
The scope of the research is limited to historical analysis of the process of making Channel 5 and its typicality

Historical Backgrounds:
Chanel No. 5 is the first perfume launched by Parisian couturier Gabrielle "Coco" Chanel. It was developed by Russian-French chemist and perfumer Ernest Beaux. The French government reports that a bottle of Chanel No. 5 is sold every thirty seconds and generates sales of $100 million a year. It is often considered the world's most famous perfume. Chanel No. 5 is one of the most popular and sought after perfume of the world particularly by women. It's a proprietary perfume from France.
The creation of No. 5 heralded a brand-new kind of perfume used for the first time: a synthetic component called aldehydes. The man-made element has a complex scent which, while not found in nature, is pleasant and recognizable to the nose. It is often described as the smell of laundry that has been dried outside on a cool day. The heavy dose of aldehydes in No. 5, along with more familiar floral, is what gives the perfume its opening burst of crispness and sparkle.
Channel No. 5 has been the fragrance of choice of many legendary celebrities over the years. Marilyn Monroe once famously said “What do I wear in bed? Why? Chanel No. 5 of course”. This is probably the most famous of Marilyn's quotes and undoubtedly what gives Chanel No. 5 such appeal. Who wouldn't want to smell like Marilyn? That is not however the beginning and the end of the story. Chanel No. 5 is a very carefully planned and created scent both in the philosophy behind its creation and the inspiration for its fragrance.
Today, Hollywood's brightest stars like Eva Mendes, Victoria Beckham, Jessica Alba, Celine Dion and Claudia Schiffer choose Chanel No. 5. This perfume is well-suited to daytime wear as the scent is very concentrated. Amazingly, for such a strongly-branded fragrance, Channel No. 5 is a scent that can smell radically different from one woman to another.

Knowing the unknowns:

- **Why the name bears No. 5 ?**

The number five was especially esteemed as signifying the pure embodiment of a thing, its spirit, its mystic meaning. The paths, which led Chanel to the cathedral for daily prayer, were laid out in circular patterns repeating the number five. Her affinity for the number five co-mingled with the abbey gardens, and by extension the lush surrounding hillsides abounding with cistus, a five-petal rose. It is noteworthy that the Cistercians, an ancient branch of Catholicism, derived the name of their order from this very flower.

Chanel told her master perfumer, Ernest Beaux, whom she had commissioned to develop a fragrance with modern innovations: "I present my dress collections on the fifth of May, the fifth month of the year and so we will let this sample number five keep the name it has already, it will bring good luck.”

- **Why the typical shape of the bottle?**

The first bottle produced in 1919, is not the Chanel No.5 bottle known today. The original container had small, delicate, rounded shoulders and was sold only in Chanel boutiques to select clients. In 1924, when “Parfums Chanel,” incorporated, the glass was proved too thin to sustain shipping and distribution. This is the point in time when the only significant design change took place. The bottle was modified with square, faceted corners. The bottle has remained the same since redesigned in 1924

Beaux perfected what was to become Chanel No. 5 over several months in the late summer and autumn of 1920. He worked from the rose and jasmine base of **Rallet No. 1** altering it to make it cleaner, more daring, reminiscent of the pristine polar freshness he had inhabited during his war years. He experimented with modern synthetics, adding his own invention “Rose E. B” and notes derived from a new jasmine source, a commercial ingredient called 'Jasophore'. The revamped, complex formula also ramped up the quantities of orris-iris-root and natural musks.

➢ **Why the strong scent?**

The revolutionary key was Beaux's use of aldehydes. Aldehydes are organic substances, carbon, oxygen and hydrogen. They are manipulated in the laboratory at crucial stages of chemical reaction whereby the process arrests and isolates the scent. Legend has it that this wondrous concoction was the inadvertent result of a laboratory mishap. A laboratory assistant, mistaking a full strength mixture for a ten percent dilution, had jolted the compound with a dose of aldehyde in quantity never before used. Beaux prepared ten glass vials for Chanel's inspection. Numbered 1-5 then 20-24, the gap presented the core May rose, jasmine and aldehydes in two complimentary series, each group a variation of the compound. “Number five. Yes,” Chanel said.

The Process of Making:

The basic ingredient of this perfume is petals of jasmine flowers and rose. These flowers are harvested exclusively in the town of Grass on the Cote d’Azur in southern France by the Mul family for five generations. To make 30 ml of Chanel No.5, approximately 1000 jasmine flowers are needed. Interesting to know that 8,000 Raw flowers yield only 1 kg of petals. In other words, 125 gm of petals are needed to make 30ml of Chanel No.5. The Mul family employs 90 workers for 100-day picking season between July and October since one person can pick only 500 gm of flowers in an hour or about 3.5kg in a day.

The flower petals are placed in perforated trays, sorted and then poured in a jacketed stainless steel vat containing 2000 liters of hexamine solvent and is steam heated. After the heating, what’s left is a waxy material called concrete. It is allowed to cool. After cooling, it is taken out and poured in an open pot, mixed with alcohol and chilled to -15°C. The liquid extracted from the wax contains essence for the perfume. Samples of flower essences are taken and sent to Compiegne for testing. Once approved, other fragrance and materials are added with the essence, stirred and mixed well before bottling. Black pearl cotton thread and a fine membrane keep air and water out of the perfume bottle and ensure original flavor and smell. There are three different scents for Channel No 5. These are:

- Top note – Ylang-Ylang and Neroli
- Heart note – Grasse Jasmine and May Rose
- Base note – Sandalwood and Vanilla

Indicative Price from some of the on- line site

- Chanel No 5 By Chanel For Women 100 ml : **Rs. 10,121.00 (Aamazon)**
- Chanel No 5 EDP 100 ml : **Rs. 4,949.00** (Snapdeal)
- Chanel No. 5 by Chanel 50 ml Eau de Parfum Spray Classic Bottle: **Rs. 13,296.00** (Snapdeal)
- Chanel No 5 Eau De Toilette - 100 Ml : **Rs. 8,449.00** (Flipkart)
- Chanel No 5 Eau De Parfume - 100 Ml : **Rs. 12,650.00** (Flipkart)

As the readers may observe, Chanel No. 5 is not for everyone in India. The craze is there among Indians to wear this scent but user percentage will be minuscule.

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Biometrics and Electronic Voting

Prof. Deepak Singh

Abstract
As Electronic Voting gains more importance while practicable solutions are being implemented, more questions arise concerning alternative possibilities for a secure and feasible authentication. The specific peculiarities of secure authentication to a system are various and for a sensitive area like Electronic Voting also challenging. In this paper we evaluate biometric systems in order to prove their capabilities for Electronic Voting systems.

Electronic voting is a sensitive issue as the person voting does not get identified by the physical attributes, rather, he/she is identified by the biological attributes. The biological attributes can change by any reason which may lead to de-authentication or de-authorization of the user.

Electronic voting is gaining world wide acceptance because people who are interested in election and want to cast their vote but may not approach the voting center personally can use the electronic method to cast their vote/votes.

This paper deals with the various aspects of the electronic voting such and complexities related to the electronic voting system such as FAR (false accept ratio) and FRR (false reject ratio) in addition it also deals with various biological features used for user identification or authorization.

Keywords - Biometrics, FAR, FRR, Voting

1 Introduction :

This contribution tries to look into Electronic Voting from a different angle on the necessary citizen authorization from a different angle. Instead of concepts such as one-time passwords or smart cards, we try to look into the pros and cons of a biometric approach. Biometrics is the science that tries to fetch human biological features with an automated machine either to authentication or identification [La02]. Biometric products should remove the necessity of password or PINs. Typical two-factor authorizations use possession, e.g. smart card, and knowledge, e.g. PIN. Biometric systems try to exchange knowledge with an individual feature, e.g. finger print. Recording of the feature should be comfortable and fast. The most commonly use biometric feature is the finger print. It is well known and in wide spread use in daily police work.

In contrast to passwords or pin codes, biometric features are dynamic, i.e. they change over time. This is probably the most challenging property of the biometric system. One has to find a balance between a check which is too strict and generates too many rejections, and a check which is too loose and generates too many false accepts.

This paper gives an overview of biometric approaches to e-Voting. The first section gives an introduction into e-Voting. The second section elaborates

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on security issues specific to Electronic Voting systems. Finally, it focuses on security in Electronic Voting systems with biometric systems.

2 Objective: objective of the paper is to deal with following aspects:

1. How to authorize a person in absence of physical identification?
2. What are the biological factors that can be used to authorize a person for voting?
3. Bring familiarity with the Standards of biometric data.
4. Factors that may affect biometric data.

3 Methodology: This paper is based on secondary data collected from online resources from the website or internet. (See references)

4 Secondary data:

1. Figure 1 biometric standards
2. Figure 2 FAR and FRR ratio
3. Refrences (See references)

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2 Electronic Voting:

Many countries have started research projects or even pilots for Electronic Voting(UK [html5],[PKK03], ACM US [html6], NIST [html7], Austria [SM03], Switzerland [BR03],[html9],[html8], Germany [BR03]. There are two main motivations to introduce Electronic Voting: cost savings and increased voter participation and interest. Providing information and increasing the convenience for the citizens goes hand in hand, and it also offers disabled people the possibility to use Electronic Voting systems [html10]. Some approaches of putting Electronic Voting into practise are quite innovative, such as voting using SMS [html8] but still they have to cope with a lot of unsolved technical problems and therefore, it is doubtful if they will be implemented. The most sensitive aspects within ElectronicVoting are fraught with secrecy and access issues.

3 Electronic Voting and Security:

Electronic Voting is probably the most security sensitive process handled electronically nowadays [Cr02]. The main reason for this being that the worst-case scenario is really catastrophic. For example, assume an electronic vote for the German Bundestag is discovered to have been tampered with. This fraudulent act will not only have drastic

consequences for Germany itself, but will also have enormous consequences for the whole European Union and further a field. Bearing this in mind, the highest achievable security is never too much for an Electronic Voting system.

Generally one can divide the requirements for an electronic vote into three basic musts:

Do the actual laws in a given country allow for the electronic handling of votes?

Does a technical solution exist that fulfils all the restrictions and requirements imposed on it by the corresponding laws?

Do the actual voters desire and accept an electronic voting system and in particular, the designed voting system [Ba04] [Ev04]?

Fulfilling these requirements is quite challenge. Especially as their individual areas of expertise are different: law, technology and social science.

4 Biometric Identification in Electronic Voting:

Standard	[illegible]
ISO/IEC JTC1 [illegible]	Personal verification through biometric methods
NISTIR 6529 (CBEFF)	Common Biometric Exchange Format Framework [illegible]
XCBF	XML Common Biometric Format: XML definition to exchange biometric data via Internet [illegible]
[illegible]	Finger minutiae extraction and format standard for one-to-one matching
ANSI/NIST ITL 1-2000	Data format for the interchange of fingerprint, facial, and scar mark & tattoo (SMT)
[illegible]	EU standard for digital signature cards (PIN and biometric authentication) draft [illegible]
DIN V66400	Finger minutiae encoding formats and parameters for on-card matching
BDPP	Biometric Device Protection Profile (UK) [illegible]
FBPP	Federal Biometric Protection Profile (US-DoD) [illegible]
BioAPI (ANSI INCITS 358-2002)	Consortium for standardization of communication interface between application and biometric devices [illegible]
HA-API	Human Authentication Application Program Interface; US Ministry of defense initiated project. It was merged after version 2.0 in 1998 with the BioAPI-Consortium
BAPI	Biometric API with [illegible] Software; Proprietary biometric interface of Microsoft

Figure-1

One of the main issues we like to stress is the difference between biometric authentication compared to "classic" authentication as e.g. smart cards. In this comparison we ignore the well known concept of card readers based on biometrics, e.g. card readers with fingerprint authentication; In this case, the biometric input is not used to authenticate the user to the Electronic Voting system, but rather to authenticate his/her smart card. The Electronic Votingsystem does not interact in any way with the biometric characteristics of the actual users, but still authenticates the user with the help of the user's authentication certificate as present on the card. Seen from this perspective, this solution is not a biometric approach to e-Voting. From now on, we will focus on biometric approaches that actually use the biometric data to authenticate the Electronic Voting system. Another issue with biometric systems is their relative young age, there is still currently a set of standardisation efforts going on (see Figure 1).

We will first have a look at some of the possible biometric properties that can be used for the authentication of individual persons. In this paper, we will restrict ourselves to present just a subset of different biometric properties. We explicitly do not focus on their feasibility, but rather try to show the wide spectrum of "theoretically" possible human properties that can be used in biometric systems.

Finger Print: Fingerprint scanners are probably the most commonly used biometric system; as and replace the pin code entry to unlock the card, especially in the area of smartcard readers. Similar systems include hand geometry or palmprints [html1] [html4].

Iris: Another static property of individuals are eyes. One can either use pictures of the person's iris or use a retina scanner that scans blood vessels to create an individual data set.

Face: The human face is also a feature that can be used by biometric systems. Human face recognition by analysing the size and position of different facial features is being pushed for use at several airports to increase security. Another possible approach is to make infrared recordings and analyse the resulting facial thermogram [html3].

Voice: A more behavioural individual aspect of humans are their voices. Everybody has a special mode and tone while speaking. Voice recognition tries to analyse these features and use them to identify a person [html2].

Signature: Another behavioural aspect of a person usable by biometrical analyses is the signature. Not only the form but also the dynamic aspects can be seen as a set of unique features of a person. Other possible movable biometric input could be the rhythm and pattern of a person's walk.

Deoxyribonucleic Acid analysis: Now this is a rather more theoretical idea for biometric identification. Imagine a DNA reader that can create a full DNA analysis within seconds from just a few cells of a person's body. Such a device would surely be a match to, e.g. a finger print reader, when comparing the quality of the results.

Multi-Biometric Systems: As a final approach to biometric data gathering, one can combine two or more actual biometric analyses and combine their results, i.e. use more than one uni-biometric system. This combination yields better results than each of the combined analyses individually and thereby increases the reliability of the biometric system.

With this we tried to give a quick introduction to the different kinds of biometric systems and will now focus on some of their technical aspects which are relevant to an Electronic Voting system. Initially, we will concentrate on the infrastructure required to use biometric input as the authentication means for an Electronic Voting system. As already mentioned before, we will not look at localized biometric measures, e.g. fingerprint scanner on the smart card reader that replaces the normal pin code, but focus on the truly biometric input to the actual Electronic Voting system.

If we look at such Electronic Voting systems, we need to have some type of central storage that handles the biometric templates of the users. This data storage again imposes high security demands, it must be impossible to tamper with the biometric templates, as this would enable fraud. An attack on the templates can come from two directions:

- ✓ A third party could replace a number of biometric templates against other templates which would allow them manipulate the results of the vote.
- ✓ Even if the risk of the above attack is seen as neglectable, there is one attacker that has a much more direct access to the biometric templates: the government. This opens a relatively straight forward route to manipulate the votes in a favourable direction for the currently governing party. One may state now that this is already possible – as many examples have unfortunately shown – even if using "old-style" paper votes.

However, the danger of this happening unnoticed is much larger. In a paper based voting scheme, large scale fraud involves a large number of people. Therefore, the risk of an information leak is several degrees higher than in an electronic environment where frauds on a similar scale can be executed in an automated manner by just a few people.
The two attacks mentioned above try to move the result of the vote into a direction favoured by the attacker. However, there is a second type of attack that is rather destructive. In this case, the goal of the attack is not to change the outcome of the vote, but rather to prevent a result of the vote in the first place. Again there are two possibilities for the attacker. Either, he starts the attack before the actual vote starts, or he initiates the attack after the vote has started, e.g. using distributed denial of service (DDOS) attack on the servers with the biometric templates. The second approach has two advantages. First, it gives the service provider of the vote a very limited time to react to the vote. Second, one has to take into account the psychological consequences such an attack has on a person not able to give his/her vote.

After taking a look at a selection of biometric properties, as well as the required infrastructure with its weaknesses, we will now set out a list of criteria that allows us to classify biometric systems.

Cost. The cost factor is very important for Electronic Voting systems as the number of participants tends to be very high. Each and every participant needs to spend an initial amount of money for his/her biometric reader. Depending on the recorded biometric characteristic, these costs can be rather large.

False Reject Rate (FRR): No biometric system is perfect. One of the problems that can occur are so called false rejects. A false reject is the situation where a valid user tries to authenticate and is falsely rejected by the system (see Fig. 2) One way such a false reject can happen is due to noise in the recorded biometric data, e.g. a fingerprint with a new scar or a voice altered due to a cold. Noise can also be introduced due to altered environmental conditions, e.g. humidity on a capacity finger print reader or unfavourable illumination for a face recogniser. If this "noisy" data is matched with the stored user templates, the difference can be too big and the authentication fails, i.e. the user is rejected. Another issue with the universal applicability of biometric systems is the possibility that a user is not able to participate, as he/she does not have sufficient biometric properties within the measured domain, e.g. his fingerprints were burnt during a fire.

Final effects that may cause a false reject are time dependent variations either with the individual, e.g. tone of the voice changing over time or an accident that changes the individual's signature, or a variation due to the reader, e.g. a new version of the reader uses slightly different sensors that yield slightly different measurements.

	False Reject Rate	False Accept Rate
Fingerprint[1]	0.20%	0.20%
Voice[2]	10-20%	2-5%
Face[3]	10%	1%

Figure-2

If a biometric device is used as an access control mechanism, a false reject may be acceptable, as it may only require the user to use a different means of authentication, e.g. by calling security, to access the area from which he was excluded by the authentication system. In the context of e-Voting, a false reject means to deny an individual of the possibility to execute his/her right as a citizen. An Electronic Voting system using biometrics has to cope with such scenarios.

False Accept Rate (FAR): The second type of error a biometric system is doomed to make is a so called false accept. In contrast to false rejects, a false accept means that a user is successfully accepted (authenticated) even though he/she should have been rejected. In an Electronic Voting system there are actually two scenarios where we have to talk about false accepts (see Figure 2):

- ✓ An unauthorized user is erroneously accepted for a vote. This has two consequences. First, this user is able to give a vote and thereby to possibly change the vote's outcome. Second, as the wrongly authenticated user already gave his vote, the actual user that should be allowed to vote is wrongly rejected yielding the same result as with a false reject.
- ✓ An authorized user is confounded with another valid user. With this the short-term effect does not yield a wrong vote count. However, once the other user is trying to make his/her vote, he will be rejected under the assumption that he has already made his/her vote. This again leads to all the consequences of a false reject.

Another source of false accepts is the uniqueness of the tested biometric recordings. Even with assuming that a finger print is actually unique, a finger print reader will not yield different readings for all users. This stems from the fact that a finger print does not yield the complete finger print as a picture for matching against the stored template, but it actually reduces the input to a predefined feature set of typical characteristics. This introduces a theoretical upper boundary on the number of individuals that a biometric system can distinguish between.

Spoofing: Another important aspect of a biometric system is its susceptibility to spoofing. Spoofing is the wilful trail to impose a false accept onto the biometric system. This type of attack is especially relevant for behavioural properties, e.g. replay of a voice recording or a blueprint of a signature. However, face recognition as well as the other physical properties are also susceptible to this type of attack.

As an example we will examine an attack on finger print readers. Modern models do not rely solely on the pattern of the applied finger, but also executes a "Life-Check". [4] describes how members of the CCC try this approach. Their approach is to first get a finger print of the impersonated person using conventional means. This fingerprint is digitally photographed and reworked using graphics software and finally transferred onto a photo layered using acid.
This form is then used to make a latex print of the original finger. Due to the very thin layer of latex, it is also possible to trick the "life-check" of the reader.

Costs of the Biometric Infrastructure: In addition to the costs of the biometric readers, the cost of the biometric infrastructure has to be handled. The infrastructure roughly consists of two parts: enrolment infrastructure and voting infrastructure. The enrolment infrastructure is necessary to collect and maintain a database of the biometric templates of all participants. The voting infrastructure handles the actual Electronic Voting process, i.e. it must be able to handle authentication requests of all participants within the official voting period; Depending on the used biometric mechanism which may

require considerable space as well as computing power.
Another aspect of the biometric infrastructure is its high demand on security. It has to maintain the two requirements of a secure Electronic Voting system: personalisation and privacy. Each and every vote has to be linked to a person while preserving the person's anonymity of what exactly he/she voted for.

Fail Safety of Biometric Infrastructure: In an access control system, a failure of the system may be acceptable. There will be a way to bypass the system and go back to a manual authentication mechanism, e.g. using guards and controlling some form of paper ID. With an Electronic Voting system, this is not acceptable. Let's assume an ongoing one day vote from 8:00 in the morning to 2:00 in the afternoon. At 9:00, an attacker starts a DDOS attack on the biometric infrastructure that actually blocks it and denies most citizens to actually process their votes. In the best case, it may be sufficient to repeat the vote at a later time. However, in other scenarios, it may have much more serious consequences.

Scenarios, such as the one described with the DDOS attack are quite common nowadays. As Electronic Voting systems become more common and votes on larger scales are handled by them, the danger of such attacks becomes more and more imminent.

Acceptance of Biometric Infrastructure: The final factor for a biometric user authentication mechanism is its acceptance with its users. Voting is mostly a matter of trust. Regardless of its actual security, a voting system (electronic or not) is only as good as its acceptance with its users. Therefore, any introduction of a new voting system requires a good deal of work to increase its acceptance with the future users. This is especially true with biometric systems [Si02].

Increasing the acceptance of such Electronic Voting systems is probably a slow process.

5 Conclusions:

Disregarding security, Electronic Voting systems can use biometric user authentication.

However: Is this necessary? Is it worth the effort and are the security risks manageable? We cannot give an answer to these questions within the scope of this paper.
We also cannot give an answer to these questions that is globally applicable. The main conclusion of this paper is that biometric approaches for Electronic Voting systems should be extremely carefully deployed. Actually, we would even recommend to refrain from using biometric systems in this context (at least for the moment). Currently, the rejection rates are just too high for an environment as sensitive as electronic votes.
Properties that have to be improved include:

- False accept rate
- False reject rate
- Protection against spoofing attacks
- Judicial aspects regarding access to biometric templates

Other than the above aspects it is also required that the industry must come up with the systems which are cost effective and are less prone to False Accept Ratio and False Reject Ratio. It is also required that application developed for Biometric voting must the secured from any time of data loss either by software process or hardware failure.

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Big data: Global Information Storage capacity

Prof. Shital Kadam

Big data: Global Information Storage capacity

“Big data” refers to datasets whose size is beyond the ability of typical database software tools to capture, store, manage, and analyze.

Big data provides business insights beyond traditional data from transactional systems. These insights offer valuable perspectives on human behavior, sentiments, interactions, and utility usage trends from a business-to-consumer model, and insights into contracts, compliance, and legal and financial trends from a business-to-business perspective. Every organization can benefit from expanding their analytics beyond structured transactional data by integrating both big data and data warehouse (DW) analytics, as one can perform deeper contextual analytics that was not possible till a few years recently.

Difference between big data analytics and traditional analytics.

Traditional analytics are developed and deployed based on structured data. The problems solved by analytical models developed on structured data provide insights but often fall short in predictive and indicative analytics. The critical reason for this failure is the lack of near-real-time information and expanded information beyond structured data. This is where big data analytics enables better analytical insights -- by integrating more voluminous data of varying complexity and timeliness into one structured output.

Big data architecture

The 5C Level Architecture can be described as:

- **Smart Connection-** Acquiring accurate and reliable data from machines and their components is the first step in developing a cyber-physical system application. The data might be directly measured by sensors or obtained from controller or enterprise manufacturing systems such as ERP, MES, SCM and CMM.
- **Data-to-Information Conversion-**Meaningful information has to be inferred from the data. Currently, there are several tools and methodologies available for the data to information conversion level..
- **Cyber-**The cyber level acts as central information hub in this architecture. Information is being pushed to it from every connected machine to form the machines network. Having massive information gathered, specific analytics has to be used to extract additional information that provide better insight over the status of individual machines among the fleet. These analytics provide machines with self-comparison ability, where the performance of a single machine can be compared with and rated among the fleet and on the other hand, similarities between machine performance and previous assets (historical information) can be measured to predict the future behavior of the machinery.

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- **Cognition-**Implementing CPS upon this level generates a thorough knowledge of the monitored system. Proper presentation of the acquired knowledge to expert users supports the correct decision to be taken.
- **Configuration-**The configuration level is the feedback from cyber space to physical space and act as supervisory control to make machines self-configure and self-adaptive. This stage acts as resilience control system (RCS) to apply the corrective and preventive decisions, which has been made in cognition level, to the monitored system.

Big data Techniques and Technologies

Wide variety of techniques and technologies has been developed and adapted to aggregate, manipulate, analyze, and visualize big data. These techniques and technologies draw from several fields including statistics, computer science, applied mathematics, and economics.

Techniques For Analyzing Big Data

A/B testing: - A technique in which a control group is compared with a variety of test groups in order to determine what treatments (i.e., changes) will improve a given objective variable, e.g., marketing response rate.

Association rule learning: - A set of techniques for discovering interesting relationships, i.e., "association rules," among variables in large databases. Used for data mining.

Classification: - A set of techniques to identify the categories in which new data points belong, based on a training set containing data points that have already been categorized.

Cluster analysis: - A statistical method for classifying objects that splits a diverse group into smaller groups of similar objects, whose characteristics of similarity are not known in advance.

Crowdsourcing.-A technique for collecting data submitted by a large group of people or community (i.e., the "crowd") through an open call, usually through networked media.

Data fusion and data integration: - A set of techniques that integrates and analyzes data from multiple sources in order to develop insights in ways that are more efficient and potentially more accurate than if they were developed by analyzing a single source of data.

Data mining: - A set of techniques to extract patterns from large datasets by combining methods from statistics and machine learning with database management.

Ensemble learning: - Using multiple predictive models to obtain better predictive performance than could be obtained from any of the constituent models. This is a type of supervised learning.

Genetic algorithms:-A technique used for optimization that is inspired by the process of natural evolution or "survival of the fittest."

Machine learning: - A subspecialty of computer science concerned with the design and development of algorithms that allow computers to evolve behaviors based on empirical data.

Natural language processing (NLP):- A set of techniques from a subspecialty of computer science (within a field historically called "artificial intelligence") and linguistics that uses computer algorithms to analyze human (natural) language.

Neural networks:- Computational models, inspired by the structure and workings of biological neural networks (i.e., the cells and connections within a brain), that find patterns in data.

Network analysis: - A set of techniques used to characterize relationships among discrete nodes in a graph or a network.

Optimization:-A portfolio of numerical techniques used to redesign complex systems and processes to improve their performance according to one or more objective measures.

Pattern recognition:-A set of machine learning techniques that assigns some sort of output value (or label) to a given input value (or instance) according to a specific algorithm. Classification techniques are an example.

Predictive modeling: - A set of techniques in which a mathematical model is created or chosen to best predict the probability of an outcome.

Regression: - A set of statistical techniques to determine how the value of the dependent variable changes when one or more independent variables are modified. Often used for forecasting or prediction.

Sentiment analysis: - Application of natural language processing and other analytic techniques to identify and extract subjective information from source text material.

Signal processing: - A set of techniques from electrical engineering and applied mathematics originally developed to analyze discrete and continuous signals

Spatial analysis:- A set of techniques, some applied from statistics, which analyze the topological, geometric, or geographic properties encoded in a data set.

Statistics:- The science of the collection, organization, and interpretation of data, including the design of surveys and experiments

Supervised learning:- The set of machine learning techniques that infer a function or relationship from a set of training data.

Simulation:- Modeling the behavior of complex systems, often used for forecasting, predicting and scenario planning.

Unsupervised learning:- A set of machine learning techniques that finds hidden structure in unlabeled data.

Visualization:- Techniques used for creating images, diagrams, or animations to communicate, understand, and improve the results of big data analyses.

Big Data Technologies

There are a growing number of technologies used to aggregate, manipulate, manage, and analyze big data.

Big Table: - Proprietary distributed database system built on the Google File System. Inspiration for Hbase.

Business intelligence (BI):- A type of application software designed to report, analyze, and present data.

Cassandra.- An open source (free) database management system designed to handle huge amounts of data on a distributed system.

Cloud Computing.- A computing paradigm in which highly scalable computing resources, often configured as a distributed system, are provided as a service through a network.

Data Mart: - Subset of a data warehouse, used to provide data to users usually through business intelligence tools.

Data warehouse.- Specialized database optimized for reporting, often used for storing large amounts of structured data. Data is uploaded using ETL (extract, transform, and load) tools from operational data stores, and reports are often generated using business intelligence tools.

Distributed System:- Multiple computers, communicating through a network, used to solve a common computational problem. Dynamo. Proprietary distributed data storage system developed by Amazon.

Extract, transform, and load (ETL):- Software tools used to extract data from outside sources, transform them to fit operational needs, and load them into a database or data warehouse.

Google File System:- Proprietary distributed file system developed by Google.

Hadoop:- An open source (free) software framework for processing huge datasets on certain kinds of problems on a distributed system.

Hbas:- An open source (free), distributed, non-relational database modeled on Google's Big Table.

Map Reduce:- A software framework introduced by Google for processing huge datasets on certain kinds of problems on a distributed system.32

Mashup:- An application that uses and combines data presentation or functionality from two or more sources to create new services.

Metadata:- Data that describes the content and context of data files,

Non-relational Database:- A database that does not store data in tables

R:-An open source (free) programming language and software environment for statistical computing and graphics.

Relational database:- A database made up of a collection of tables (relations)

Semi-structured data: - Data that do not conform to fixed fields but contain tags and other markers to separate data elements.

SQL: - SQL is a computer language designed for managing data in relational databases.

Stream Processing:- Technologies designed to process large real-time streams of event data. Stream processing enables applications such as algorithmic trading in financial services,

Structured Data.- Data that reside in fixed fields

Unstructured data. -Data that do not reside in fixed fields.

Advantages of Big Data:

- Big data provides access to data that was always available but not consumable. The expansion of big data into business intelligence platforms enables BI professionals to leverage expanded analytics and create 360° perspectives.
- Big data technologies like Hadoop and cloud-based analytics can provide substantial cost advantages.

<u>Dis advantages of Big Data :</u>

- Big data projects are complex to plan and execute. The complexity stems from your need to perform data discovery before you can document a single user requirement. If you lack clear business requirements, you cannot plan the remaining project logistics, including team, skills, execution steps, rollout, and training.
- Another issue with big data projects is the lack of availability of business subject matter experts (SMEs) who have both data and institutional knowledge as well as a command of math and logic. Organizations often shy away from big data due to this critical resource -- the data scientist.

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The Future of E-Commerce Business

Prof. Neetu Gupta

Abstract
The objective of this paper is to analyze the growth and economic viability of E-Commerce business worldwide and to critically evaluate whether this model would be profitable and sustainable in the future. There are questions being asked whether is it a bubble waiting to be burst? Globally there has been a phenomenal growth in E-Commerce which is expected to be USD 1.6 trillion in 2015 and is expected to cross USD 2.5 trillion by 2018. But despite this exponential growth in revenues, most of the E-commerce companies with the few exceptions like Alibaba have been incurring huge losses. Smaller companies run out of cash due to continuous losses and the big players like Amazon, Flipkart, and Snapdeal etc. are injecting investor's funds to remain in business. In India, E-Commerce companies have incurred huge losses mainly due to adoption of predatory pricing policy. This predatory pricing model may not be financially feasible in the long run .The Future of E-Commerce looks promising as number of internet users& mobile base is growing by 58% annually. Most of the analysts are expecting viral growth in e-tailing business in the future due to use of mobile applications. The future for e-commerce is promising but these e-commerce companies may need to change their present revenue driven model to profit driven self-sustainable business model.

Key words: E-Commerce, Losses, Potential, Revenue and Profit.

Introduction
E-Commerce business as in B2C has shown exponential growth worldwide and India is said to be a leading player in the Asia Pacific region. This business is divided into e-travel and e-tailing. E-tailing comprises of online retail and market places. There are two kinds of business models: a) Inventory based model and b) Market place model. Most of the e-commerce companies run on inventory based model.

Objectives
1. To study the growth of e-commerce companies.
2. To understand and compare different business models under e-commerce.
3. To analyze the future profitability & sustainability of this business.

Research Methodology
This research is based on various articles and reports published about ecommerce business on internet & PWC report.

Observations and Findings
1. Growth: Worldwide largest e –commerce markets are based in North America and Asia Pacific region. It is projected that Asia Pacific region would emerge as the fastest growing market for e-commerce with China being the largest online consumer followed by India and Indonesia. Together US and China account for over 55% of internet retail sales but by year 2018 China's sales is expected to exceed $ 1 trillion which will amount

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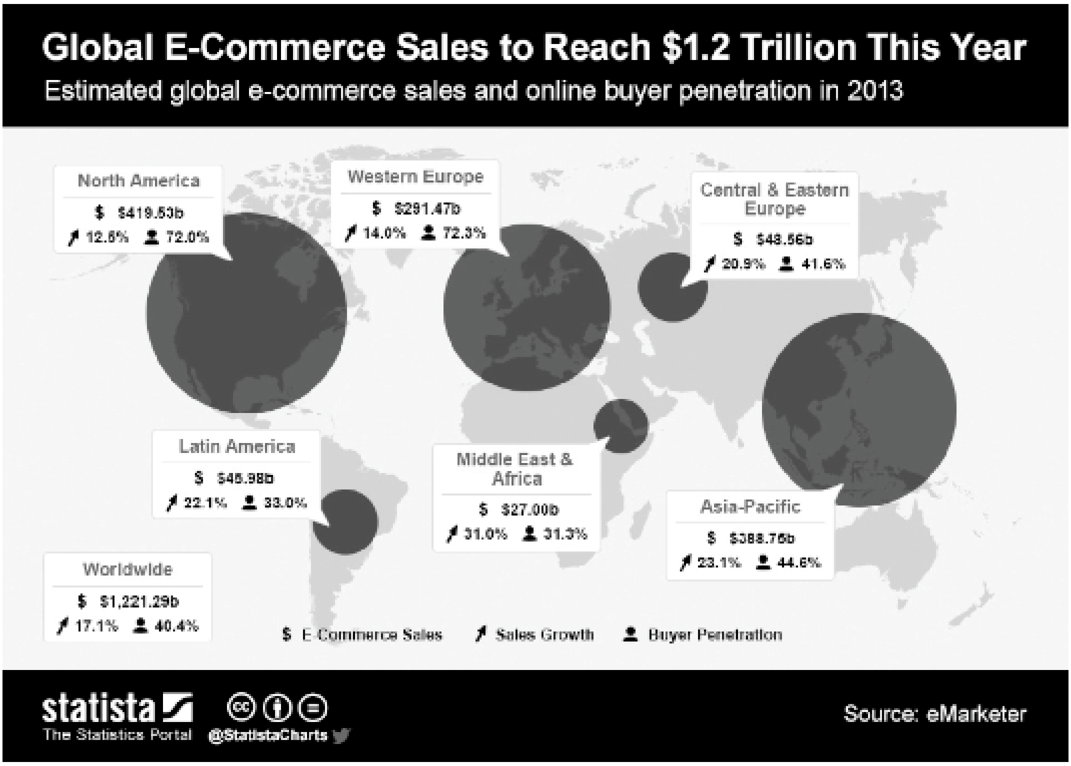
to more than 40% of the total internet sales.
India's e-commerce market will reach $16 billion in 2015. Online travel is about 61% while e-tailing is around 29%.As the number of internet users is increasing there is market penetration in tier 2 & 3 tier cities. Low prices, free shipping and cash on delivery options make online purchases more attractive. Use of mobile apps in the young age group has led to more sales. According to Forrester research only 16% of India's total population was online and out of them only 14% were online buyers. But with the use of Smartphone's, tablets ,3G&4G services there is a huge potential for growth.



Despite Growth, Why ecommerce companies are running into losses?

2. Profitability:

A company earns profits when the selling price of goods is more than the cost price. Profitability is the key indicator of the long term growth of a business. In order to be profitable the company must recover its cost of goods sold and operating cost which includes rentals for warehousing, logistics, marketing and other overheads.

There are two kinds of e-commerce business models namely inventory led and market place model. In inventory led model (B2C) the ecommerce company holds inventories and also supplies products directly through retailers and manufacturers. The invoices are in the name of the e-commerce company and it bears all the logistics costs. The e-commerce company maintains warehouses in various locations, employ people, tie up with courier companies and incur advertising, marketing & promotional expenses to draw traffic to their shopping websites for acquiring customers.

In contrast, market place model (B2B) offers a platform for businesses to connect with the consumers. They earn commission on sales and do not maintain any inventory or logistic costs. They do not sell directly to the consumers but are more like service providers. The sellers of goods are the vendors who set up internet shops on the e-commerce company's shopping websites. This is the basic difference between the two models. The market place model offers a platform for small businesses to list their merchandise online and earns a commission on every purchase while the inventory led model has to deal with the infrastructure and logistics costs. Because of huge costs being incurred under inventory led models companies like Amazon are yet to make significant profits while Alibaba which is based on market place model is in profits.

All the cash flows of the company are diverted in marketing, business development & capital expenditures

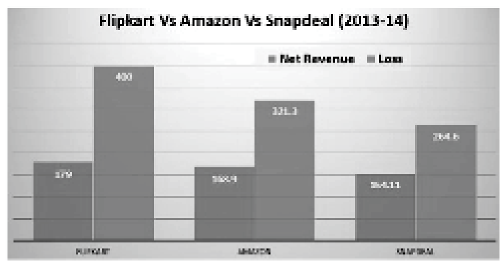
Below is the calendar wise comparison of the two companies in terms of revenues and profits.

($bil)	2011	2012	2013
Alibaba			
Revenue	$3.2	$5.5	$8.5
Profit	$0.7	$1.4	$3.7
Profit Margin	21.1%	24.3%	44.0%
Amazon			
Revenue	$48.1	$61.1	$74.5
Profit	$0.6	-$0.03	$0.6
Profit Margin	1.2%	0.0%	0.8%

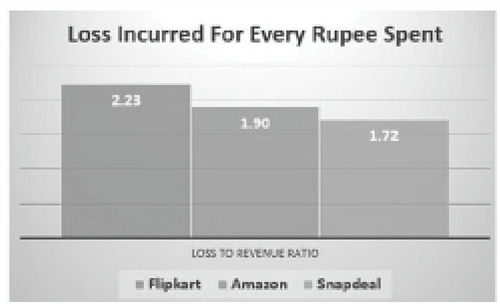
The profits of Alibaba are significantly higher than Amazon even though their revenues are more. It is because of the huge expense incurred on holding and maintaining inventories.

In India, none of the e-commerce companies are making profits. High customer acquisition costs, deep discounts and heavy advertising costs are eroding the profits though revenues are monumental.

Small players are shutting down shops while the big one's are working on the premise that profits will come after a certain scale is achieved. Most of the companies focus only on price differentiation. In order to penetrate deeper into the market they are offering discounts while squeezing the retailers and manufacturers of their profit.



Flipkart has the highest loss followed by Amazon and Snap deal. The next graph shows the loss per rupee spent.



The above figures show that for every rupee spent Flipkart makes a loss of 2.23, Amazon 1.90 and Snap deal 1.72. The big question here is how long can any business survive if they are making such losses?

1. Financing:

The e-commerce companies are on an expansion spree because of private equity funding. It has taken approximately $550million from investors though it hasn't shown profits even a single year. Since 2011 equity investors have put $1.2billion (7450 crores) into online retail according to Venture Intelligence and more than half of it has gone to India's lead player- Flipkart.

A business can sustain in the long run only if it earns profits that are ploughed back into the business. A company cannot survive on investor's funds endlessly. It would become increasingly difficult to find new investors if the company has not been profitable even in a single financial year Flipkart is considering an IPO in 2015. Groupon gave amazing discounts to each individual buyer by convincing SMB's. Their business model was tagged as disaster by a leading research firm-Forrester research. The company kept loosing $100million each quarter and repaid its earlier investors from funds taken by new investors. It had launched an IPO at $20 per share. After a year the share prices fell to 80% of the launch price. Neither the founder nor the investors lost money but the shareholders got a raw deal.

Is Flipkart awaiting a similar fate?

Conclusion:

E-Commerce is an explosion into the world of retailing. The young educated in India are tuned in to online shopping. Hence there is a tremendous scope for expansion. It has benefited the consumers in numerous ways and is a workable business model provided the companies don't sell the products at a price lower than the cost they incur to purchase and market their products.

It can be profitable if the products are sold for more than the sum of cost of goods, discounts, payment gateways costs, delivery, logistics, returns and amortizing the cost of acquiring new customers Gaining profitability should be the clear business objective. Price should not be the only differentiator. Merchandising, customer satisfaction, delivery, efficiency, strong infrastructure and supply chain logistics should be the primary focus.

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Impact Of Big Data On E-Commerce

Meera Datye

Abstract
Big Data is the next big thing in the world of technology and no business whether big or small can afford to disregard Big Data, especially companies that conduct a majority of their businesses online. This paper explores the significance of Big Data in e-Commerce and how e-commerce companies can maximize the potential of Big Data.

Keywords
Big Data, E-commerce, Online Business Analytics

Introduction
Most of the data in E-commerce falls under two categories – structured and unstructured. Structured data is the regular data that can be easily captured, such as, name, address, and preferences, sex and age. The more valuable chunk of data is that which is not captured but is extremely important - unstructured data - such as likes, tweets, clicks, videos etc. The challenge is how to take the unstructured data and develop meaningful insights from it so as to increase conversions. Big Data can prove to be the best solution for this challenge and can provide unparalleled benefits to online businesses

Research objectives
To understand the significance of Big Data in e-Commerce and how e-commerce companies can maximize the potential of Big Data.

Methodology
This research is based on secondary sources of information from various websites on the internet.

Need for Big Data in E-Commerce
Big Data is the next big thing in the world of technology and no business whether big or small can afford to disregard Big Data, especially companies doing a majority of their businesses online. This paper explores the significance of Big Data in e-Commerce and how e-commerce companies can maximize the potential of Big Data.

Most people still view Big Data as just another hyped idea in technology. This is not true. The excitement around Big Data is far from being unwarranted. It allows merchants to acquire deeper insights into customer behavior and industry trends. It also facilitates more accurate decisions to improve every aspect of the business, from marketing and advertising, to merchandising, operations, and even customer retention.

Big Data plays a role in several areas -- right from improving customer experience to developing better products or marketing campaigns. The impact of Big Data in e-Commerce is discussed in detail below.

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1. More Organized Data
The major challenge faced by most e-commerce businesses is the

collection, storage and organization of data originating from multiple data sources. The data waiting to be analyzed is humungous, making it a daunting task for e-commerce businesses to manage, classify and decipher it all. This is where Big Data comes into the picture by providing more organized data and enabling businesses, managers and other stakeholders to track and better understand a gamut of information from many different sources (like inventory management system, CRM, AdWord / AdSense analytics, email service provider statistics, etc.).

2. Data-Driven Decisions

Perhaps the most significant impact of Big Data has on businesses is that it empowers merchants to make more informed decisions. Choices that are made on the basis of Big Data are rooted in data insights and not on mere intuition or incomplete information. Decisions when not based on speculation, prevent needless expenditure, expensive trials, or even mistakes.

3. Personalized Offers

Backed by Big Data e-Commerce businesses can offer more personalized services and communications. Big Data enables merchants to keep tabs on each customer's behavior and thereby determine the most effective ways to convert one-time customers into repeat buyers.

A relatively accurate profile can be created for every customer after collecting and processing data. This customer profile will thus offer insights as to what price would re-engage the customer and persuade him to make another purchase. Note that this has proven the most effective for customer retention strategies. This would also help expedite the process of deciding whether a $10 off or 20% discount would work the best on any particular customer.

A number of touch points such as loyalty programs, visitor browsing patterns, and previous purchase behavior enable companies to collect huge amounts of data from customers. This data is processed to carry out customer segmentation which allows for generating more personalized content and promotions.

Here, let us note the example of Bikeberry.com. This online store collected a vast amount of customer data like browsing patterns, login counts, past purchases etc. BikeBerry.com then used that information to create 5 different offers, namely free shipping, 5% off, 10% off, 15% off, and $30 off on new products. Based on a Customer Profiling Engine, each customer was offered a tailor-made solution that was more relevant to his preferences and past behavior.

Consequently, Bikeberry's sales reported an increase of 133%. Also, user on-site engagement has increased by ~200%. Additionally, for customers who didn't need a huge incentive to convert, Bikeberry.com did not have to offer too big discounts and was also able to save more money.

4. Customer Service

Poor customer service accounts for 68% of online visitors leaving the web site. As a result, improving this aspect is critical in increasing sales. Big Data can help in coordinating the various communication channels, including phone calls, emails, or live chat features. Understanding which issues customers are concerned with, or identifying time periods where customer support is most needed can also help companies best allocate resources more efficiently. Any customer conflict can thus be resolved more effectively within a shorter period of time.

5. Supply chain management

Any e-commerce company knows that transparent visibility and careful management of its supply chain process are important. Big Data helps retailers to determine patterns which can be useful to forecast any potential problems and disruptions to the process. This leads to timely action and preventative measures. For instance, any changes in warehousing or shipping updates can be captured real-time and communicated to the retailer immediately.

6. Predictive Analytics
Big Data provides a more in-depth picture of the different channels in the e-commerce business, including sales and inventory. Knowing how to forecast provides added flexibility in deciding the next steps of business operations.

7. B2B E-commerce - Sales Opportunities
Although B2B sales teams mostly use CRMs to make decisions, social networking presents companies with another channel for customer engagement and can help provide marketing insights and opportunities for lead generation. The large amount of data available from online customer interactions can help in offline sales. For example, abandoned shopping carts provide information about products intended for purchase and can be followed up with a phone call by a sales person who is equipped with the right information increasing the chances of completing the sale. Sales representatives could use real-time updates that reveal customer patterns such as most receptive times to sell and the most optimal pricing options. Further, it provides opportunities to up sell and cross sell. Streamlined data offers options to segment markets for peak sales, deploy sales resources crucial to each market segment, forecast sales accurately without crunching historical data sets, and set realistic sales quotas because of the accurate information in hand. Sales forecasts and pipelines have primarily been based on historical trends. Big Data Analytics helps with relevant and more precise information so sales representatives are no longer driven by hypothetical numbers. There are also B2B buyers who do not talk to a sales professional and exclusively buy online. So, firms have to identify buying patterns rather than rely solely on analysing past sales trends. Such buyers may be looking for recommendations on what is trending and what to stock in their store, and selling has to be timed in context and in real-time, at the most opportune moment predicting a buyer's actions.

8. Managing fraud
Larger data sets help increase fraud detection. But it requires the right infrastructure, to detect fraud in real-time. This will lead to a safer environment to run the business and improved profitability. Most online retailers need to process their sales transactions against defined fraud patterns, for detection. If it's not done in near real-time, it could be too late to catch the fraudsters.

Data Analysis and interpretation
As a result of exponential growth in digitization and prevalent social media experiences, online businesses today generate huge amounts of data. These businesses have to manage this huge volume of data of varying nature and complexity. They are looking to advanced technology initiatives such as Big Data Analytics to capture and decipher concealed patterns and unidentified associations.

Big Data Analytics will help in better business decisions to drive revenue growth. It is the science associated with spotting trends in large and complex data sets to find useful supplementary information that is otherwise go undiscovered owing to the lack of appropriate tools and applications. It offers businesses the opportunity to anticipate trends, find meaningful insights from scattered data and make significant business conversions. With data growing from terabytes to zettabytes, e-commerce firms are now seeking suitable tools that can help them fix the optimal pricing points for millions of SKUs (stock keeping units), identify the niche customer segment to pursue, or pinpoint the exact customer touch points to make the best offers, as well as uncover other obscure business insights. Data is basically categorized into structured data like name, address, preferences, etc. and unstructured data such as tweets, clicks and videos, etc.

The challenge lies in interpreting significant, actionable insights from unstructured data. It is estimated that the mainstream data spawned will be more unstructured than structured and the real value derived is from analyzing this unstructured data.

Findings and conclusion

According to MGI, a retailer using Big Data to its current potential could increase their operating margin by up to 60%. To get an idea of this, one can look at Fast Company's case study on Amazon's unique relationship with Big Data to gain further insights. Big Data has an entire range of fascinating applications outside the spectrum of what is believed possible. In politics, for example, some believe that elections can be decided by analyzing Big Data. To sum up, Big Data is the future, and E-commerce businesses should be wise and start investigating and adopting it as soon as possible.

Big Data is being used across different business sectors. E-Commerce companies have become one of the fastest adopters of Big Data and recognizing the importance of its analytics. The dynamics of the industry is changing constantly and most companies are operating in razor thin margins. Companies are using Big Data Analytics to stay on top in the game.

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Promoting Entrepreneurship Education: Need of the Hour

Dr. Pralay Kumar Ghosh

Abstract
Entrepreneurship has remained a topic and interest area for few. They have always been judged by risk appetite, great ideas and tenacity. They also have a myth that they are in-born talented people. However, today Education has emerged as playing a huge role in the development of individuals. Knowledge and awareness are not in control or regulation of anybody and is easily accessible.

Given the diversity of India and its demands for future employment along with scarcity of jobs, entrepreneurship needs a new thrust and can be "taught". Feedback from different entrepreneurs admit that this subject can be taught and needs to be high on the agenda of management education. It needs to become an area of thrust that shall provide solution to the ongoing talent crisis in the country and generate lots of opportunities.

In parallel mode, India is witnessing a lot of change. The government, in operation over a year, has put a special focus on Skill development and this paper attempts to draw a connection between Skill development and Entrepreneurship through management education. The strong connection puts a fundamental case for a new era of development of human capital in India.

Key Words: Entrepreneurship, Skill Development, and Management Education

Introduction:
The economic reforms initiated in 1991 resulted in several transformations - regulation to liberalisation and protection of globalisation. All these transformations, coupled with the move from a planned economy to a market-oriented economy, provoked a new approach to deal with all types of challenges. The challenges arising out of global competitiveness are further compounded by several factors and by socio-economic, technical, political and ecological changes. The emerging challenges, perhaps, require an entrepreneurial and managerial approach, and entrepreneurship education is therefore, more important and relevant than ever before.

Our present educational systems focus on creating people who are more doers (managers, engineers and analysts) rather than dreamers (change architects, risk takers, innovators and entrepreneurs). To sustain and maintain its supremacy and lead the next century, the country needs a roadmap clearly charting what it can further offer to the world. Perhaps, this can be done in synchronisation to the plan of the Prime Minister's (PM's) skill development programme:

1. Assess the country's need in terms of Vocations and Skills

2. Identify the gaps between the above.

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Director

3. Look at adding in a curriculum that can have people sign up for it and where we are sure to get the numbers.

4. Encourage current Entrepreneurs to be allocated as “Mentors” to these management institutes and incentivise them.

5. Develop a model by which some initial funding can be worked out to encourage people to opt for starting their own enterprise/sole proprietorship firm.

6. Probably define an incentive for each new Entrepreneur to come back with what they have achieved in five years time. They can, probably, have a mandate of achieving few results and probably employing few people. However, all of this should not be too regulated but just given in terms of broad guidelines. Many a times, incentives drive these actions.

Objectives:

In the above backdrop, we have a humungous task in hand. This paper proposes, arbitrarily, on how we can somewhere address a portion of these issues through Education. Alvin Toffler, in his famous book “Future Shock”, says " To help avert future shock, we must create a super industrial education system and to do this, we must search for our objective methods in the future rather than the past... Education must shift into future tense." The essence of this education has to be in attracting people to sign up for it and needs to be done at a faster pace with widespread impact. This will have a two-fold benefit to the economy. The core problem of unemployment will become less critical, thereby generating more entrepreneurs! This is important as creativity and innovation is the make or break of an economy. People must be encouraged to take up challenges to explore new avenues of wealth generation.

The objective of this paper is specifically focused in examining whether entrepreneurship can be taught in the classroom.

Research Methodology:

This paper is based solely on some 51 entrepreneurs who responded to the questionnaire sent to them as a follow up study undertaken by the researcher in March 2015 for primary data of Doctoral Research.

In selecting Entrepreneurs, the researcher has deployed Purposive Sampling method. Purposive sampling, in contrast to probabilistic sampling, is "selecting information-rich cases for study in depth" (Patton, 1990, p. 169) when one wants to understand something about those cases without needing or desiring to generalize to all such cases.

Data collected through quantitative and qualitative research provided very valuable and revealing insights and views about the role that management education could provide in promoting entrepreneurship and the much needed initiative required by the management educational institutions in this direction.

Purposive sampling method has allowed the researcher to include people of interest and exclude those who do not suit the purpose. It was particularly relevant when choosing entrepreneur respondents because we were seeking information from a specific predefined group, i.e., Entrepreneurs with some background of management education and/or having rich experience in managing business and competent /capable of providing relevant inputs.

In this method, using common sense and the best judgment, the right respondents and the right number of right entrepreneurs, spanning across the employment spectrum (micro to large), were chosen for the purpose of the study.

Literature Review:

Major theories and expositions (Busenitz and Barney, 1997) view the entrepreneur as performing various functional roles as risk taker, decision maker, organizer or coordinator, innovator, employer of factors of production, gap seeker and arbitrageur, etc.

According to the Harvard Business School (Cole, 1949) entrepreneurship comprises of any purposeful activity that initiates, maintains or develops a profit-oriented business in interaction with internal situation of the business or with the economic, political and social circumstances surrounding the business. This approach emphasized two types of activities: the organisation or coordination activity, and the sensitivity to the environmental characteristics that affect decision-making.

An Ascribe report states that the first global study of high expectation entrepreneurship has found that just 9.8 percent of the world's entrepreneurs expect to create almost 75 percent of the jobs generated by new business ventures. The Global Entrepreneurship Monitor ("GEM") international research consortium (co-directed by Babson College and London Business School) carried out this study. This is a clear indicator for us in India to take serious note of. A very large percent of employment is from people who expect to employ around 20 people.

Historically, we in India have focused on creating managers and bureaucrats rather than employers. At the time of independence, Indian economy was developing and the political ideology was an inward looking one. Hence the demand and desired management skills were, perhaps, different then. However, over 60 years after independence, the Indian economy has become more mature, we now require different kinds of management skills and this makes the task challenging for Management Institutes. There is no denying the fact that the management educational institutions in the country are playing a major role in professionalizing the human resources so essential for running an organization efficiently and in achieving maximum productivity as in economic growth of the country. The contribution is not limited to the sphere of business management alone. It has expanded in the areas of other operations and sectors.

However, jobs are far fewer than the number of pass outs and quality is uneven (not of comparable standard). There exist many factors that are responsible for such uneven quality. These include infrastructure, industry-academic interface, competitive and updated curricula, modules and lesson plans, faculty, systems of evaluation and certification. Thus improving the quality of the management education is a major challenge today.

Prof Khurana in his book, "From Higher Aims to Hired Hands," argues that famous B-schools, including Harvard, have lost track of their original mission to produce far-sighted leaders who can help the economy run better". Is it true for India also?

Until those dynamics change, it will be hard for top business schools to resume their traditional -- and vital -- role as training grounds for the next generation of entrepreneurs. The future global manger would require new skills, among others, Intrapreneurship and Entrepreneurship.

The literature review clearly conclude that although entrepreneurship has certainly become fashionable there are signs that it has not yet attained full citizenship in the Indian academic world. High quality and industry focused education is about change, hopefully for the betterment on the individual student and for society as a whole.

Data Analysis & Key Findings:

This section highlights certain background data related to the respondents and only relevant, important analysis and findings focusing the objective of the paper namely "whether entrepreneurship can be taught in the class room'.

An analysis of the data on socio-demographic and other background information about respondents (Entrepreneurs) reveal the following:

I) The majority of entrepreneur respondents (36.54%) belong to 41-50 years age-group followed by 50+ year's group (25%). Clearly, the entrepreneur respondents, by and large, are highly experienced.

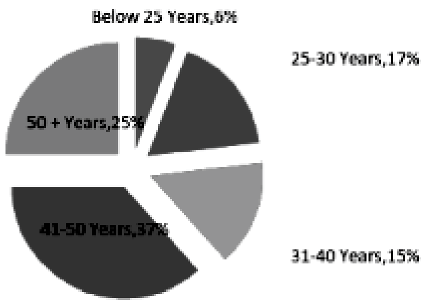


Chart: Current age of entrepreneurs

ii) The highest percent of entrepreneur respondents are Engineers (31.27%), with postgraduates (27.45%) and MBA/PGDBM (25.49%) following.

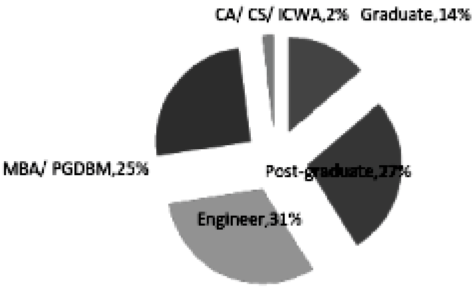


Chart: Educational qualification of entrepreneurs

iii) While selecting entrepreneur respondents, due care was taken by using common sense and best judgement to ensure that the right respondents and the right number spanning across the employment spectrum were chosen. The analysis does reveal that the sample is spread out across the employment scale, from Micro to Large enterprises, a classic example of purposive sampling method. This spread should give a fair representation of how entrepreneurs at different levels view entrepreneurship education. Highest percent of all respondents (31.37%) has small enterprise, employing 10 to 49 employees, followed by 27.45% who have large enterprises employing 25+emplyees large enterprises employing 250+ employees.

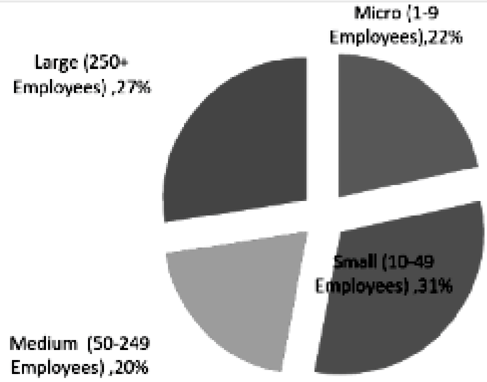


Chart: Size of enterprise

iv) While 100% of respondents below 25 years are in the service sector, overall highest percent of entrepreneur respondents are in manufacturing (42.31%), followed by service sector (32.69%).

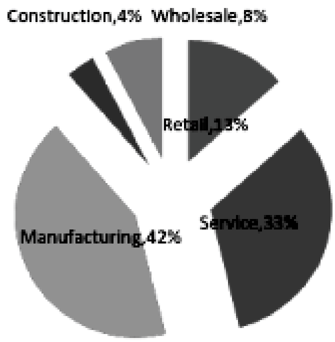


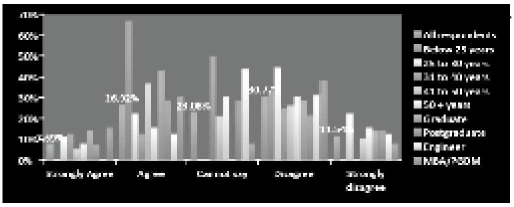
Chart: Sector of activities

The high per cent in service sector reflects the change that is occurring in the Indian economy

Key Findings:

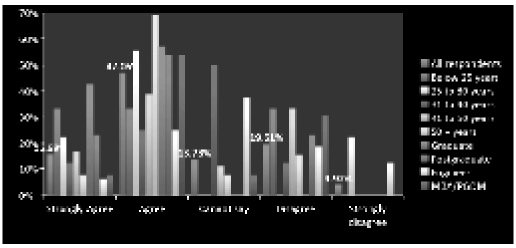
1. College/Institute not imparting enough practical knowledge on entrepreneurship

Over 42% of all respondents disagree or strongly disagree that their college/institute did teach



2. Entrepreneurship can be taught in the classroom

Over 62% of all respondents agree that entrepreneurship can be taught in the classroom



Management schools will have to develop these skills among students. Needless to say, that the courses should be need based and syllabi should be changed periodically to keep pace with the ever-changing world of business. The goal being not to just impart technical legal skills, but to enhance judgment which students will bring to their responsibilities as entrepreneurs.

Entrepreneurship both can and should be taught at the university, for reasons that go back to some simple and fundamental drivers of the individual's decision making (Ivo Zander, 2013) .

3. Revamping of management education by radical change

We have to revamp management education in a comprehensive manner. Incremental changes are inadequate. It requires radical change. Put in another way, to survive in today's highly competitive placement environment, management institutes should focus on entrepreneurship education to forge ahead.

4. Curriculum should be designed to promote Entrepreneurship and Governance & fostering Entrepreneurship in Education Sector.

In this context, it is recommended to evaluate the teaching pedagogy developed and used by Insead. Therefore, it is really interacting with people through means of case studies and that is far more important then reading books. The way to develop Indian entrepreneurs is not so much the way of classroom training. What is needed is an interactive experience built around case studies and simulations. More action oriented learning, where people learn by doing is going to be the key to success in an Indian environment.

5. As indicated by few entrepreneurs, a special screening of students to be admitted for Entrepreneurship specializations may be required. Similarly, selection of faculties needs to be different for these specializations. Faculties should also understand what the market needs from them so that they can create best-fit managers. The focus on entrepreneurship in B Schools must intensify with more focused courses and dedicated teachers to train young minds to become successful entrepreneurs. This calls for an out of the box thinking and taking initiatives in promoting courses like entrepreneurship with more seriousness, just like all the other topics taught in management schools.

6. The concerned bodies/authorities have to ensure a thorough understanding of the visionary motive of the institute before introducing entrepreneurship as specializations. In addition, the control system should ensure the preparedness and associated quality requirements needed to offer the said curriculum and hence differentiation of the institutes. Allowing all of them to offer this course in particular will have an adverse effect on the professional management education in the end.

7. To build the spirit of entrepreneurship and for transforming management education to foster entrepreneurship development at management institutes, greater mutual collaboration between industry and institutions is needed. Therefore, it is recommended that management institutes should regularly invite people from industry to teach their students about the current trends and challenges which they are facing. The B Schools should teach the practical knowledge with the Industry support to provide students better ideas that will help individual as well as industry to grow in a better manner. In this context, industry also can encourage faculties for short term training to enable upgrade current trends of industry expectations.

8. It is observed that in most of the institutes the classes are separated early in the second year, based on specializations – say Finance, HR or Marketing. This Compartmentalising is not a good idea for promoting Entrepreneurship, as an entrepreneur needs to have an in depth integrated knowledge on each aspect of management and business, right from making plans, projections, raising funds and also running the business. Therefore it is recommended that specializations should be offered at the penultimate semester and before that all the students should be exposed to all aspects and disciplines/functions in an in depth manner keeping entrepreneurship in background.

Conclusion:

A broad consensus arising out of this research is that career enhancement and job placements best describes the objective of management education during 2003-2008 as per the entrepreneur respondents.

Promoting entrepreneurship as part of management education does not appear to be a key area of focus and needs attention for Management Education. The curriculum is more or less same with only new case studies being added along with a variety of topics on "management"! Though from the academic year 2014-15 some Universities like Savitribai Phule Pune University have added few compulsory credits under the head "Skill Development Programme". This is because what is largely missing in the syllabus today is the "Skills" component, which actually helps shape an individual's competence. This could attract many people, who struggle to find jobs after graduating. Learning skills and managing their own enterprise can allow them to have a multiplier effect and create more opportunities.

Therefore, this model can help us achieve some amount of our objectives in meeting the job scarcity needs in the country along with enhancing entrepreneurial characteristics in people.

Whether B-schools can teach entrepreneurship is debatable and whether an MBA degree gives the extra urge and confidence to take that plunge into the unknown is also not clear. Given the fact that entrepreneurship has been taught at Harvard Business School for about six decades (first taught as a process, not as a person) and the course – "The Entrepreneurial Manager" was introduced into the required MBA curriculum in the very first year in 2000 which marked an important milestone in the evolution of teaching entrepreneurship at Harvard Business School. It is also an important testimonial to the debate whether it can be taught and the answer that it can be taught. Perhaps, Entrepreneurship can be taught in the classroom provided the MBA syllabi which are largely structured to groom students to become better managers need to be restructured. Often, the classes are separated in the second year, based on specializations – say Finance or Marketing. This Compartmentalizing is not a good idea for promoting Entrepreneurship, because as an entrepreneur they have to make plans, projections, raise funds and also run the business. Therefore, to sum up, it is not "can entrepreneurship be taught?" but may be "what is the best way to teach and inspire the next generation of entrepreneurs"

To conclude, the time is ripe to develop Entrepreneurial education in the country by bringing this under the fold of management education. The Governments programme of skill development fits into this motive and can give this the long deserved impetus for further development and sustenance.

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Impact Of Big Data Using Web Mining On Customer Relationship Management In E-Business

Prof. Swapna Tekale

Abstract
Big Data refers to the vast amount of information businesses are gathering these days. This information comes from a host of sources – social networks, Server logs, Web click stream, sensor networks, customer chat sessions – and includes both online and offline data.
As a large and dynamic information source that is structurally complex and ever growing, the World Wide Web is fertile ground for data mining principles, or Web mining. Web mining is the integration of information gathered by traditional data mining methodologies and techniques with information gathered over the World Wide Web.
This paper attempts to analyze the role of Big Data by using web mining in e-businesses. Scope of this paper is limited to the use of various tools and techniques of web mining used in E-learning. This paper highlights the role of Big Data in achieving a viable edge in business.

Keywords: - Big Data, CRM, E-learning, Web mining, Web Personalization

Introduction
Big data is a sort of catchall phrase that can be used to describe a massive volume of fast moving data which exceeds the current processing capacity of most enterprises. In general, standard tools and procedures are not designed to store and analyze these massive datasets.
When used by vendors, Big Data can also refer to the emerging technology used to store and process the large amounts of data. The data can be transactional (e.g. social media) or analytic (e.g. clicks). It can also be structured or unstructured and include text, audio, video and images.
Big data can be divided into 5 main categories:

- Social media – used to understand consumer sentiment.
- Server logs – used to deliver responsive IT.
- Web click stream – used to gain granular customer segmentation.
- Machine/sensor – enabling predictive analytics.
- Geo location – optimizing global logistics operations.

Web Mining
The web as we all know is the SINGLE largest source of data available. Web mining aims to extract and mine useful knowledge from the web. It is used to understand the customer behavior, evaluate the effectiveness of a website and also to help quantify the success of a marketing campaign. Due to the large availability of data the World Wide Web, it has become very important for users to use automated tools to find the desired information resources. For example a user uses Google or Yahoo search for finding information. These factors thus give rise to the necessity of creating server and client side intelligent systems which can effectively mine for knowledge.
To use web mining effectively for managing customer relationships the data must be categorized in some manner if it is to be accessed, re-used, organized, or synthesized to build a picture of the organization's competitive environment or solve a specific business problem or to decide

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strategic policy.

The taxonomy of web mining can be broadly divided into three distinct categories; according to the kinds of data to be mined they are

I. Web Content Mining: Content mining is used to examine data collected by search engines and Web spiders.

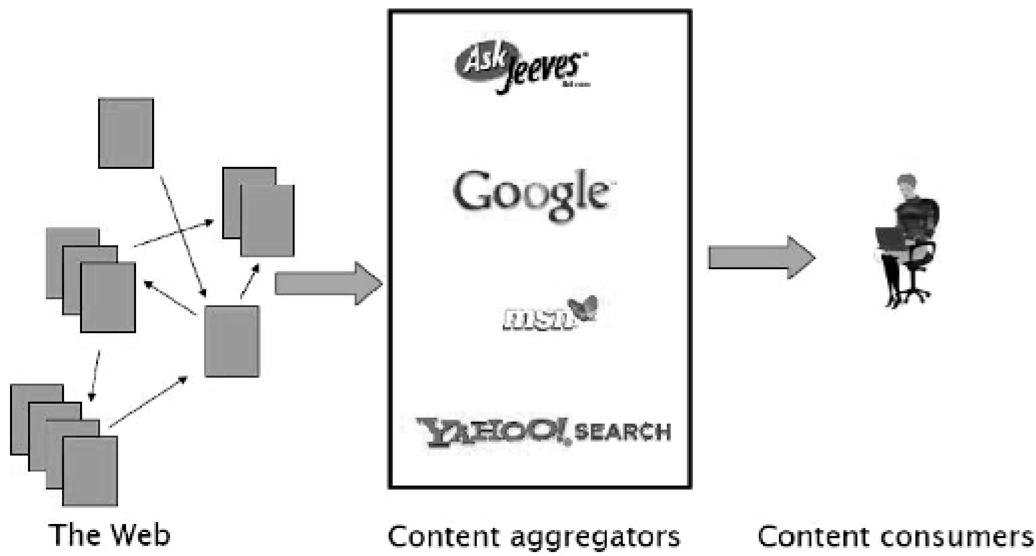
II. Web Structure Mining: Used to examine data related to the structure of a particular Web site.

III. Web Usage Mining. : Used to examine data related to a particular user's browser as well as data gathered by forms the user may have submitted during web transactions.

Web Mining Techniques

1. Cluster and Classification

The cluster techniques identify and distribute similar Individual's behaviors in homogeneous groups. Classification of customer availing the services of car loan, home loan, education loan, credit/debit cards, ATM can be done.



2. Rules of Association

The association rules can be seen as the identification of actions or facts that, being initially independent, they happen in a combined or associate way. The considered facts can be characteristics or behaviors observed in the individuals.

3. Path Analysis

This technique supposes the generation of directed graphs, which represent the relationships among the web pages. Path analysis shows the number of users that go from a page to another.

4. Sequential patterns

It is a historical of transactions in a web server, where the visit of a client is stored for a period of time.

5. Cubes

A cube of data is a type of multidimensional array that allows the users to explore and to analyze a collection of data from different perspectives. From a structural perspective, the cubes of data are composed of two elements: dimensions and measures. The dimensions are categories that describe the studied factors for their analysis, and the measures are the values of the data stored in that structure.

6. AI techniques such as Multi-Agent Technology and Swarm Intelligence Algorithms

7. Personalization

Web site personalization can be defined as the process of customizing the content and structure of a Web site to the specific and individual needs of each user taking advantage of the user's navigational behavior.

Customer Relationship Management

CRM can be defined as the process of predicting customer behavior and selecting actions to influence that behavior to benefit the company usually leveraging on information technology and database-related tools.

CRM initiatives usually seek to fulfill several objectives.

1. To get closer to the customer by utilizing the data "hidden" in scattered enterprise databases. Examining and analyzing the data can turn raw data into valuable information about customer's need. By predicting customer need in advance, businesses can then market the right products to the right segments at the right time through the right delivery channels. Customer satisfaction can also be improved through more effective marketing.

2. To transform the company into customer-centric organizations with a greater focus on customer profitability as compared to line profitability. The insights gained from CRM enable companies to calculate or estimate the profitability of individual accounts.

3. To increase cross-selling possibilities, better lead management, better customer response and improved customer loyalty.

4. As internet and technology opens up a wealth of information 24 hours a day, seven days a week, thereby highlighting the transparency of the markets. Customers use the Internet to quickly shop around and see what competitors can provide. As a consequence, the attention span of customers has decreased, and customer loyalty is subject to new laws. Customers are looking beyond products to assess whether the overall solution you provide addresses their individual needs and priorities. Customers and knowledge about customers is one of most important assets of today's organization. The period of time between a new customer request and its fulfillment is decreasing. This means that, if one doesn't react quickly enough, the customers will find someone else.

How Is Big Data Relevant To Crm?

Big data has the potential to change the way companies manage customer relationships by offering businesses powerful new tools, capable of identifying sales opportunities and analyzing customers' responses to products, by combining internal data with comments made on social networks. Using big data and CRM analytics to find associations, recognize patterns and identify trends that allow a company to shape customer experiences for increased engagement and greater profits is a great way to bring the perspective of the customer into business decisions.

Web Mining As Big Data Tool For Customer Behavior Analysis

Customer relationship management is one of the major applications of Web mining. A website should be designed to attract the customers. Web Mining analyses visitor's behavior and makes predictions on their future interaction. This can be exploited to improve website performance and to recommend products or links based on user's behavior. Visitors entering the site exhibits different behavior. They might just surf through or the process might end up using internet banking services. For understanding customer behavior and thus improve the performance of your web site, certain standards should be used. Web metrics provide a method to evaluate the performance. There are certain standard notations used which is provided in the table below.

Term used	Meaning
User	A customer who visits your website
RepeatVisitor	A visitor who has made at least one visit
Visitor retcency	Period between last and current visit
Committed Visitor	Visitor who spends more than 15 minutes
Stickiness	Duration and frequency of the user's visit
Slipperiness	Find quickly what they are looking for and then go out.
Focus	Number of pages a user visits in one section
Speed	How quickly a user moves from one stage to other stage from just a visitor to a customer

Number of repeat visitors and committed visitors should be increased. Customer service sites should be able to provide the required information in a short span of time. Customer data including personal information entered during log time is stored in customer database. The content delivery to the customer can be customized. Each user might be interested in specific service and features. New products can be recommended to the user by analyzing their behavior pattern. Market basket analysis can be carried out using the web data and there by improve the chances of cross selling, discount rates etc.

Information about the visitor's behavior can be collected from Web logs which includes various log files like

Log file	Purpose
Access logs	records hits or requests
Referrer logs	describes "from-to" navigation pattern
Agent logs	describes the browser software a visitor uses

We can also analyze the pattern in which the user travelled from one web page to another of your website before making a purchase. Behavior can be analyzed to form user clusters that require same class of details. Information mined can be used to opt for the finest manner of interaction with customers. The decision made by a customer depends on his experience on the site. Provision can be provided to enter feedback. Data can be gathered and mined from web to achieve the final goal of turning visitors to buyers.

Web Mining In E-learning

E-learning is nothing but where learning happens with the aid of digital tools and content, with necessary interactions possible. E-learning is independent of location, time or space.

1. Query keywords can be grouped into clusters and information from the query result can be recommended to users.

2. E-learning experience can be enhanced by providing the relevant information to the relevant learner with the assistance of Web mining.

3. Giving the right combination of keywords is imperative for searching and finding what we require exactly.

4. The contribution of Web mining has not been restricted to explicitly available information such as page content. It must be noted that learning is often aided with inclusion of other kinds of data such as concept hierarchy on which a Web structure is based or usage information.

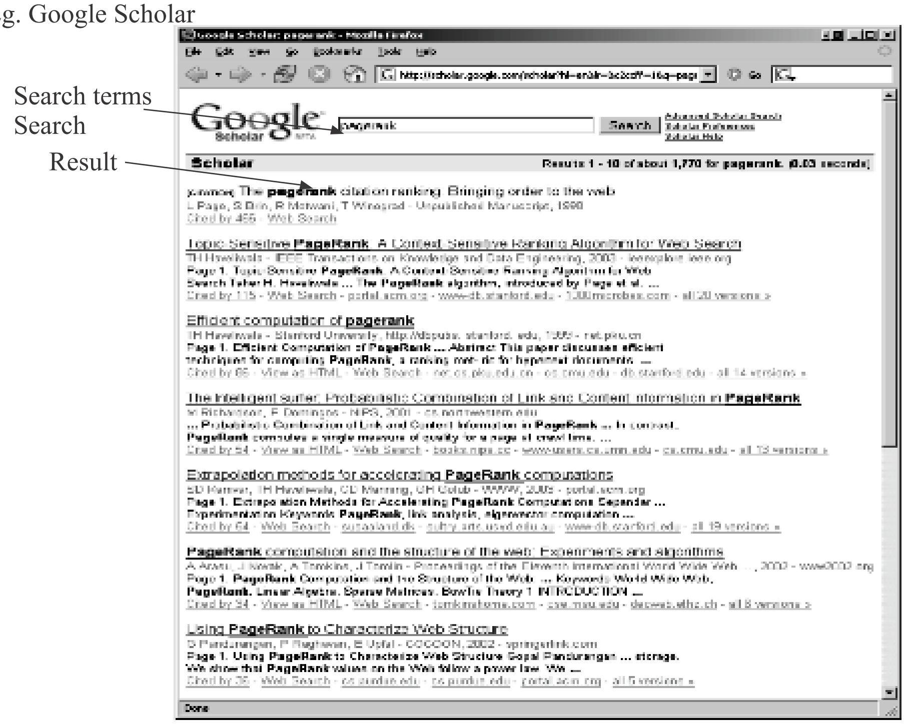
5. Data do not directly reflect the information in the page but help in building the context and circumstances in which such information is sought. Web usage mining techniques as discussed earlier can be used to discover user navigation patterns.

6. The creator of the Web pages would represent the expert who has designed the Web site to represent a series of notes. However, it is the usage information that actually reflects how a user is navigating or learning from the Web site. Such usage information can not only serve as a useful feedback to the experts about the learners approach, but can also suggest to learners from the 'navigation experience' of other user's on what they found useful.

7. Analyzing Web logs to discover patterns and associations between Web pages visited provided the right direction for such kind of analysis, but did not especially address the issue of e-learning. Web mining techniques coupled with integrated meta-information such as author info, download info, and other additional info explicitly defined by a domain expert helps to improve the learning process. Given a large, knowledge-dense website and a non-expert user seeking information, recommending relevant content becomes a significant challenge.

8. A user who is exploring the web for self learning may not be a domain expert. Web sites and topics popular among other users exploring the same area can be found using web mining and recommended to the non-experts.

Eg. Google Scholar



Google Scholar is essentially a search engine for academic publications that are available on-line; each publication linked to others by way of citations. Both natural language and Boolean searches are possible. The searches themselves can be customized to query certain authors, publications, or within a year range (e.g., 1999 – 2003). The search results are similar to Google's regular search, and are generally in order of descending citation count (because Google's result ranking algorithm, Page Rank, relies on "back links" – citations, in this case – to influence result authority).Search terms ,Search results

Applications Of Web Mining For Crm In E-Business

1. Improving the relationship between the website and the user Recommendations to modify the web site structure and content.
2. Determine lifetime value of clients
3. Design cross marketing strategies across products.
4. Evaluate promotional campaigns.
5. Target electronic ads and coupons at user groups based on their access patterns.
6. Predict user behavior based on previously learned rules and users' profile.
7. Present dynamic information to users based on their interests and profiles.
8. Target potential customers for electronic commerce.
9. Enhance the quality and delivery of Internet information services to the end user.
10. Improve Web server system performance.
11. Identify potential prime advertisement locations.
12. Facilitates personalization of sites.
13. Improve site design.

Conclusion

Web-mining which is one of technique of BIG DATA have been immensely successful in a variety of application domains, and this leads us to believe that web mining techniques will enable us to overcome the limitations in current E-Learning systems. In any online business face to face interaction between business & customer is not seen. This create huge gap for business how to serve & maintain customer relations in online environment. To build bridge between the business and customer relations web mining is the best tool of BIG DATA to investigate and maintain CRM. A personalized e-business site is more likely to attract and retain visitors and to build sales. Quite simply, web mining has become a required, expected feature of an e-business Web site.

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Medical Tourism: An Emerging Trend in Indian Tourism

Prof. Samira Naik

Introduction

In order to compete and adapt to the rapidly changing global and domestic market environment, it is imperative for the travel and tourism sector to invest in innovative initiatives and development of new avenues of tourism including film tourism, medical tourism, educational tourism and eco tourism in order to widen the scope of sector and cope with the emerging trends in the tourism industry so as to sustain in the competitive global market segment and gain the competitive edge over the other Tourism Promoting Countries.

Historical Perspective

Over the past few decades, Travel and Tourism has emerged as one of the fastest growing industries and has been identified as a sector that has immense potential to contribute significantly to a nation's economic growth. It has been a major social phenomenon driven by social, religious, recreational, knowledge seeking and business interests and motivated by the human urge for new experience, adventure, education and entertainment.

Tourism is both cause and consequence of economic development. It has the potential to stimulate other sectors in the economy owing to cross synergetic benefits and its backward and forward linkages. Besides providing the prospects to attract larger tourists, such development activities also benefit local communities. There are several countries where a major proportion of their national income is dependent on this sector.

In addition to its vibrant history, culture and diversity, initiatives likes Incredible India and Athiti Devo Bhava have helped gain India to a position of importance in the World Tourism and it is obvious that India is now becoming a destination of choice for global tourists. Moreover, recent inroads made in newer avenues including medical, spiritual, eco and lately educational tourism have broader the prospects and future of this industry.

Medical Tourism

Medical Tourism is a concept where a patient travels from one country to another for medical treatment, either to reduce treatment costs, or to get faster treatment or to avail of better medical facilities. A number of patients from countries like the US and UK often travel to developing countries including India, since these countries offer economical pricing options for treatment of certain ailments. Besides, such trips can also offer benefits of good holiday. In addition there are waiting lists or queues and the doctors are comparable to the best in the world. Moreover, there is no language barrier as most educated people in India communicate in fluent English.

India has several modern hospitals which are managed by leading corporate and which are capable of providing super-speciality facilities by skilled staff. In addition there is more on offer as India has a rich tradition of natural medicines and alternate healing including Yoga and Ayurveda.

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Developing Trends In Medical Tourism:
Medical Tourism will be particularly attractive in the United States, where an estimated 43 million people are without health insurance and almost 120 million without dental coverage. Moreover these numbers are likely to grow in the years to come. Patients in Britain, Canada and other countries with long waiting lists for major surgeries will be keen to avail the advantage of foreign healthcare options.

What is Medical Tourism?
Medical Tourism is broadly defined as provision of cost-effective private medical care in collaboration with the tourism industry, for patients in need of surgical or other forms of specialized treatment. This process is currently facilitated by the corporate sector involved in medical care, as well as private and public sector tourism industry businesses.

Medical or Health tourism has also become a common form of vacationing and covers a wide spectrum of services. It mixes leisure, fun and relaxation with wellness and healthcare. The idea of a healthy holiday is to offer an individual the opportunity to get away from his daily routine and relax in peaceful surroundings.

Why is The World Moving Towards Medical Tourism?
There are several reasons due to which someone would seek medical care beyond his/her home country. While in some countries, it could be the lack of state-of-the-art facilities, in others the public healthcare system could be so over burdened, that it would take years to avail the required care.

Medical Tourism In India:
India is considered as the golden spot for treating patients from developed and far east countries for ailments and procedures of relatively high cost and complexity. Currently, India is also promoting medical tourism and rapidly progressing towards a new area of medical outsourcing where our local subcontractors provide services to the overburdened medical care systems of western countries.

India's National Health Policy declares that treatment of foreign patients is a legal export and deemed eligible for all the fiscal government and private sector studies that medical tourism could facilitate revenue between 1-2 billion US$ by 2012. Medical Tourism is a growing sector in India. India's medical tourism sector is expected to experience an annual growth rate of 30%, making it a $ 2 billion industry by 2015. It offers: Yoga, Ayurveda & SPA Treatment

Competition In Medical Tourism Industry:
Thailand, Singapore, Malaysia, India and Philippines are the key destinations on the Asian medical tourism market. While Thailand is more popular among the western European medical tourists for cosmetic surgery, Singapore and India specialize in complex procedures with India having a cost advantage and Singapore a technology one.

The healthcare industry in Thailand has seen rapid growth in recent years even ahead of the country's GDP. The government of Singapore has formed a collaboration of industry and government representatives to create a medical hub in Singapore. The Malaysian government is also aggressively promoting medical tourism. Major hospitals in Malaysia are targeting new markets such as Vietnam and Cambodia. Taiwan provides high-quality healthcare at highly competitive prices but is slower starter.

Amongst the various medical tourism destinations, India offers the lowest cost and highest quality. It offers low cost cardio-vascular and orthopaedic procedures, at about one-tenth the cost of similar surgeries in US.

Limitations of Medical Tourism Industry:

- One of the biggest criticisms faced by the industry is that there is little follow-up care. The patient is usually in hospital for only a few days and then goes on vacation portion of the trip or returns home. Complications, side- effects and post-operative care are then the responsibility of self or the medical care system in the patient's home country.

- Most of the countries that offer medical tourism have weak malpractice laws, so the patient has little recourse to local courts or medical boards if something goes wrong.
- There are growing accusations that profit motive and private sector based medical tourism is drawing medical resources and personnel away from the local populations.
- The patient is provided limited information, other than an introductory phone call to the intended physician after electronically sending medical records to the doctor or hospital through the medical tourism agency.

India as a Global Destination for Medical Tourism:

Being an integral part of the service industry of many economies, healthcare and tourism are important sources of foreign exchange. Globalization has promoted a consumerist culture with the necessity to maximize profits and expand their coverage. However, the constraint lies in the fact that these services are affordable only to a relatively smaller population in most developing countries.

Long waiting lists, decline in public spending rise in life expectant of non communicable diseases which usually require specialist services are some of the key factors responsible for directing a wave of medical tourists more affordable healthcare destinations. India is unique as it offers holistic, healthcare addressing mind and, body and spirit. With Yoga, meditation, Ayurveda, allopathy and several other Indian systems of medicine, India offers a combination of services and cultural warmth that is difficult to match by any other country.

Advantage India:

Indian corporate hospitals excel in cardiology and cardiothoracic surgery, joint replacements, orthopedic surgery, gastroenterology, ophthalmology, transplantation procedures and urology.

All medical investigations is conducted on the latest and technologically advanced diagnostic equipment.

As Indian corporate hospitals are currently at par, with hospitals in Thailand, Singapore, etc. with a little more improvements India could become a preferred medical destination.

In addition to the increasingly top class medical care offered in India, a big draw for foreign patients is also the minimal wait list as is common in European or American Hospitals.

Additionally, India's quality of care largely equals American standards, and some Indian medical centres even provide services that are uncommon elsewhere.

Medical Package:

The healthcare sector in India has witnessed an enormous growth in infrastructure in the private and voluntary sector. The private sector which was the rather modest in the early stages has now become a flourishing industry equipped with the most modern state-of-the-art technology at its disposal. It is estimated that 75-80% of healthcare services and investments in India are now provided by the private sector.

An added advantage had been that India has one of the largest pharmaceuticals industries in the world, which besides being sufficient in drug production for domestic use, also exports drugs to more than 180 countries.

Medical Visa:

In an effort to make India a global hub for Medicare, the Indian government has introduced a medical visa for foreigners seeking specialty treatment for extended periods. Available to residents of all countries including Pakistan, Bangladesh, China and Sri Lanka, it has an initial validity for one year and which can be extended for another year by the Foreign Regional Registration Office (FFRO) and thereafter by Union Home Ministry.

Terminally ill patients:

In the UK, the waiting list for the government funded National Health Services (NHS) prompts some patients to look elsewhere. Nevertheless, in India, there is no waiting period and this provides a significant incentive for terminally ill patients who are in immediate need for medical treatment. This advantage must be seized by the medical care destinations in India.

We Care Attitude:

Indian hospitals are encountering certain perks of their own. This is for the fact that India believes in 'atithi devo Bhava' (Guest is God) and using this to support their own cause. Hospital representatives meet patients at the airport, help them through the immigration process and even drive them to the hospital in the private vehicle. Their room is stocked with fruits, drinks and other basic amenities. They have on call consultants with arrangements made for pre and post treatment sightseeing, shopping and other tourist activities.

Areas Of Improvement For India To Achieve The Competitive Edge:

- High Hurdles

With 100,000 patients a year travelling to the country up from 10,000 five years ago, hospital are now struggling to remedy first impressions that can turn people off. Europeans are aware of the poverty and decrypt state of the infrastructure but this information is second hand as it is largely gained through books and other media. A reality check generally happens when visitors are faced with street overflowing with large masses of people and by neighborhoods where new offices stack up against slums. It is a make or break situation as one hand they are promised world class healthcare at nominal cost, while on the other hand they face reality. Patients can sometimes decide not to go through process just after looking at the general state of the local people of the host country.

Therefore, the logical thing for India is to strive for massive image plan improvement plan. The medial industry in itself is bonding together to improve its image.

- Infrastructural Mess

While India competes for foreign patients with countries like Malaysia, Singapore and Thailand yet it offers less in some areas, especially in areas where it really matters. One such problem area is infrastructure. We can almost call it as the curse of India since no matter whatever problems we try to resolve on the national scale, the first and most formidable issue is that of infrastructure or rather the lack of it. Thus, it is indeed crucial to first attend and improve the basic requirements of having wide roads, continuous electricity supply, grounded electric wiring, efficient public information system, etc. only then can we be confident of solving the problems of the various medical tourists visiting our country.

- International Focus:

The lack of focus on international patients screams at us. Having interpreters and instructions in multiple languages such as Arabic, English, German, Spanish, etc. is a must for any country desirous of promoting medical tourism. The patient must be able to communicate well with his/her physician and other medical support staff. It is a very significant issue and needs to be addressed urgently.

- More Foreigners:

Foreign patients are still from the norm. Operations on non-Indians accounted for only 10 percent of the more than 4,000 surgeries. Foreign surgeries will pick up as rising health costs and long waiting lists provide incentives to travel to India and its low priced rivals.

- Brain Drain Reversal:

A number of successful Indian doctors practicing abroad are returning home and offering medical procedures that they previously performed abroad. There were many Indian patients who went abroad for medical reasons, and this factor became one of the reasons that influenced such doctors to return home.

- Easy Transition:

Some Indian hospitals are also trying to make the transition facilities for overseas patients easier.

The idea is that a doctor would examine patients in their home country, evaluate the problem, and then make all arrangements to get them to India for treatment.

Future of Medical Tourism in India:

The Indian medical tourism industry is expected to reach $6 billion (around Rs.36,000 core) by 2018, with the number of people arriving in the country for medical treatment set to double over the next four years, according to a report by industry lobby Punjab Haryana Delhi (PHD) Chamber of Commerce and Industry.

Currently, the size of the medical tourism industry in India in value terms is estimated at a little over $3 billion, with tourist arrivals estimated at 230,000.

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The Language Labs

Prof. Sudesh Vats

It is said that man learns to speak a language naturally and easily. On one side we have "Gyan Ganga" of Google and Information Technology flowing in full force and almost every third person claims to be a self appointed expert in 2-3 languages, however the reality is that most of them do not speak their mother tongue flawlessly or with grace – forget about the foreign languages.

When I confronted a linguistic expert with these observations, he waived me off saying that it is the age of 'mix and match'. Why are you looking for purity in a language? To encourage students, sometimes marks are given generously, whereas in reality, only a handful of students may be able to write a decent paragraph. The harsh reality is that it is fashionable to use language incorrectly and celebrate the inappropriateness! Under the garb of modernization, urbanization and improving ratings, some coaching centers are granting certificates of proficiency in a matter of weeks!

I would like to draw your attention to the fact of improving linguistic skills. To have a scientific approach, it has become inevitable that we have language labs – on the line of science laboratories so that we tackle this problem scientifically and in a logical manner.

People tend to think, paradoxically, that the 'language labs' are a recent phenomenon. However, I would like to emphasize that every home has one, where a mother tries to teach her young ones their mother tongue. In fact the first of the language lab was probably started by Eve! This teaching was pretty basic and with a lot of personalized attention and still is one of the most effective means of teaching a language.

To make the process more effective, on a large scale and as a part of natural evolution, new teaching methods/aids were devised. This was needed as class rooms size grew and individual attention shrank. Also the time that could be devoted to each student reduced. Also with globalization, the need to learn more languages was felt and the modern language lab was born.

In its current form, the language labs have been in existence in the western world for 3-4 decades and have come home in the last few years and are still evolving. To throw more light on the subject I have listed the basics of a language lab below:

What do they offer?

1. Amalgamation of text, images, audio and video
2. Teachers can modify material to fit individual needs
3. Learners can record their own voice and play back the recordings, interact with each other and the teacher, and store results for posterity and feedback to monitor progress
4. Independent learning opportunities

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Why language lab?

In an average foreign-language class, all students combined speak for about 25% of the class time. In a 45-minute long class 25% equals approximately 12 minutes. As this number is the speaking time of all students put together, the time each student gets to practice speaking becomes less, as class size increases.

With a language lab, all students in the class can speak on their own without distracting each other, regardless of the class size.

A language lab creates a more effective learning environment vis-à-vis a traditional classroom enhancing the capabilities of students and allowing a high degree of involvement and exposure to diversity.

Considering these figures, it is obvious that language labs offer a number of advantages over traditional teaching systems.

In addition, the use of the language lab allows students to have access to the information quickly and easily; developing many types of classroom exercises, personalizing the learning process, encouraging creativity, innovation and training. Language laboratories also favor a high degree of skill development, team and collaborative work eliminating socio-temporal barriers since information is not found in a particular and specific place and at the same time, they foster digital literacy responding to new educational and social needs.

Language labs have a number of distinctive advantages that make them an ideal tool to achieve high rates of participation and interaction.

➢ The school will have a tool that facilitates communication, interactivity, etc. in a classroom, using existing resources of the school.

➢ It accelerates language learning through practice.

➢ There is a greater involvement of students in a participatory environment.

➢ In addition, the technology of a language laboratory offers great advantages to both teachers and students. Both can access the new information and communication technologies quickly and easily. They have a classroom where they have at their disposal the latest technology for language learning.

Whatever I have expressed doesn't mean computers /language labs are replacement for teachers. In fact, it is an additional strong ' smart ' tool for effective teaching learning .To make ' full n smarter use ' Schools should have a structured time table and students should be checked at every step for their pronunciation, voice modulation, intonation, but informally. The second best way is the teacher should be a role model for phonetics; so with the fine blending of 'human' teacher and 'machine' teacher (lab language teacher) will certainly help anybody develop his/her language skills.

So let us put our heads together and make full use of our language lab to improve our mother tongue and learn a foreign language as well.

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The Brahmanical Icons Found from the Archaeological Site Ambari, Guwahati : Assam

Prof. Nilam Nandini Sarmah

Introduction :
According to Oxford dictionary Iconography is "the visual images and symbols used in a work of art or the study or interpretation of these". Iconography, as a branch of art history, studies the identification, description, and the interpretation of the content of images: the subjects depicted the particular compositions and details used to do so, and other elements that are distinct from artistic. The word iconography comes from the Greek εἰκών ("image") and γράφειν ("to write"). A secondary meaning (based on a non-standard translation of the Greek and Russian equivalent terms) is the production of religious images, called "icons", in the Byzantine and Orthodox Christian tradition; see Icon. In art history, "an iconography" may also mean a particular depiction of a subject in terms of the content of the image, such as the number of figures used, their placing and gestures (http://en.wikipedia.org/wiki/Iconography).

The study of Iconography always plays a vital role to understand the socio-religious history of a region which is a reflection of faiths and beliefs of people who lived there through the ages. The cult image and icons of deities of a region at different times are reflection of changing spiritual and religious life of people and adaptation of new ideas. There are no remains of sculptural art found in Assam prior to fifth century A.D. looking at the findings of sculptural activities in Assam, it can be suggested that it began with the expansion of the Gupta Empire. The remains of sculptural art at Da-Parvatiya, Mikir-Ati, Barganga, Kamakhya and Dudhnai, belongs to the late fifth and sixth century AD. (Dutta, M.1990). Development seen in sculptural art may form the frame work for assigning the chronology and probable date of the Iconography of the deities in Assam.

The development of sculptural art in early Assam is divided into three parts:
a) Classical style (late fifth to sixth century A.D.)
b) Continuation of the Classical style (seventh century to eighth century A.D.)
c) The Deopani School (late seventh to eighth century A.D.)

a) Classical style :
"The special characteristic of the Classical style are-the drooping eye brows, lotus-petal-type eye, tilaphula (sesame flower) type nose, and sankha type neck etc., typified human figures". The human figures were given precedence over nature. The sculptures of this period in Assam are found at Da-Parvatiya (Tezpur), Mikir-Ati (Nagaon), Barganga (Nagaon), Kamakhya (Guwahati) and Karamedhipara (Dudhnai).

b) Continuation of the Classical style :
The special characteristic features of the continuation of the classical style are- the slimmer and graceful body, excessively wide shoulders, fleshier faces with full lips, transparent drapery and sometimes Negroid type features etc. (Dutta, M.1990) The sculptures of this group of style are seen at Devsthan, Na Nath, Goalpara and Suryapahar.

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c) The Deopani School :

The sculptures of the Deopani School have a separate identity. The sculptures are found in the Golaghat District of Assam. This has a remote influence of the Classical tradition and some local traits which led to the development of a different style. The special characteristic features of the sculptures are mainly- human figure with round face, thick lips and stout body. These characteristics indicate ethnic affinity of the Bodo people. The sculptures display vigour, youthfulness, unexciting, sensuousness and poignancy in their manifestation and personality. The school also brought some special features like wide and pointed nose, long ear, squarish kiritimukuta, broad forehead, long hair and thick eyebrows (Dutta, M.1990). The shoulders of the sculptures are broad and abdomen is bulging. The sculptures are not projected in round. They are in high relief. In depicting the youthfulness they leave out the blissful idiom and spiritual tranquility of the Classical style. Very less attention was given to the depiction of nature. Most of the sculptures are images of Lord Vishnu which shows the popularity of Vaisnavism in this region.

The development of sculptural art of Assam in the Medieval Period is divided into two groups:

a) The East Indian School of Mediaeval Art (EISMA)

b) Central India and Local Art Styles

a) The East Indian School of Mediaeval Art (EISMA):

The socio- economic, religious and political condition of a region plays a very important role in monument as well as sculptural development. From the eighth century A.D. a new dimension in Indian history unfolded itself both politically and culturally. The all Indian personality of political or cultural homogeneity became incoherent and regional character gradually took root in Indian life (Dutta, M.1990).

The rise of the East Indian School of Mediaeval Art started with the development of the Pala Empire in the eight century A.D. The sculptural art EISMA are found in Assam from the ninth century A.D. onwards.

The special characteristic of the EISMA group are- the images were mostly carved out on the stela of black stone and were nicely polished. The decoration of kirtimukha became a popular feature on the stela. The sculptures are more sensuous in their body postures, fleshy forms and gracious facial depictions with emotional characteristic. The emphasis on the large breasts and hips of the female figures with narrow waist and gradually elongated torso suggests sensuousness which is often associated with Tantrism. It shows a transition of the Indian sculptural art from Classical heavenly expression to early medieval erotic expression (Dutta, M. 1990).

The Development of Stylistic Features :

The stylistic features of this school developed in a chronological pattern. "In the ninth century, the special sculptural features of EISMA group are- the fleshy body with a sensuous charm and calmness of the face with definite outlines" (Dutta, M 1990). The sculptures of this period are seen in Assam at Na Nath, image of Sarasvati is found at Tezpur, Lohidangra, Barpeta, and Kahilipara.

In the tenth century A.D. the characteristic feature of the sculptures is the vigorous body forms. The facial expression remained similar to the ninth century A.D. These types of sculptures are found at Kamakhya, Deopani, and Golaghat.The images found in Assam during this period are Chamunda, Narasimha, Vishnu, Varuna, Durga, Brahma, and Indra etc.

In the eleventh century, the slight body, charming facial appearance, a slim waist and large chest are the special features of the sculptures of EISMA group. The images found in Assam are Tara, Bodhisattva, Ganesh, Vishnu, Uma-alingana, Bhairava etc.These are mainly found at different places of Guwahati.

"In the twelfth century, the slender body form of the eleventh century was retained, but ornamentation increased impressively and serenity of the ninth century's ideal of the face is replaced by unexciting posture and heaviness" (Dutta, M 1990). The body looks as if frightened (Dutta, M.1990). The images found in this pattern are Bodhisattva, Parvati, Chandi, Surya and Vishnu etc.These sculptures are found at Barpeta, Nagaon and Guwahati.

In the thirteenth century, the same principles of art continued in Assam coupled with a new theme. Plain and simple pedestal was carved and the pedestal became a part of the stela. Kirtimukha was simple and it seems like a bee with a large tongue generally touching the kiritamukuta of the principal deity (Dutta, M. 1990).The images found with these features are Vishnu, Nataraj, Narasimha, Apsara etc.These sculptures are seen at Mariyani, Kamrup and many other places.

b) Central Indian and Local Art Style:
The Central Indian art style influenced the sculptural activity of Mediaeval Assam with the mixture of local art style made a different school of art in Assam. Muslim invasions of Assam were the main factor which introduced the Central Indian art school in this region. The special characteristic features of this style are- the facial expression of the images which signify spirituality, closed and half closed eyes, broad but pointed nose, small breast, diaphanous or semi-diaphanous drapery, elongated torso and broad chest. (Dutta, M.1990). These types of sculptural art are found at Odalbakra, Mangaldai, Tezpur, Deoparvat, Hojai, Madan-Kamdev, Kamakhya, Pingalesvara, Didrugarh and Sukresvara.

Late Medieval Sculptures of Assam:
The artists of the late Medieval school did not pay much attention to the textual details regarding the Ayudhas. This can be seen in the images of Surya, Vishnu and Brahma. Iconographic rules were not strictly followed because during this time Assam had very less inter-relation of art with the Indian mainland. The sculptures of this period can be divided into two groups.
i) Round Sculptures
ii) Profile Sculptures

i) Round Sculpture: "All the sculptures of the late mediaeval period are primitive in appearance. The round sculptures are not creatively by mature. Most of the images are with wide face, pointed noses, sharp eyebrows, thick lips, large bulging eyes, robust chest and thin waist. They are slender in body front and polished. They wear scanty jewellery, which is a general aspect of the late mediaeval sculptures of Assam. The breasts of the female figures became very small. The mukutas are generally carved with pointed ribs, sometimes with a lotus bud like a long kirita. The broad chest and the thin waist blend well with the sculptures. Their open bulging eyes and the gracefully carved facial expressions signify their mundane attitude. "The legs are stiff with disproportionate calves and thigh (Dutta.1990)".

ii) Profile Sculptures: The sculptures of the late mediaeval period are generally frontally carved. This group of sculptures is sturdier in look, enthusiastic in form and motionless in attitude. Noses are pointed and hips are small. There is no artistic skill evident in depicting the chests of the male figures. They exhibit the powerful Tai physiognomy, but, no ethnic influence is found in the face. The late eighteenth century sculptures are more articulate in their profile and appearance. The eyes are open and a peaceful facial expression is seen (Dutta.1990).

Most of the medieval sculptures are small in size, except those carved on the temples constructed under the patronage of the Koch rulers. The late mediaeval sculptures are generally flat and frontally carved (Dutta.1990). Some Indo-Chinese and Tibetan Cultural influence are also seen in the sculptures.

Aims and Objective:

The main aims of the article is to study the Brahmanical icons found from the archaeological site Ambari (26ºN – 91º84′E) to understand the Iconography of the Brahmanical Deities in a regional perspective. It is situated in the heart of the city of Guwahati. The archaeological site is among a few other sites in the North-East, where extensive excavation has been conducted. A good number of Brahmanical icons had been underneath from the excavation. The site came into prominence in 1968-69, when archaeological evidence was noticed while digging for the construction of the building of the Reserve Bank of India. To understand the potentiality of the cultural remains a systematic excavation was carried out during 1969-71 by the collaboration of Gauhati University and Deccan College Post Graduate & Research Institute, Pune. The team was leaded by Prof. M.C.Goswami, Dr. T.C.Sharma, Prof. M.K. Dhavalikar and Dr. Z.D. Ansari.

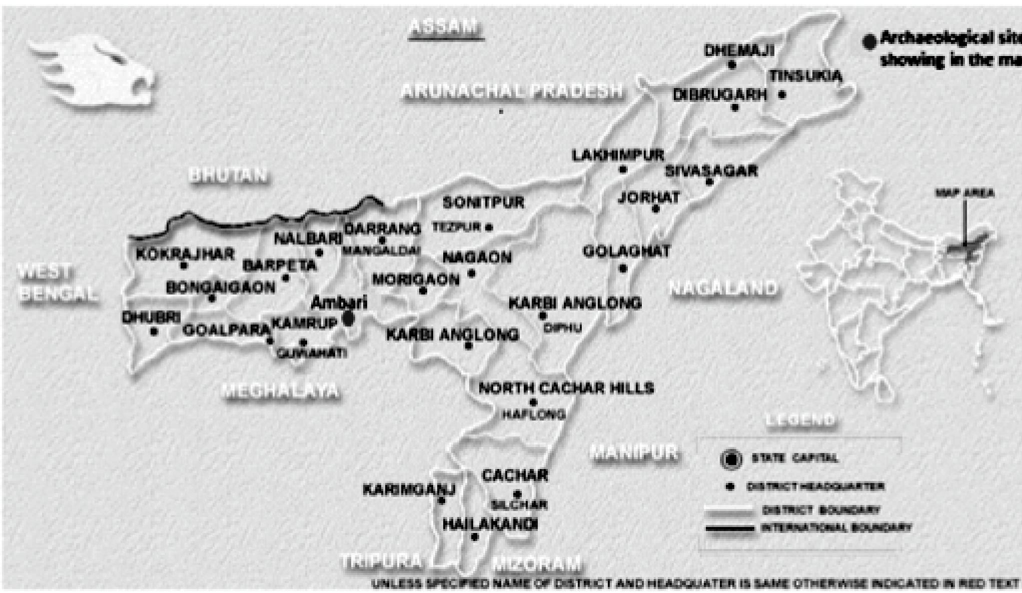

Fig.1. Map showing the location of Ambari Archaeological site

Previous Work: The result of the previous research led to a series of excavations by various organizations in the subsequent period till 2007-2008. These excavations yielded potsherds, intact pots, stone sculptures, pottery, stone beads, structures which help us to reconstruct the cultural sequence of the ancient settlement in the suburb of the city of Kamrup district.

A) Period I is dated to seventh –twelfth century A.D.
B) Period II is dated to thirteenth -seventeenth century A.D.

Brahmanical Deities found in Ambari

Number of stone sculptures of Brahmanical deities has been found during Ambari excavations. The sculptures have been carved out of grey and buff sandstone with black specks. The stone, is coarse grained and is of friable nature (Ansari, Z.D. and M.K.Dhavlikar 1970).

On the basis of size and raw materials, the sculptures are divided into two groups:

1) The large sculptures made of a very fine variety of clay stone and very rarely locally available granite.

2) The small sculptures made of amphibolites and basalt.

The icons can be categorized on the basis of their cult into:

1) Vaisnavaite icons: there are six Vishnu icons found.
2) Shaivaite icons: Nataraja, Shiva linga, Ganesh, Vrishava.
3) Female deities: Chandanayika, Mahisamardini Durga, Ganga, Yamuna, Manasa, Yoni pithas
4) Minor deities: Surya, Agni, Muni
5) Terracotta figures

1) Vaisnavaite icons found in Ambari:

Fig.2. Vishnu Image

Lord Vishnu is depicted in samapada sthanaka attitude holding sankha in his upper right arm, chakra in the upper left arm, in the lower left the gada and in the lower right arm the padma. He wears kirtamukuta, hara, kundalas, keyuras, kankanas, udarabandha, yajnopavita and vanamala. He is flanked by two goddesses, Laxmi in the right and Saraswati in the left. Laxmi is holding padma and Saraswati is playing on the vina. The image is with kirtimukha at the top and flying Vidyadharas on either side. Garuda is depicted on the pedestal. This can be dated to thirteenth-fourteenth century A.D.

Fig.3. Vishnu Image

Vishnu is depicted in samapada sthanaka posture holding gada in his upper right arm, padma in the lower right, chakra in the upper left arm and sankha in the lower left. He wears kirtimukuta, hara, kundalas, keyuras, kankanas, udarabandha, yojnopavita and vanamala. He is flanked by the two goddesses Laxmi in right and Saraswati in left. Laxmi is holding padma and Saraswati is shown playing on vina. The image is with kirtimukha at the top, hovering Vidyadharas on either side. Garuda is depicted on the pedestal. This is dated to thirteenth-fourteenth century A.D.

Fig.4. Vishnu Image

Lord Vishnu is depicted in samapada sthanaka posture holding gada in his upper right arm, padma in the lower right, sankha in the upper left arm the and chakra in the lower left. He wears kirtimukuta, hara, kundalas, keyuras, kankanas, udarabandha, yojnopavita and vanamala. He is flanked by the two goddesses Laxmi in the right and Saraswati in the left. Laxmi is holding padma and Saraswati is playing on the vina. The image is with kirtimukha at the top. Garuda is depicted on the pedestal.

This is dated to thirteenth-fourteenth century A.D.

Fig.5. Vishnu Image

Lord Vishnu is depicted in samapada sthanaka attitude holding in his upper right arm the chakra, sankha in the lower right, in the upper left gada and padma in the lower left. He wears kiritamukuta, hara, kundalas, keyuras, kankanas, udarabandha, yajnopavita and vanamala. He is flanked by the two goddesses Laxmi in the right and Saraswati in the left. Laxmi is holding padma and Saraswati is playing on the Vina. Garuda is seen below. This is dated to thirteenth-fourteenth century A.D.

Fig.6. Vishnu Image

Vishnu is depicted in samapada sthanaka attitude holding chakra in his upper right hand the gada in lower right hand, sankha in his upper left hand and padma in his lower left hand. He wears kiritamukuta, hara, kundalas, keyuras, kankanas, udarabandha, yojnopavita and vanamala. He is flanked by his consorts Laxmi in the right and Saraswati in left. Laxmi is holding padma and Saraswati is playing on the vina. Kirtimukha is seen on the top. This is dated to thirteenth-fourteenth century A.D.

Fig.7. Kurma Image

This is an icon of Kurmavatara (tortoise form) of lord Vishnu. The lower part of the icon represents a tortoise, while the upper part represents a human form with two arms. He is holding gada in his right hand, left hand is not clear. This is dated to thirteenth-fourteenth century A.D.

2) Shaivaite Icons found in Ambari:

Fig.8. Nataraj Image

This ten armed Nataraj sculpture is a masterpiece found in the site. Here Siva in the form of Nataraj is performing Samhara or destruction dance. The icon in high relief depicts Siva wearing a tall mukuta or headgear, two disc-shaped large earrings, one sheet necklace, long garland and a pair of ghunghru on the ankles. He also wears conical armlets. In the pose of high rhythmic dance, he has folded the left leg across in ardhvajanu karana touching the right leg which is shown balanced on the toe resting on the back of the Nandi, the bull vehicle of lord Siva. The attending figures, including the bull are also shown dancing in great frenzy. Siva's each hand is holding an ayudha or weapon, but the lower two are kept in Varada and abhaya mudra. The forehead of the God bears the third eye vertically placed in the centre. On the top, a human head is identified. This is dated to thirteenth-fourteenth century A.D.

Fig.9. Ganesh Image

The Ganesh image is in seating posture. The trunk and the front arms are broken. He is flanked by two chauri bearers, who are defaced. The figures of Vidyadharas and Kirtimukha are seen above the deity. This can be dated to thirteenth century A.D.

Fig.10. Vrishava

The Vrishava is found in the crouching posture. This is dated to ninth-tenth century A.D.

3) Icons of Female Deities found in Ambari:

Fig.11. Chandanayika Image

This is an unique figure of sixteen handed Durga made out of grey clay, which is inscribed as Chandanayika in Kamrupi script. The icon stands in alidha posture keeping her right leg on her vahana, the lion and the left leg is placed on the back of mahisha with a view to push him down forcefully. The Ayudhas held in her right upper arms in succession are Tanka, Khadga, Shakti, Mudgara, Vajra, Chakra, Ankusha and the Trisula piercing the chest of the asura. Her left arms hold Dhala (khetaka), Dhanu, Pataka, Tarjani mudra, Ghanta, Darpana, Pasa successively from top to downwards. In her left lower hand, she holds the asura's hairs tightly. She wears kiritimukuta, patrakundala, hara, kanakana, katisutra, nupura, keyura, tilaka etc. Her vahana, lion is in attacking posture. The asura is in pratyalidha posture and holds a khadaga with both his hands. His left leg partly comes out from the severed neck of the asura mahisha and the other part is still inside.

Two flying Vidyadharas holding garlands are depicted on each side of the upper corner of the Stela. This is dated to thirteenth -fourteenth century A.D.

Fig.12. Mahisamardini Image

There are sixty eight icons of Mahisamardini durga which are found in miniature size. This icon is standing with her right leg on the back of her vahana the lion and the left leg on the back of the mahisha in a slightly bending posture. Mahishasura is depicted in human form. The goddess Durga grabs his hair by one of her left hands while with a trisula in one of her right hands she pierces the chest of the asura. The other ayudhas are khadaga in the upper right hand, dhala and dhanu in the left upper hand. Other ayudhas cannot be identified. This is dated to thirteenth- fourteenth century A.D.

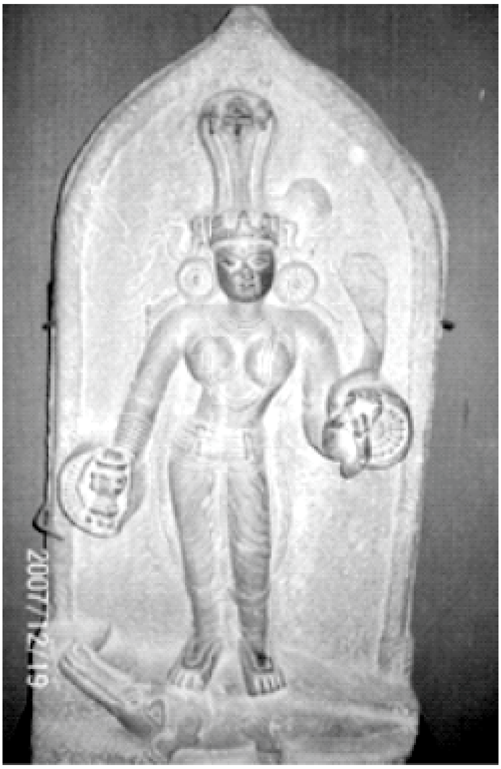

Fig.13. Ganga Image

The figure of Ganga is standing on her vehicle makara. She is two armed, holding in her right hand a pot against a lotus stalks. A cobra with spread hood is coiled round her left arm. Her coiffure consists of neatly combed long tresses gathered over her left shoulder in the shape of large sized bun. She wears a tiara, over which a tall snake canopy with three hoods is seen. As ornaments, she has lotus shaped large circular ear rings, a number of necklaces of different sizes, a multi-banded girdle with an oblong over sized buckle, bangles and bracelets cover her forearms and upper arms and loose anklets are seen on her feet. This is dated to thirteenth-fourteenth century A.D.

Fig.14. Yamuna Image

The figure of river goddess Yamuna is depicted standing on her vehicle, the tortoise or kurma. She is two handed and holds in her right hand a pot and her left hand is in abhaya mudra. Her well combed hair is gathered in a long thick bun held in position by circular clasps. She is wearing a coronet and is provided with a snake canopy with single hood. Her ear rings are large and lotus shaped. She is adorned with a number of necklaces of various designs. She is wearing long loose nupuras. The Kurma is placed over a saptaratha pedestal. The right, left and curved top of the stela is chiseled to form the kirtimukha a frame for the goddess. This is dated to thirteenth- fourteenth century A.D.

Fig.15. Manasa Image

The figure of Manasa, the snake goddess which is made of black basalt, is broken. A snake hood is seen on her head. She is also wearing a beautiful mukuta. This is dated to ninth-tenth century A.D.

4) Icons of Minor deities found in Ambari:

There are a number of icons of minor deities and other figures found during the excavations. Some of them have been described below.

Fig.16. Surya Image

The four armed Surya is standing in samapada sthanaka pose on a lotus pedestal which is driven by a chariot drawn by seven horses.

The god is accompanied by a number of subsidiary figures, the danda and pingala are shown on either side. Other accompanying figures are Aruna, Ratri, Raggi or Rajni, Nikshubha, holding camara and purnakhumbha, Usha and Pratyusha both holding bows and guarding the chariot. The kiritamukuta is flanked by two flying Vidyadharas. Surya holds two padmas in front hand and back left hand holds a sula, while the back right hand is probably shown without any posture. The image indicates the deterioration of the pre Ahom pala style. This is dated to thirteenth-fourteenth century A.D.

Fig.17. Agni Image

Many Agni figures were unearthed from the site. This image of Agni is in sthanaka pose. It has a jatamukuta on the head, kundalas on the ears and bangles in both hands. He is accompanied by female deities Svaha and Svadha. This can be dated to ninth-tenth century A.D.

Fig.18. Muni Image

There are many Muni or Sage figures found in the excavation. This bearded figure is standing erect in sampada sthanaka holding a ghata with the left hand and in right hand he is holding an akshamala. This is dated to thirteenth-fourteenth century A.D.

5) Terracotta Objects found in Ambari:

There are number of terracotta figurines found during the excavation. Many of them are made of Kaolin. One of them is:

Fig.19. Ganesh Image

This is a mutilated figure of Ganesh. The deity has his matted hair tucked in the crown of the head into a conical lump. The broken trunk is shown as turned to the right side of the chest. This is made of creamy buffish clay. This is dated to eight-ninth century A.D.

Conclusion:

To understand the icons found from the archaeological site Ambari, an attempt was made by the researcher to study the icons of present living temples in Kamrup district. Although, the temples from the Kamrup district and the icons from the excavated site of Ambari have been studied by different scholars from the social, political and religious point of view. In course of their writings some of the icons have been described and they find mention in their scholarly work. While studying art and architecture of Kamrup, the monuments bearing these icons have been dated by these scholars. The scholars like P.C.Sarma (2002) had done commendable work in the field of art and architecture. However, while dealing with the icons of this region the details of their attributes in most of the cases not been properly attempted. The present documentation has tried to identify and arrange these icons in cult specific and location specific on monuments along with their more identifiable attributes.

It has been noticed from the above documentation that during Early Mediaeval times Shaivaisim and Vishnavishim played very important role. The icons depicted were influenced by the general iconographic trend of the period seen in other parts of the country. However, they followed the stylistic form of the contemporary sculptural art while depicting their facial features according to the local traditions.

Though, Shivasim and Vishnavism were predominate religion in this region and this is attested by number of temples and icons found. This also tells their dominance in the religious life of the Kamrup district. It is interesting to note that there are no synchronistic images like

Ardhanariswara, Naranarayan, and Sivaparvati which are found in abundant in the contemporary temples in other part of the country. The absence of such kind of figure may reveal that there was less symbiotic relationship between them here and they were more independent and develop on their own sphere. The political history and the religious affiliation of the dynasty go with the religious life of the region. Though, Buddhism was predominate religion in the neighbouring states like Bihar, Bengal it is not so strongly in Assam except in some exceptional cases like Surya Pahar area where Brahmanism, Buddhism and Jainism found flourishing together. Moreover, Assam would have formed a passage for the interaction between mainland Buddhism and Buddhist centers in China and South-East Asian counties. The Buddhist remains of the state do not tell more about its nature and intensity of participation. The Tantrikism and its practice in Kamakhya temple at Kamrup it said to be centre of Tantrikism which influenced the contemporary Brahmanical religion within the state even outside. This brief documentation the icons and nature of iconography seen in the image of God and Goddess can tell about the nature of religious activity and religious philosophy, practice of the people of Kamrup district of Assam through the ages.

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Women entrepreneurs lack financial resources – Is it a myth?

Prof. Swapnali Bhosale

Abstract:
An entrepreneur is a person who has an enterprising quality with an eye on opportunities and an uncanny vision, commercial acumen and above all, a person who is willing to take risks because of the adventurous skill within, same holds good for women also. For women entrepreneurs, starting and operating a business involves considerable risks and difficulties regarding obtaining lines on credit, problems in marketing management, production, advertising and packaging and other socio-personal, managerial, technical, obtaining raw-material, inventory, financial and governmental assistance problems. But this no longer holds true in today's scenario.
In fact, a recent Global Entrepreneurialism Report conducted by international bank BNP Paribas has ranked India on top for the highest percentage of women entrepreneurs. Conducted among 2,500 entrepreneurs in 17 markets spanning the US, Europe, Middle East, and Asia, the survey found that 49% of the entrepreneurs in India were women. India performed better than Hong Kong and France, which were next on the list. The business environment for women entrepreneurs has changed substantially in India. There is a lot of potential and there is government support as well. There are no biases in finding finance and credit, both readily available these days. The myth is therefore unfounded

Keywords: women entrepreneurs, business environment, government support, finance.

Introduction:

The word Entrepreneur is derived from the 17th century French word Entreprendre- it means individuals who undertook the risk of new enterprise. According to Karl Vesper, psychologists tend to view entrepreneurs in behavioral terms as achievement oriented individuals driven to seek challenges and new accomplishments. Entrepreneurs play a very important role in socio-economic welfare of the country. An entrepreneur can be defined as one who initiates and establishes an economic activity or enterprise. Entrepreneurship thus refers to the general trend of setting up new enterprises in a society (Begum, 1993). The International Labor Organization (ILO) defines an entrepreneur as a person with a set of characteristics that typically includes self-confidence, result-oriented, risk taking, leadership, originality and future oriented. Khanka (2002) referred to women entrepreneurs as those who innovate, imitate or adopt a business activity.
In modern era, when women are showing their capabilities in various walks of life, the entrepreneurial classes of women are playing an increasingly prominent role in various sectors of industrial growth and economic development. Entrepreneurship amongst women is a relatively recent phenomenon, which is gradually changing with the growing sensitivity of the roles, responsibilities and economic status of women in the society in general and family in particular.

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Need For The Study:
Society at large still feels that adequate measures are not being taken by the government to encourage women entrepreneurs. Women entrepreneurs contribute to the economic well-being of the family and communities, poverty reduction and women's empowerment, thus contributing to the Millennium Development Goals. The Government has been actively running various schemes to fulfil the dreams of women who want to be entrepreneurs. Also various schemes are being offered by the banks for them. It is only when people come out of this myth will woman entrepreneurs thrive and they would be able to contribute to the economic development of the country and come at par with that of their male counterparts.

Objectives Of The Study:
1) To study schemes offered by Government of India / various Banks for growth of Women Entrepreneurs, particularly in providing finance
2) To analyse whether women entrepreneur lack financial resources

Before describing each scheme in detail, following is the summary of various measures for encouraging women entrepreneurship in India

Supportive Measures for Womens Economic Activities & Entrepreneurship
1) Direct & indirect financial support
2) Yojna schemes & programmes
3) Technological training & awards
4) Federations & associations

1) Direct & Indirect Financial Support :
- **Nationalized Banks**
- **State Finance Corporation**
- **State Industrial Development Corporation**
- **District Industries Centre**
- **Mahila Udyog Needhi scheme**
- **Small Industries Development Bank of India**
- **State Small Industrial development Corporations**

2) Yojna Schemes & programme
- **Nehru Rojgar Yojana**
- **Jacamar Rojgar Yojana**
- **TRYSEM**
- **DWACRA**

Description Of Various Schemes Offered By The Government :

1. Trade Related Entrepreneurship Assistance And Development Scheme For Women

With a view to encourage women in setting up their own ventures, government implements a Scheme, namely, "Trade Related Entrepreneurship Assistance and Development (TREAD) during the 11th Plan. The scheme envisages economic empowerment of women through the development of their entrepreneurial skills in nonfarm activities.

2. Micro & Small Enterprises Cluster Development Programme (Msecdp):

A cluster is defined as a group of enterprises, ideally having 100 members, producing same/similar products/services. While 100 members could be the minimum per cluster, depending on the density of population and other factors, even 200-300 could be a good target group for undertaking Diagnostic Study and the subsequent Soft Interventions in a cluster. However, in difficult and backward regions the target numbers could come down to 50 or less but it should not be too small as a lot of Government expenditure is made per cluster. The Cluster Development Programme (CDP) being implemented envisages diagnostic study of identified clusters of traditional skill-based MSEs to identify appropriate technologies and their providers and to facilitate adoption of available technology meeting the specific needs of the end users. The Cluster Development aims at enhanced competitiveness, technology improvement, adoption of best manufacturing practices, marketing of products, employment generation etc. The scheme provides assistance for capacity building, common facilities, marketing etc. the delivery, assimilation and diffusion of the identified technology from its producers to the recipient user/cluster of small enterprises.

3. Credit Guarantee Fund Scheme For Micro And Small Entreprises:

The Scheme was launched in August 2000 to ensure better flow of credit to micro and small enterprises by minimizing the risk perception of financial institutions and banks in lending without collateral security. Under the scheme, guarantee cover is provided to collateral free credit facility extended by member lending institutions (MLIs) to the new as well as existing micro and small enterprises on loans up to Rs.50 lakh. The guarantee cover available is up to 75% of the loans extended. The extent of guarantee cover is 80% for (i) micro enterprises for loans up to Rs.5 lakh; (ii) MSEs operated and/or owned by women; and (iii) all loans in the North-East Region. The lending institutions availing guarantee from the Trust have to pay one time guarantee fee of 1.5% and service charges of 0.75% per annum of the credit facility sanctioned. For loans up to Rs.5 lakh, the one time guarantee fee is 1% and service charges are 0.5% per annum of the credit facility sanctioned.

4. Support For Entrepreneurial & Managerial Development:

MSME-DIs regularly organize a number of Entrepreneurship Skill Development Programme (ESDPs)/ Entrepreneurship Development Programme (EDPs)/ Management Development Programmes (MDPs) to train the potential entrepreneurs in improving their techno/managerial knowledge and skill with a view to facilitating them to start MSEs in various fields. Many of the programmes are tailor made for the target group for SC,ST, OBC,Women, Minorities and other weaker sections and exclusively for women also. These programmes are also called "Out-reach Programmes" as they are conducted in rural / less developed areas. 22.5% of total target of ESDPs/EDPs are conducted exclusively for SC,ST, Women and Physically Challenged persons with a stipend of Rs. 500/- pre month per candidate under the Promotional Packages for MSEs. No fees is charged from SC / ST, women and Physically Handicapped.

5. Exhibitions For Women Under Promotional Package For Micro & Small Enterprises Approved By Ccea Under Marketing Support:
DC (MSME) has formulated a scheme for women entrepreneurs to encourage Small & Micro manufacturing units owned by women and register in DI/DIC in their efforts at tapping and developing overseas markets, to increase participation of representatives of small/micro manufacturing enterprises under MSME stall at International Trade Fairs/Exhibitions, to enhance export from such units. Under this scheme, participation of women entrepreneurs in 25 international exhibitions is envisaged during the 11th Plan (2007-2012). With a view to encourage women entrepreneurs to participate in the International Exhibitions under MDA scheme it has been decided to: i) provide rent free space (6/9 Sq Mts) in the exhibitions ii) reimburse 100% economy class air fare for one representative
6. Federation Of Indian Women Entrepreneurs (Fiwe):
A National-level organization, founded in 1993 and registered under Society Act of India in May 1999, is today, one of India's Premier Institution for Women thoroughly devoted towards Entrepreneurship Development in the country. It has branches in different states of India with membership base of 15,000 individual professionals and more than 28 Member Associations spread throughout the country. FIWE endeavors to provide: Networking platform for women, Technical know-how, Industry research & expertise, Skill development & training and brings the businesswomen on a Common Forum; and ensures that their opinions, ideas and visions are collectively and effectively taken up with policy makers and various other agencies respectively for the development of Enterprise in Women.

Schemes Offered By Banks

One of the most difficult aspect that needs to be tackled in new venture creation is obtaining finance. Various sources can be used like personal funds, bank loans, family and friends etc. Banks take decisions according to the five C's of lending: Character, Capacity, Capital, Collateral and Conditions. However looking at the growing number of women entrepreneurs banks have come up with various schemes to support them in their initial phases of growth and establishment.

Let us take a look at few such banks.

1. Small Industries Development Bank Of India:

SIDBI Marketing Fund for Women- The assistance under the funds is available to women entrepreneurs and organizations involved in marketing of products manufactured by women entrepreneurs to increase their reach both in domestic and international markets.

2. State Bank Of India:

Aimed at supporting entrepreneurship among women by providing certain concessions.

3. Bank Of Baroda:

Akshaya Mahila Arthik Sahay Yojna –Financial Assistance for professional,self employed women and also those into retail trade and agricultural activities.

4. Andhra Bank:

Mutual Credit Guarantee scheme for Women:

Credit facilities extended to a single borrower in the micro and small enterprises sector for credit facility upto Rs.100 lakh (both manufacturing and service sectors) excluding retail trade without any collateral security.

5. Dena Bank:

Dena Shakti Scheme for Women Entrepreneurs –A scheme run by the bank to finance women entrepreneurs.

6. Punjab National Bank:

Various Schemes for Women entrepreneurs- To meet gap in equity, for purchase of required infrastructure, easier credit available for financing crèches , for meeting working capital credit requirement of allied agricultural activities.

Conclusion:

In view of so many schemes and facilities offered by government and banks, the author is of the opinion that women entrepreneurs lack financial resources for their start-up or growth is an unfounded myth. Women entrepreneurs have tasted adequate amount of success for themselves. Hence, to become a successful women entrepreneur is no longer a dream.

However there is a need for the government to conduct gender sensitization programmes, provide infrastructure in terms of industrial plots & sheds, ensure training assistance by NGOs on professional competence & leadership skills, setting up of more incubation centres where women can start a commercial activity and gain the confidence to take it to the next level.

These activities along with financial assistance will ensure success in any kind of entrepreneurial activity.

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