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RESEARCH PAPERS	Page No.
Sustainability Marketing: Marketing Archetype in Emerging Economies	5
<i>Manoranjan Dash</i> <i>Dr. Madhusmita Dash</i>	
Cloud Computing and Supply Chain Management: An Integration Approach	16
<i>Anil Kumar Mishra</i> <i>Dhruti Sundar Sahoo</i>	
The share of Odisha in Fourteenth Finance Commission (FFC) in India	25
<i>B.P. Mahapatra</i>	
Impact of Intrinsic Work Motivational Factors on Employee Retention- With Special Reference to Gen Y	38
<i>Swati Mishra</i>	
Competency Mapping of Middle level Leaders at Kurl On Ltd	56
<i>Prof. (Dr.) Sibananda Mishra</i> <i>Prof. Saswati Tripathy</i>	
Towards Sustainable Development Through Corporate Social Responsibility: Experience of Indian Corporates	65
<i>Ms. Dipti Rekha Mohapatra</i>	
An Assessment of HRD Climate- a Case Study Of NALCO	76
<i>Binita Panda</i> <i>Leena P. Singh</i>	
Environmental Awareness among Primary School Learners in Odisha	83
<i>Sabita Sahu</i> <i>Prof. (Dr.) Subash Chandra Panda</i>	

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From the Chief Editor's Desk

It is a great pleasure to announce that the 4th volume of our journal "BIITM Business Review" is being published. It contains quality articles with rich inputs on various domains of management. We extend our heartfelt thanks to all the contributors from various institutions and hope their cooperation in future also.

We are trying best to improve the quality of the journal and striving our continuous effort to achieve this goal. We hope the journal will meet its goal by providing quality inputs to students, faculty members, researchers and to academic fraternity as a whole.

The editorial board would like to extend heartfelt thanks to its Chief Patron, Mr. P. K. Balabantray, Patron, Prof. P. R. Pattanayak and Advisors for their encouragement and support for the success of this issue.

Dr. P. K. Tripathy
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From the Editor's Desk

It gives us immense pleasure in informing you that our journal "BIITM Business Review" has become popular and gain acceptance in a short span of time. We are proud to host articles with the ISSN number as it enhances the recognition and credibility of the articles published in the journal.

The articles in this issue are a selection from the work done by a group of researchers and practitioners on some of the important aspects of management and related fields. It is our continuous effect to bring out the versatility of the concepts in the light of providing knowledge and satisfaction to our readers.

The editor would like to heartily thank its Chief Patron Mr. P. K. Balabantray, Principal, Advisor, members of the editorial board, the authors and other well-wishers for their cooperation and encouragement in bringing out this issue.

Mr. Anil Kumar Mishra

Editor

INDEX

RESEARCH PAPERS	Page No.
Sustainability Marketing: Marketing Archetype in Emerging Economies <i>Manoranjan Dash</i> <i>Dr. Madhusmita Dash</i>	5
Cloud Computing and Supply Chain Management: An Integration Approach <i>Anil Kumar Mishra</i> <i>Dhruti Sundar Sahoo</i>	16
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Competency Mapping of Middle level Leaders at Kurl On Ltd <i>Prof. (Dr.) Sibananda Mishra</i> <i>Prof. Saswati Tripathy</i>	56
Towards Sustainable Development Through Corporate Social Responsibility: Experience of Indian Corporates <i>Ms. Dipti rekha Mohapatra</i>	65
An Assessment of HRD Climate- a Case Study Of NALCO <i>Binita Panda</i> <i>Leena P. Singh</i>	76
Environmental Awareness among Primary School Learners in Odisha <i>Sabita Sahu</i> <i>Prof. Dr. Subash Chandra Panda</i>	83

Sustainability Marketing: Marketing Archetype in Emerging Economies

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** Dr. Madhusmita Dash

ABSTRACT

Sustainability is now a need for business leaders and marketers. Companies are already proactively embedding sustainability across their businesses and finding benefits in increasing profits, brand affinity and advocacy, reputation and staff morale. Consumers are one of the central drivers of sustainability marketing strategies. Sustainability marketing is a move away from just selling to customers. It embraces the development of longer term value relationships and gets companies thinking about marketing more broadly to include the socio and the eco-environments. Sustainability marketing tries to build and maintain sustainable relationships with customers, the social environment and the natural environment. By creating social and environmental value, sustainability marketing tries to deliver and increase customer value. This paper focuses on characteristics and determinants of sustainability marketing strategies in the present economic scenario and proposes a framework of sustainable marketing practices.

Keywords: Social Environment, Brand affinity, Sustainable Development, Eco-environment

1. INTRODUCTION

Sustainable development is defined as meeting “the human needs of the present without compromising the ability of future generations to meet their own needs.” Sustainability has become an exhortation used by individuals and businesses alike to convey a sense of caring about the environment, and it is often used interchangeably with other terms such as green or environmentally friendly. Measurement of sustainability is often morphed into many different forms for various research studies. Banbury, Stinerock, and Subrahmanyam (2011) used subjective personal introspections and found consumers defining sustainable consumption as reducing overall purchases and consumption, producing more than is consumed, using public transportation, living in smaller homes, reducing purchase of single-serving packages, consuming organic foods, using energy-efficient light bulbs, and using low-flow shower heads. Advertising messages promoting sustainable goods or services are often labeled as green advertising. Instead, consumers adopt sustainable viewpoints to be socially acceptable but may not follow through with sustainable behaviors (Zinkhan and Carlson 1995). Companies are already proactively embedding sustainability across their businesses and finding benefits in increasing profits, brand affinity and advocacy, reputation and staff morale. Marketers can lead the business thinking on this, ensuring that product development has sustainability built in. Thus, sustainable marketing can have an impact on the whole business. Designed-in sustainability creates operating efficiencies, such as using less packaging, which reduces transport costs and waste. In a service business, good use of digital media is more efficient than brochures and letters. It also speeds up customer service. Customers expect businesses to take the lead and make it easy for them to do the right thing, so even where sustainability appears to add cost, there can be first-mover advantage in embracing and delivering on a customer need in your category. People also care about the sort of company they work for, so attracting and retaining talent is easier for ethical businesses. It will hurt commercially not to be sustainable. Organizations must address this issue to ensure that their business is commercially viable today, but also, even more importantly, in the future. They also need to balance principles and profits, and value and values. Innovation is now driven with sustainability at the forefront. In most cases, sustainable marketing options are associated with a reduction of the resources required and hence provide a commercial saving. Often known as green marketing, sustainability marketing is a strategy that involves the promotion, sales, and distribution of products and services that leave less of a footprint on the environment. 50% of global consumers are

willing to pay more for goods and services from socially responsible companies that have implemented programmes to give back to society. This is an increase of 5% from 2011 (45%), according to new research from Nielsen. More companies are recognizing that putting sustainability at the heart of their strategies will reap rewards in the longer term such as admiration by customers as well as respect and loyalty.

2. CHARACTERISTICS OF STRATEGIC SUSTAINABILITY MARKETING

Sustainability marketing can be defined as building and maintaining sustainable relationships with customers, the social environment and the natural environment. By creating social and environmental value, sustainability marketing tries to deliver and increase customer value. Similar to the modern marketing concept, sustainability marketing analyses customer needs and wants, develops sustainable solutions that provide superior customer value, and prices, distributes and promotes them effectively to selected target groups. The segmentation of the market, the selection of certain target groups and the positioning of products are strategic decisions of sustainability marketing – aside from the social and ecological product qualities. Generally, geographic, demographic, psychographic and behavioural variables are used to segment consumer markets. The socio-ecological consciousness of consumers is one psychographic segmentation variable that can be used. The three different consumer groups can be differentiated. The first group has a very high level of socio-ecological consciousness and they are willing to act upon it i.e. socio ecological actives. From their point of view, social and ecological product features play a very important role in buying decision making processes. Usually, this consumer group is relatively small, and represents the innovator consumers of sustainable products. The second group has a high level of socio-ecological consciousness i.e. socio ecological approachables. The members of this group are often willing to pay a higher price for the perceived value added, but they are reluctant to make any compromise when it comes to the quality of the product. They represent the early adopters of sustainable products. The third group is not particularly conscious about social and ecological issues i.e. socio-ecological passives. Usually, socio-ecological product features are not perceived as value added. Thus, this group is not willing to compromise with respect to performance or price. They represent the majority adopting sustainable products. Companies that segment the market according to the socio-ecological consciousness of consumers can target one of the three main groups identified. In the case of strategic sustainability marketing the niche strategy focuses on the socio-ecological actives. Differentiation as the second competitive

strategy means creating and marketing a product with a certain unique selling proposition. A company can differentiate itself, for example, by means of a particular technology, design, image, after-sales services, distribution network, price or product quality. This strategy requires an excellent company reputation, which is often accompanied by a smaller market share due to its exclusiveness. In terms of strategic sustainability marketing the differentiation strategy targets the socio-ecological approachable. By contrast, the strategic goal of the third competitive strategy is to achieve overall cost leadership. This can be realized with the help of a number of cost saving methods such as tight control of variable costs and overheads, minimization of research and development as well as advertising costs and taking advantage of economies of scales. Low cost strategies are compatible with ecologically orientated strategies when the emphasis is on eco-efficiency, the avoidance of waste and the creation of products that are resource efficient to produce and use. This strategy often requires a higher market share in order to gain significant cost advantages by means of bulk buying and selling in larger quantities. Companies pursuing a cost strategy usually target consumers who are price sensitive. This group matches with the socioecological passives.

3. DETERMINANTS OF STRATEGIC SUSTAINABILITY MARKETING

Strategic decisions in sustainability marketing are influenced by different kinds of stakeholder, public exposure and industry membership. A number of studies have identified the consumer as a key driver for environmental/sustainability management. Consumers strongly influence the 'business case' for sustainability. They can respond to the company's action either positively by purchasing its products or negatively by boycotting its products. Retailers act as 'sustainability gatekeepers' between manufacturers and consumers. Due to their purchasing power they largely control whether sustainable products are made widely available, in which ways they are promoted, and to what extent. The role of retailers as sustainability gatekeepers is ambiguous. On the one hand they discount product prices to such an extent that there is little room for sustainability considerations. On the other hand retailers play a decisive role in marketing sustainable food products beyond niches, i.e. 'mainstreaming' sustainable food products. Thus, it seems that food retailers are another key external driver for sustainability marketing. Competitors are another driver of sustainability marketing, as shown by empirical studies in Switzerland and the US (Belz, 2003, 2005; Marshall *et al.*, 2005). In terms of offering new green products, competitive forces are not quite as important for companies as

consumer pressure (Wong *et al.*, 1996). However, as the demand for sustainable food products rises and as competitors start fulfilling the unsatisfied demand by offering more sustainable alternatives, so other food processing companies are likely to follow suit. According to literature studies and empirical research, legislators are one of the most influential external drivers for a company's social and environmental (marketing) commitment. By setting up new product regulations, proposing voluntary standards, introducing sustainability product labels or providing information to sensitize consumers in relation to the social and environmental problems or benefits of certain products, legislators can make companies take an active stance.

Besides external stakeholders such as consumers, retailers, competitors and legislators, internal stakeholders play a decisive role in sustainability marketing as well. A number of empirical research studies show that proactive environmental management greatly depends on the managers' beliefs, attitudes, perceptions and expectations. An empirical study in Switzerland indicated that top management forms a key driver for sustainability marketing (Belz, 2005). Berry and Rondinelli (1998) point out in their research that proactive environmental management needs a champion, who usually has a senior position within the company: 'The champion must be a person with superior managerial skills and influence within the organization and with the authority to allocate adequate resources to environmental management'. We assume that the empirical results regarding the influence of top management on proactive environmental management and sustainability marketing can be applied to owners as well. In addition, it is assumed, that the public exposure or visibility of companies has an influence on sustainability marketing. Useful parameters for public exposure are the size of the company and its brand awareness. The size of a company can be measured in terms of sales or employees. Size generally indicates the degree of public exposure and is also an indicator of the likely available corporate resources, which play a decisive role regarding the innovation and marketing of sustainable products. The availability of financial or human resources seems to positively affect the companies' commitment in terms of environmental activities and eco-marketing activities. The higher the brand awareness, the more it is known by the consumers. Yet at the same time it is also watched more closely and forms a prominent target for activists' campaigns.

4. CONCEPTUAL FRAMEWORK OF SUSTAINABLE PRACTICES FOR SUSTAINABLE DEVELOPMENT

Sustainable Marketing Strategy Framework

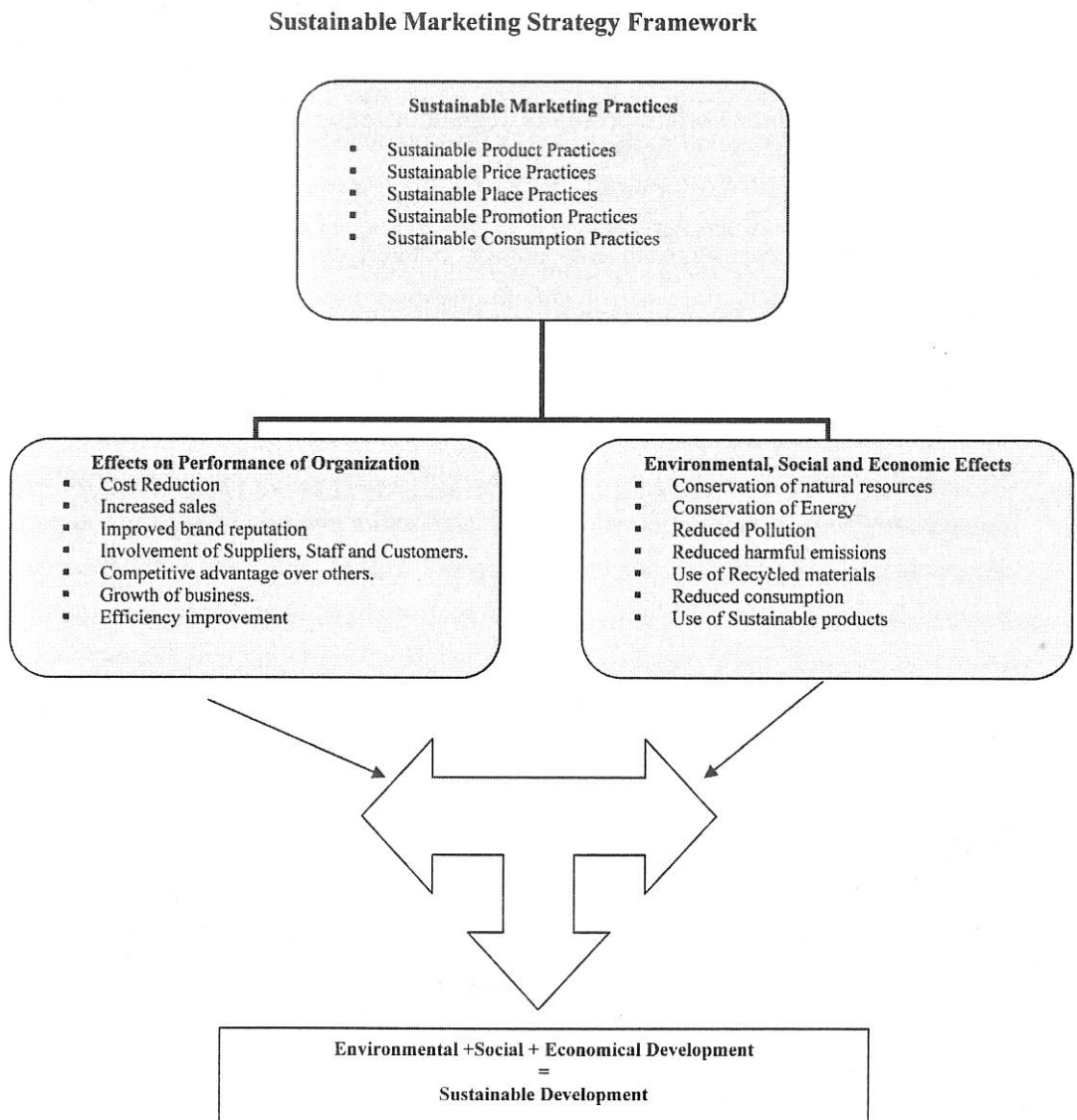


Fig-1 Sustainable Marketing Strategies

5. MANAGERIAL IMPLICATIONS

1. Embed Sustainable business practices into your business strategy

Embed sustainable business practices right into your business strategy - don't fasten them on as an after-thought: set measurable goals; list the key activities that will undertake to achieve these goals; make a senior resource accountable for the success of these goals.

Examples of sustainable business practices include:

- Optimise the performance of your business
- Create strong relationships with your customers, other businesses, staff and community
- Balance your budget and ensure your financial sustainability
- Help your business community to prosper
- Reduce your carbon footprint.

2. Deliver marketing activities that create ongoing growth.

Businesses have limited financial, human and capital resources, so focus the resources on the top performing marketing activities for the business. Use an aggressive growth strategy for biggest growth markets. Adopt a selected growth strategy for new or emerging markets. Build an authentic brand, and craft an appealing story that attracts genuine interest from the target market. Collaborate with customers to develop more targeted products and to get to market sooner. Use permission based marketing, and avoid interruption based marketing.

3. Promote and support sustainable businesses to help them grow.

One aspect of sustainable marketing is the promotion and support of sustainable businesses and their products. At Sustainable Marketing, we help sustainable businesses develop and implement marketing plans, marketing strategies and brand strategies to help them grow.

4. Influence other businesses to adopt sustainable business practices.

As a business owner, we can create a big impact by influencing the staff and other businesses to adopt sustainable business practices.

5. Minimise the use of resources in the day to day business operations

Minimise your contribution to greenhouse gases by undertaking activities such as:

- Print the business stationery using environmentally friendly inks and recycled paper
- Reduce the use of direct mail: use online communications instead

- Create online catalogues instead of printed catalogues
- Use virtual communications such as skype, video conferencing and webinars

6. CHALLENGES OF SUSTAINABLE MARKETING PRACTICES

Sustainable marketing practices are costly in general and difficult to implement in the short run. The ecological profits are insubstantial, not direct or inconsequential to consumers. Environmental profits are complicated to determine or compute. For example some marketers use false environmental claims in order to gain competitive advantage. The accomplishment of sustainable marketing practices depends on a number of stakeholders who have to put efforts as a group. These include; NGOs, public, employees, retailers, government, environmental groups, and suppliers and customers.

7. CONCLUSION

Sustainable marketing practices should not be measured as just one more approach to marketing, but has to be pursued with much greater drive, as it has environmental, economical and social dimensions to it. With the danger of global warming, climate change social and economic crises alarming large, it is tremendously significant that sustainable marketing becomes the custom rather than exclusion or just a craze. Marketers also have the accountability to make the consumers know the requirement for and profit of sustainable products as compared to unsustainable ones. In sustainable marketing, consumers are willing to pay more to maintain a cleaner, greener and healthy environment. Sustainable marketing practices assumes even more importance and relevance in developing countries like India.

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Cloud Computing and Supply Chain Management: An Integration Approach

Mr. Anil Kumar Mishra

Mr. Dhruti Sundar Sahoo

ABSTRACT

Currently enterprises are connecting its processes with its suppliers and customers into the supply chain to optimize the cost and efficient information flow among all partners in the chain. The new computing paradigm cloud computing has the potential to enhance collaboration between chain partners as well as the cost optimization. The integration of Cloud computing and business process shapes modern enterprises significantly. A service-oriented supply chain is promising to promote the creation of value-added services through different levels of service provisioning. However, existing supply chain as a service rigidly provides one solution for different enterprises, inevitably inhibiting the potential of business collaboration to a higher level. This paper provides an eye view on the cloud computing from the supply chain management perspectives and presents a framework for the implementation of the cloud computing.

Keywords: Cloud computing, Supply Chain, Business Processes.

1. INTRODUCTION

In the order to gain a competitive advantage, the geographically wide spread supply chain network are choosing enhanced information technology for the purpose of increase information flow. Beyond increasing information flow, there is also a need for supply chain

partners to be willing to share information. Integrating supply chain practice with information flow is crucial now a day for improving supply chain performance. As novel information technologies emerge, there is a need to explore their potential in improving supply chain performance. One state of the art information technology currently being adopted by a variety of organizations is cloud computing. Cloud computing can be generally defined as a massively scalable computing power that offers software, infrastructure and platforms on demand using a pay as- you-go basis through the internet. While the open access flow of information to cloud computing technology comes with security concerns, it has been shown to have various benefits for information flow, including cost reduction, massively scalable service and on demand access.

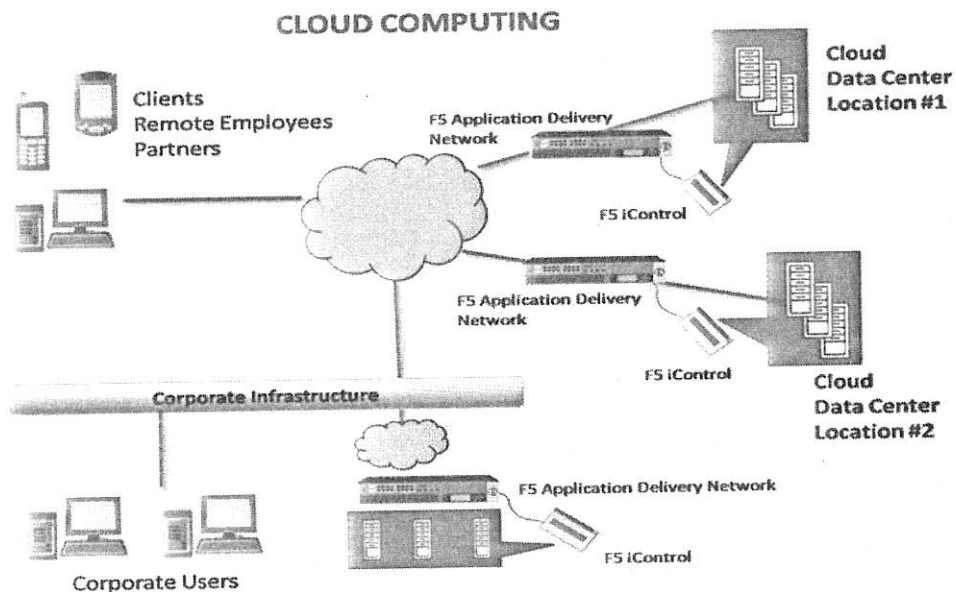


Fig-1 Cloud Computing Model

2. CLOUD COMPUTING

Cloud computing is a computing paradigm in which tasks are assigned to a combination of connections, software and services accessed over a network. This network of servers and connections is collectively known as "the cloud". Computing at the scale of the cloud allows users to access supercomputer-level power. Users can access resources as they need them. The underlying cloud architecture includes a pool of virtualized computers, storage and

networking resources that get aggregated and launched as platforms to run workloads and satisfy their Service-Level Agreement (SLA). Cloud architectures also include provisions to best guarantee service delivery for clients and at the same time optimize the efficiency of resources for providers. Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.

- **SaaS (Software as a service):** It features a complete application offered as a service on demand. A single instance of the software runs on the cloud and services multiple end users or client organizations. The most widely known example of SaaS is salesforce.com.
- **PaaS (Platform as a service):** It encapsulates a layer of software and provides it as a service that can be used to build higher-level services. There are at least two perspectives on PaaS depending on the perspective of the producer or consumer of the services: Someone producing PaaS might produce a platform by integrating an OS, middleware, application software, and even a development environment that is then provided to a customer as a service.
- **IaaS (Infrastructure as a service)** It delivers basic storage and compute capabilities as standardized services over the network. Servers, storage systems, switches, routers, and other systems are pooled and made available to handle workloads that range from application components to high-performance computing applications.

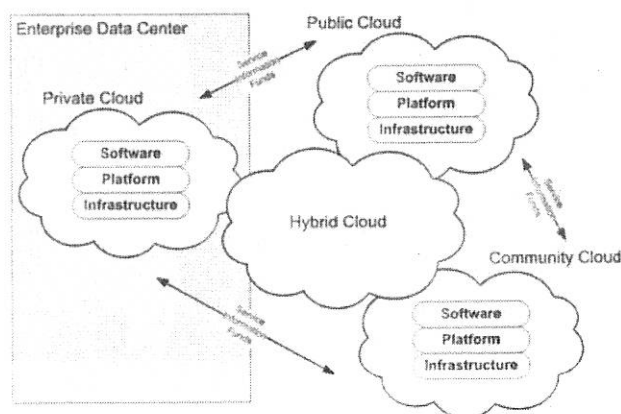


Fig-2 Composite Service Cloud

It has the essential characteristics:

1. On demand service.
2. Elastic Scalability.
3. Sharing information and group collaboration
4. Virtualization technique.

Different Cloud Providers have developed various access models to these services. The access to these Services are based on standard Internet Protocols like HTTP, SOAP, REST, XML and the infrastructure is based on widely used technologies including Virtualization, hosting.

The main units involved in cloud computing model are:

- (i) **Data-centers:** Master data-centers: It is located at cloud provider's administrative ground. User's bookkeeping on pay-as-you-go basis is done here. Slave data-centers: Slave data-centers are situated at geographically scattered locations, and serves to user's request within minimum physical distance.
- (ii) **Users or brokers:** There are two ways for user to communicate with master data center. In the first approach user communicate directly with master data center and in another approach brokers plays the role of intermediate between user and master data center.
- (iii) **Service Level Agreements (SLAs):** Pricing negotiation and Quality of Service (Qos) are settled through service level agreement. Master data centers look into service level agreement whenever it has to host user's need.

3. SUPPLY CHAIN MANAGEMENT:

Effectively and efficiently meeting the needs of the end customer is the main objective of the supply chain management process. Three flows that occur in supply chain which are supported by processes, organizational structures and enabling technologies are : **Material flows:** which represent the movement of physical products from suppliers to customers as well as

the reverse flows for products return s, servicing and recycling. **Financial flows:** which represent the payment schedules. **Information Flows:** which represent the information flow among the supply chain partners i.e. order transmission, order tracking etc.

4. SUPPLY CHAIN MANAGEMENT AND CLOUD COMPUTING:

By leveraging Supply Chain Management with Cloud technology, companies are working in the environment of collaborative computing for supply chain partners.. SaaS-based SCM solutions are ideal for cost- and risk-averse supply communities, who can take advantage of critical advancements in the scalability, security and reliability of today's more mature cloud environment. SCM in the Cloud solution for three reasons:

- 1) Low total cost of ownership.
- 2) Flexibility, with the ability to customize.
- 3) Simple implementation, with minimal technical requirements and easy management.

With a customer-specific, SCM in the Cloud-enabled solution is able to centralize information, bridge process gaps and create real-time, cross-community visibility with their retail customers. And, critically important in the reality of economy-driven business decisions, they're able to accomplish this with a budget-friendly "pay-for-what-you-use" model.

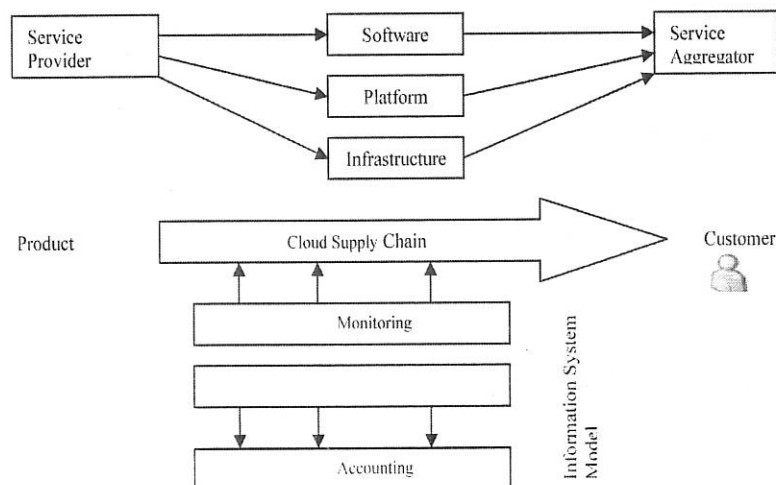


Fig -3 Cloud Supply Chain

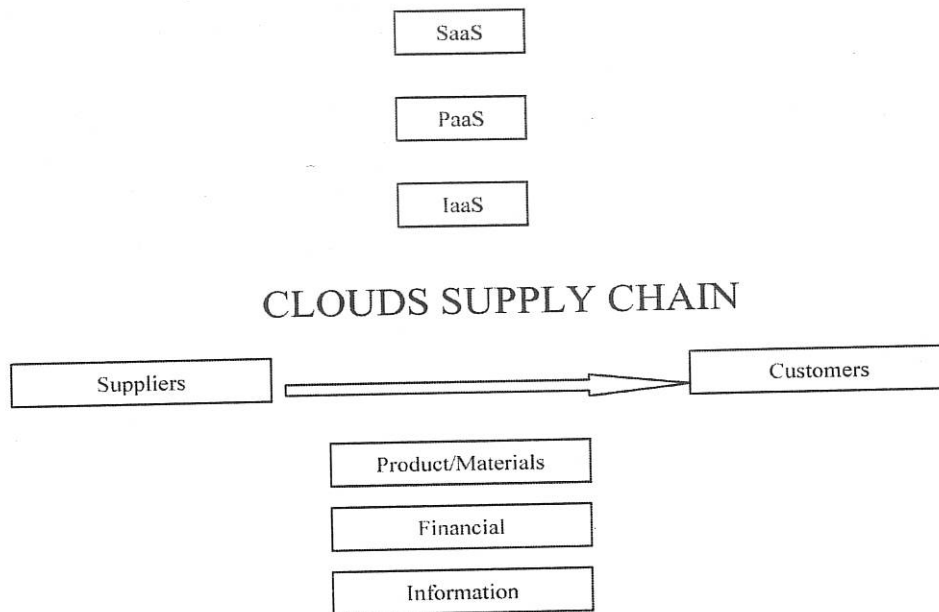


Fig 4. Cloud Supply Chain Components

5. IMPLEMENTATION FRAMEWORK FOR CLOUD COMPUTING IN SUPPLY CHAIN MANAGEMENT:

For cloud computing adoption in supply chain management, organization should align the business strategy and identify the goal among the supply chain partners before implementation. The frame work includes the following phases

5.1 Selection

- The decision about selection of suitable cloud computing infrastructure, architecture, investment decisions and Return on investment is being undertaken in this phase. The appropriate implementation strategies and right tools are selected to match the organizational business priorities and transformation. The other considerations undertaken are updates and technological innovations, documentation, training personnel and looking into the overall performance of the organization.

5.2 Manage

This phase includes

- Acquiring necessary resources, identifying policy for cloud computing adoption with an alignment with the management of supply chain.
- Set operational performance measures for impact of Cloud Computing modules in business operations and metrics like profitability, ROI etc.,
- Performance measures are set up to find out the impact of cloud computing and to find out the necessary changes and improvements made through the cloud computing.

5.3 Design

- Develop the implementation strategies, policies, administration change management procedures, goals, objectives, of the cloud computing in the Supply chain operations.
- Establish a tracking ,reporting strategy , change management process , collaboration strategies for Cloud Computing enablement

5.4 Implement

- Develop new or identify existing improvement opportunities that are appropriate and timely, communicate management's commitment, and the importance of the Cloud Computing enablement and implementation to the workforce.

5.5 Evaluate

- Assess, evaluate and review Cloud Computing security awareness and training program materials and recommend improvements
- Ensure that information security personnel are receiving the appropriate level and type of training

6. CONCLUSION

Cloud Computing is an opportunity for companies to consider changing their IT business model. This requires careful evaluation of the benefits and challenges Cloud Computing brings. It is unlikely many management teams can spend time discussing the fine technical detail regarding Cloud Computing. However, the key issues are straightforward. Businesses should expect the benefits in terms of reduced upfront investment costs, High levels of operational resilience; Systems support availability 24/7, extra processing & storage when needed, Reduction in overall lifetime running costs. Organization should assess correctly their business

needs, existing infrastructure and through understanding of the organization strategic objectives while deciding for cloud computing implementation in supply chain management.

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The share of Odisha in Fourteenth Finance Commission (FFC) in India

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Abstract

Recommendations of the Finance commission in India give a road map of the union and state finances. As an instrument of public policy, the recommendations should be understood by the management students, teachers, citizens and other interested stakeholders in order to understand the fiscal management of the country and state. Recently, the recommendation of the Fourteenth Finance Commission(FFC) has been accepted by the government of India for the year 2015-20. There is a wide scope of the finance commission recommendation to discuss. But this article limits its scope to two recommendations related to devolution of taxes and grants-in aid. While doing so, this article also finds the share of Odisha government from the FFC.

Introduction:

1.1: About Finance Commission:

India is a union of states and like any federations, India has also the vertical and horizontal imbalances²²

Vertical imbalance arises because of the constitution of India has assigned taxes with nation wide base to Union to make the country one economic space and at the same time the constitution has also assigned the states to discharge their functional responsibilities involving expenditure disproportionate to their assigned source of revenue because they are close to the people and sensitive to the local needs and aspirations of the people. Similarly, horizontal imbalances across states arise due to historical background of the states, different endowment of resources and capacity to raise resources of the states

² Article 268,269,270,275,282 and article 293 of Indian constitution

. In order to reduce such imbalances the constitution of India has provided a mechanism of made certain enabling and mandatory provisions for the transfer of resources from the centre to the states. To facilitate such transfer of resources, the constitution of India has provided an institutional mechanism in the form of a **Finance Commission**(under article 280). The finance commission is to be appointed every five years.

1.2: Functions of the Finance Commission:

- To prepare formula for the distribution of the net proceeds of taxes between the Union and the States and the allocation between the States of the respective shares of such proceeds.
- Devising the principles to govern the grants-in-aid of the revenues of the States out of the Consolidated Fund of India
- Measures to augment the Consolidated Fund of a State to supplement the resources of Panchayats and Municipalities based on the recommendations of the respective State Finance Commissions (SFCs).
- Any other matter referred to it by the president in the interests of sound finance

1.3: About 14th Finance Commission(FFC):

The Fourteenth Finance Commission(FFC) was constituted by the President of India under Article 280 of the Constitution on 2 January 2013 to make recommendations for the period 2015-20. Dr. Y. V. Reddy was appointed the Chairman of the Commission. The commission submitted its report to President of India on December 15, 2014. As per the Term of Reference(TOR), the commission made recommendations on the basic tasks assigned to it by the constitution. Also the FFC made suggestions on certain additional tasks assigned by President of India in the interest of sound finance.

1.4: Vertical Devolution:

- The share of tax devolution has been increased to 42 per cent of the divisible pool to fulfill the twin objectives of increasing the flow of unconditional transfers to the States and giving more fiscal space to states to carry out specific-purpose transfers to the States.
- FFC keeps the aggregate transfers at 50pc of the gross revenue receipts of the union.

1.5: Horizontal Balance:

To address the horizontal balance, finance commission has determined the *inter-se* share of the States to correct the differentials in revenue raising capacity and expenditure needs, taking into account the cost disability factors to the extent possible. Criteria, chosen by finance commission for this purpose, can be grouped under, a) factors reflecting needs, such as population and income measured either as distance from the highest income or as inverse, b) cost disability indicators, such as area and infrastructure distance and c) fiscal efficiency indicators, such as tax effort and fiscal discipline. While the weightage assigned to population has declined considerably, weightage assigned to income distance and efficiency factors has increased considerably in recent years. However, in FFC, the weightage for the population has been increased to 27.5 as demographic change, a first timer criterion is also a component of population with 10 per cent and population of 1971 with 17.5 per cent weightage.

Table 1.1: Criteria and Weight for sharing the Union Tax Revenue in 14th Finance Commission

Criteria	Importance	Weight (Per Cent)
Population	Public goods and services are to be provided to the entire population to ensure equality in per capita transfers across states. Like all previous FCs, FFC has taken the population figures of 1971 for determination of devolution of taxes and duties and grants-in-aid.	17.5
Demographic change	For the First time the FC considered demographic changes since 1971. This criterion is best fulfilled by 2011 census data which captures the migration and age structure of the population.	10
Area	The use of area of a state as a criterion for determining its share emanates from the additional administrative and other costs that a state with a larger area has to incur in order to deliver a comparable standard of services to its citizens	15

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Income distance	Successive Finance Commissions have used the distance of actual per capita income of a State from the State with the highest per capita income as a measure of fiscal capacity. The 13th finance commission, however, introduced a new criterion based on distance between estimated per capita taxable capacity for each State and the highest per capita taxable capacity and used this for <i>inter-se</i> devolution. Considering the non-linear relationship between income and tax, The FFC decided to revert to the method of representing fiscal capacity in terms of income distance followed by 12th finance commission. For correcting differential fiscal capacities and enabling poorer states to meet better the needs for providing public goods and services, it appears to be the preferred indicator as it imparts progressively in distribution. This is calculated by taking a three-year average (2010-11 to 2012-13) per capita comparable gross state domestic product (GSDP) has been taken for all the twenty-nine States. Income distance has been computed by taking the distance from the State having highest per capita GSDP. Three states having highest per capita income, namely Goa, Sikkim and Haryana are considered.	50
Forest Cover	It is recognized that States have an additional responsibility towards management of environment and climate change, while creating conditions for sustainable economic growth and development. A large forest cover provides huge ecological benefits, but there is also an opportunity cost in terms of area not available for other economic activities and this also serves as an important indicator of fiscal disability.	7.5

Source: Report of Fourteenth Finance Commission, volume-1

Table 1.2: A comparative illustration of Criteria and Weight used in 14th, 13th and 12th Finance Commission for sharing the Union Tax Revenue

14th Finance Commission		13 th Finance Commission		12 th finance Commission	
Criteria	Weight (Per Cent)	Criteria	Weight (Per Cent)	Criteria	Weight (Per Cent)
Population	17.5	Population	25	Population	25
Demographic change	10	Area	10	Area	10
Area	15	Fiscal Discipline	17.5	Fiscal Discipline	7.5
Income distance	50	Fiscal Distance capacity	47.5	Per Capita income distance	50
Forest Cover	7.5	-----	-----	Tax effort	7.5

Source: 12th, 13th and 14th Finance commission Reports, Government of India

A review of the above criteria and weights reveal that for the first time, demographic changes as a criterion, is considered by the FFC for the devolution of the funds. Similarly forest cover has also been added with 7.5 weight in the FFC. This criterion was not used by 12th and 13th finance commission. The weight for the population was reduced from 25 in 13th finance commission to 17.5pc in FFC. Criteria like Fiscal discipline and Fiscal distance capacity have been done away with in the FFC. However, in the FFC, population has been given more weightage

Table 1.3: Horizontal Devolution of Centre to states:

States	Share from the 14 th Finance commission	Share from the 13 th Finance commission	Gain/Loss
Andhra Pradesh	4.305	6.937	-2.632
Arunachal Pradesh	1.370	0.328	1.042
Assam	3.311	3.628	-0.317
Bihar	9.665	10.917	-1.252
Chhattisgarh	3.080	2.47	0.610
Goa	0.378	0.266	0.112
Gujarat	3.084	3.041	0.043
Haryana	1.084	1.048	0.036
Himachal Pradesh	0.713	0.781	-0.068
Jammu & Kashmir	1.854	1.551	0.303
Jharkhand	3.139	2.802	0.337
Karnataka	4.713	4.328	0.385
Kerala	2.500	2.341	0.159
Madhya Pradesh	7.548	7.12	0.428
Maharashtra	5.521	5.199	0.322
Manipur	0.617	0.451	0.166
Meghalaya	0.642	0.408	0.234
Mizoram	0.460	0.269	0.191
Nagaland	0.498	0.314	0.184
Odisha	4.642	4.779	-0.137
Punjab	1.577	1.389	0.188
Rajasthan	5.495	5.853	-0.358
Sikkim	0.367	0.239	0.128
Tamil Nadu	4.023	4.969	-0.946
Telangana	2.437	0	2.437
Tripura	0.642	0.511	0.131
Uttar Pradesh	17.959	19.677	-1.718
Uttarakhand	1.052	1.12	-0.068
West Bengal	7.324	7.264	0.060
All States	100.00	100.00	0.000

Source: 14th Finance Commission Report Volumt-1

The above horizontal tax devolution from the centre to state shows that the state's share has come down to 4.642 per cent in fourteenth finance commission's award against 4.779 per cent. Therefore, Odisha has a loss of share of 0.137pc in the tax devolution framework. Odisha will get **Rs.1,83,274.8** from the union tax proceeds during 2015-20.

1.7: Grants-in Aid:

Normally, the finance commission recommends grants-in aid for five purposes-. Revenue deficit, disaster relief, local bodies, sector-specific schemes and state-specific schemes. But FFC proposed to give grants-in aid on three aspects like **post devolution Revenue deficit Local Government, Disaster management and.**

1.7.1: Four principles for Grants-in-aid:

1. The devolution of taxes from the divisible pool should be based on a formula which should, to a large extent, offset revenue and cost disabilities
2. The assessment of expenditures should build in additional expenditures in the case of those States with per capita expenditure significantly below the all-State average. The assessment of revenues should build in the scope for additional revenue mobilisation based on current tax-GSDP ratio relative to the all-State average. This will enable fiscally-disadvantaged States to upgrade their services without earmarking or specifying sectors.
3. If the assessed expenditure need of a State, after taking into account the enabling resources for augmentation, exceeds the sum of revenue capacity and devolved taxes, then the State concerned will be eligible to receive a general purpose grant-in- aid to fill the gap.
4. Grants-in-aid for state-specific projects or schemes will not be considered, as these are best identified, prioritised and financed by the respective States.

Table 1.4: Grants-in- aid to states in FFC (Rs in Crores)

1	Local Government	2,87,436
2	Disaster Management	55,097
3	Post-devolution Revenue Deficit	1,94,821
	Total	5,37,354

Source: 14th Finance Commission Report Volumt-1

1.8: Post Devolution Revenue Deficit Grant-in-aid:

This grant-in aid is given to those States which are projected, after due assessment of resources and needs by the finance commission, to have a post-devolution non-Plan revenue deficit in any year. Since the FFC has taken a comprehensive approach to the assessment of expenditure needs by taking both Plan and non-Plan expenditure in the revenue account, (unlike previous finance commissions), therefore the grants are intended to cover the entire post-devolution revenue deficit as assessed by the commission. This grant-in aid is the largest component of the grant-in-aid till 13th finance commission. Only in 13th finance commission, the grants to local bodies formed the largest component of grants-in-aid.

Table 1.5: Grants-in-aid for Revenue Deficit (2015-20) *(Rs in Crores)*

State	2015-16	2016-17	2017-18	2018-19	2019-20	2015-20
Andhra Pradesh	6609	4930	4430	3644	2499	22113
Assam	2191	1188	Nil	Nil	Nil	3379
Himachal Pradesh	8009	8232	8311	8206	7866	40625
Jammu & Kashmir	9892	10831	11849	12952	14142	59666
Kerala	4640	3350	1529	Nil	Nil	9519
Manipur	2066	2096	2091	2042	1932	10227
Meghalaya	618	535	404	213	Nil	1770
Mizoram	2139	2294	2446	2588	2716	12183
Nagaland	3203	3451	3700	3945	4177	18475
Tripura	1089	1089	1059	992	875	5103
West Bengal	8449	3311	Nil	Nil	Nil	11760
Total State	48906	41308	35820	34581	34206	194821

Source: Report of 14th Finance Commission Vol.1

FFC awarded the revenue deficit grants to **seven** states like Andhra Pradesh, Himachal Pradesh, Jammu and Kashmir, Manipur, Mizoram, Nagaland and Tripura for each of the years during 2015-20. In addition, there are four States - **Assam, Kerala, Meghalaya, and West Bengal** - that will need a revenue deficit grant for at least one of the years of our award

Table 1.6: Comparison of assessment of the expectation and share of the Odisha government from revenue deficit grants –in-aid from FFC

(Amount in Rs. in crore)

Grants-in-aid	Projection by Odisha government	Assessment by FFC	Remark
Pre-devolution revenue deficit	3,38,498	1,26,511	No revenue deficit is available to Odisha as FFC found the post-devolution revenue as surplus for the state.
Pre-devolution non-plan deficit	1,87,518	Not considered	

Source: Report of 14th Finance Commission

As per the assessment of the FC-XIV, the Pre-Devolution Revenue Deficit for Odisha has been Rs 126511 crore. However, as per the projections of Revenue and Expenditure Submitted by Odisha State Government for 2015-16 to 2019-20, the Pre-Devolution Revenue Deficit was Rs. 338498 crore causing a gap of Rs.111987 crore in the projections will bound to create dissent in Odisha. Similarly the pre devolution Non plan Revenue deficit was projected by Odisha as Rs 187518 crore. But this deficit is not considered by the finance commission while devising principle for sharing Grants-in aid among states. States like Odisha has not got any benefit of the post devolution revenue deficit grant-in aid from the 14th finance commission as in the assessment of the commission, Odisha has a post devolution revenue surplus

1.9: Disaster Relief

The 9th finance commission recommended a dedicated fund for calamity relief, which led to the establishment of a Calamity Relief Fund (CRF) in each State. The 10th finance commission recommended the setting up of a National Fund for Calamity Relief (NFCR) to assist a State affected by a calamity of rare severity through contributions from the Union and State Governments. The 11th finance commission modified this and recommended the setting up of a National Calamity Contingency Fund (NCCF), with an initial corpus of Rs. 500 crore. The funds were to be recouped by levying a special surcharge on Central taxes. The 12th finance commission continued this arrangement. With the enactment of the Disaster Management Act, 2005 and consequential changes in the design and structure of disaster management, the

13th finance commission recommended the merger and transfer of NCCF balances as on 31 March 2010 to the National Disaster Response Fund (NDRF), which was accepted and notified by the Union Government. Since 2010-11, the Union Government has been financing the NDRF through the levy of a cess and the State Disaster Response Fund as grants-in-aid, based on the recommendations of the 13th finance commission. FFC allocated an amount of Rs. 55,097 crore with 90 per cent contribution from the union government and 10pc from the states.

Table 1.7: State Disaster Response Fund (SDRF) 2015-20

Sl.N	State	2015-16	2016-17	2017-18	2018-19	2019-20	Total 2015-20
1	Andhra Pradesh	440	462	485	509	534	2429
2	Arunachal Pradesh	52	55	57	60	63	287
3	Assam	460	483	507	532	559	2541
4	Bihar	469	492	517	543	570	2591
5	Chhattisgarh	241	253	265	278	292	1329
6	Goa	4	4	4	4	4	20
7	Gujarat	705	740	777	816	856	3893
8	Haryana	308	323	339	356	374	1699
9	Himachal Pradesh	236	248	260	273	287	1304
10	Jammu & Kashmir	255	268	281	295	310	1408
11	Jharkhand	364	382	401	421	442	2010
12	Karnataka	276	290	305	320	336	1527
13	Kerala	185	194	204	214	225	1021
14	Madhya Pradesh	877	921	967	1016	1066	4848
15	Maharashtra	1483	1557	1635	1717	1803	8195
16	Manipur	19	20	21	22	23	106
17	Meghalaya	24	25	27	28	29	134
18	Mizoram	17	18	19	20	20	93
19	Nagaland	10	10	11	11	12	55
20	Orissa	747	785	824	865	909	4130
21	Punjab	390	409	430	451	474	2153
22	Rajasthan	1103	1158	1216	1277	1340	6094
23	Sikkim	31	33	34	36	38	172
24	Tamil Nadu	679	713	748	786	825	3751
25	Telangana	274	288	302	317	333	1515
26	Tripura	31	33	34	36	38	171
27	Uttar Pradesh	675	709	744	781	820	3729
28	Uttarakhand	210	220	231	243	255	1158
29	West Bengal	516	542	569	598	628	2854
	Total	11079	11633	12215	12826	13467	61219

Source: Report of 14th Finance Commission

During 2015-20, the Odisha government will get a total of Rs.4130 crore out of which the state share will be Rs.413 crore and union share is Rs.3717 crore.

1.10: Local Bodies: Since the 10th finance commission, grants for local bodies has been awarded on the basis of the recommendation of individual state finance commissions(SFCs). The distribution of grants for the local bodies should give 90% weight to 2011 population and 10% weight to area. The commission recommended grants in two ways-a basic grant and a performance grant. The ratio of basic to performance grant is 90:10 for Gram Panchayats and 80:20 for urban local bodies.

For Odisha, the FC-XIV allocated Rs 885.03 crore for Rural Local Bodies during 2016-20 and Rs. 354.50 crore for the Urban local bodies during 2016-20.

1.11: Sector-specific: Starting from the 1st finance commission, which provided special grants for expanding primary education to states having very low school enrolment ratio, successive finance commissions have recommended sector-specific grants. The 12th finance commission observed that grants-in-aid can be used to look at certain common, as well as specific, needs of the States. The 13th finance commission listed three objectives in recommending grants. (i) to reduce disparities in the standards of various administrative and social services across states. (ii). to enable particular states to meet special financial burdens emerging from their peculiar circumstances. (iii). to provide resources for specific activities considered to be national priorities. The FFC has categorized the sectors into general administration (including judiciary and police), environment (forests), maintenance (irrigation, roads and bridges) and social sector (education, health, drinking water and sanitation). *Except accepting the proposal of Rs. 9,749 crore of the Department of Justice of Government of India which covers areas like reduction in pendency of cases, re-designing existing court complexes to make them more litigant friendly, enhancing access to justice and capacity building of personnel, the commission has not recommended any specific purpose grants for others including social sectors.*

1.12: State specific grants: 6th finance commission started the practice of recommending grants-in-aid for addressing the specified needs of the states till 13th finance commission. In the opinion of the 13th finance commission, these grants in aid are relevant where they address deprivation, generate significant externalities (especially environmental externalities), meet the needs of the marginal groups or areas and encourage policy innovations. However, the FFC desisted from awarding state specific grants. Five key considerations have influenced

the decision of FFC while taking a decision not to award funds for the state specific needs. They are: (i) the state-specific grants recommended by previous finance commissions constitute a small fraction of the proposals submitted by the States. (ii).the state-specific grants were not allocated on the basis of any formula or any uniform principle. (iii) state-specific schemes are best identified, prioritised and financed at the level of the State Government. (iv).State Governments repeatedly raised the issue of the need for flexibility in the use of state-specific grants during its discussions with state governments. This need for flexibility arises as there is a minimum time lag of two years between the time state-specific schemes are originally proposed to the Finance Commission and when the implementation process actually begins. Due to changed circumstances, there is often a need to revisit the originally recommended schemes. This flexibility is not possible in grants recommended by finance commissions. After considerable deliberations, we have come to the conclusion that grants for both sector-specific and state-specific schemes by the Finance Commission are not necessary. *Similarly, for state specific grants, no categorization of states has been made by the commission.* However, for sector specific and state specific grants, the commission has suggested to redesign and expand the scope of the Inter State Council for ensuring the cooperative federalism.

Table 2.1: Odisha's share from the 14th Finance Commission during 2015-20

(Rs. in Crore)

Demand Heads	Share of Odisha during 2015-20
Tax devolution	183274.8
(a)Post Devolution Revenue deficit grants-in aid	Nil
(b)Union share for Disaster grant-in aid	3717
C. Grants in aid for panchayats and municipalities	10622
As per the department of Justice(Government of India)grant-in-aid	405.67

Source: Report of 14th Finance Commission

1.4: Conclusion:

The article concludes with the Highlights of FFC: They are:

- Share of net proceeds of union taxes is increased to 42 percent from existing 32 per cent.
- An amount of Rs. 39,48,187 crore from the union tax proceeds are to be given to the states and Union Territories.
- Total grants to the states recommended by the FFC is Rs. 20,15,297 crore out of which Rs. 5,37,354 crore is finance commission grants, which is 26.7 of the total grants. Other expected transfers to the states are Rs. 14,77,943 crore which is 73.33 per cent of the total grants.
- Out of Rs. 53,73,54 crore Grants-in-aid, Rs. 1,94,821 crore to only 11 states as revenue deficit grants, Rs. 55,097 crore as disaster relief grant (this is union share which is 90 pc of aggregate corpus of State Disaster Relief Fund of Rs. 61,219 crore) and Rs. 2,87,436 crore as grants to local bodies to states. However, the grants-in-aid is contingent upon the revenue raising and fiscal consolidation measures taken by the states.
- The commission only considers the plan revenue expenditure while assessing revenue deficit grants. Continuity of gap filling approach³ for awarding post devolution revenue deficit grants.
- No distinction between Plan and non-Plan expenditure but continuity of the distinction between revenue and capital expenditure.
- The practice of analyzing the Non-plan Revenue expenditure of union and states by the finance Commissions has been stopped.
- Local bodies are required to be spent the grants only on the basic services within the functions assigned to them as per the constitution. Distribution of grants for the local bodies should give 90% weight to 2011 population and 10% weight to area. The commission recommended grants in two ways—a basic grant and a performance grant. The ratio of basic to performance grant is 90:10 for Gram Panchayats and 80:20 for urban local bodies.
- For the first time two new criteria are used by the FC-XIV for determining the shares of the states. They are demographic changes and forest area.

- For horizontal distribution of resources among states, no categorization of states like special category is considered
- FFC desist from awarding sector/state specific grants.
- FFC suggests institutional mechanisms for better monitoring of fiscal rules and to achieve “co-operative federalism”.

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(Footnotes)

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³ Grants recommended by the Finance Commissions are predominantly in the nature of general purpose grants meeting the difference between the assessed expenditure on the non-plan revenue account of each State and the projected revenue including the share of a State in Central taxes. These are often referred to

Impact of Intrinsic Work Motivational Factors on Employee Retention- With Special Reference to Gen Y:-

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Abstract

Employee commitment, high productivity and retention strategies are rising as the most serious human resource management challenges of the upcoming future driven by employee loyalty concerns and heavy competition to retain key talent. In this scenario employee turnover has a significant impact on decline of productivity and failure of corporate plans. The significance of motivation in retaining key employees cannot be overlooked. Motivation is an internal energy that persuades an individual to achieve his or her goal and to be retained in the organization. An employee is extrinsically motivated through reinforcement contingencies but this is not enough, so it should be accompanied by intrinsic motivation which includes interest on job and making it pleasurable. Individual motivation tends to differ across subject areas, groups and this field specificity increases with age. Each generation has their own mindset towards motivation. In today's work place organizations are facing the challenge of satisfying the need of four different generational cohorts. The newest generation in the work place is generation y which has different values and requirement in comparison to its previous generations. It is important for the organization to recognize the specific needs and values which motivates them in order to have an efficient workforce. This paper aims to focus particularly on a review of extant literature on generation y and their preference for motivation. Conclusions and implications for further research have been drawn from the literature reviewed.

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Key Words-Intrinsic Motivation, Extrinsic Motivation, Employee Retention and generation y

Introduction

Irrespective of recruitment expenditure the problem of right people at right place at right time is a burning topic in the corridor of human resource management. An adverse economic situation post 2001 forced companies to retrench employees. This created a highly speculative work environment and gave rise to chaos, mistrust, confusion among workers. In these situations human resource managers were given the difficult task to retain employees who had zero faith in them (Mitchell, 2012). To cope up with this kind of aggressive situation the managers could not depend upon the obsolete bookish theories rather they have to understand the market realities, the mindset of the workers and innovate techniques that are creative and flexible in nature (Aamri, 2010). Each employee belongs to different environment with respect to culture, language, family background, economic conditions thus creating a vast workforce diversity to deal with. Their belief and value structure differ not only cross-sectionally but also in time trend.

Traditional theorists support extrinsic motivational factors that dominate employee performance but new theorists like that of Deci and Ryan (1985) support the existence of intrinsic motivational factors that inspires employees in remaining creative, skilled and talented. The current paper is an examination of extant literature reviewing the impact of motivational factors-extrinsic or intrinsic on employee performance and employee retention with particular reference to Generation Y employees. The aim of this review is mainly to draw inferences and directions for further research.

Some Statistics

As per Indian Journal of Applied Research March 2014, India is expected to lead the turnover rate in Global scenario with 26.9% in 2013 and 27.5% in 2014 respectively.

Turnover Rates in Major IT Firms in 2013 are

- Infosys-17.3%
- TCS- 10.9%
- Wipro-21.1%
- Tech mahindra-17%
- Accenture-12%
- Polaris-18.2%
- Oracles-17%

Causes of labor turnover

- Need of Opportunities for Professional Development
- Insufficient Compensation
- Monotony/Lack of Challenge
- Deprived Work Life Balance
- Job Stress and unreasonable Treatment
- **Lack of motivation**
- **Work environment:**
- **Lack of vision**
- **Lack of employee engagement programs.**
- **The job did not meet opportunities**
- **Feeling undervalued**
- **freezing Praises and promotions**
- **Coaching and feedback are lacking**

Need of Work Motivation

- Human Capital Management
- Higher Productivity
- Greater Employee Satisfaction
- Raising employee Efficiency
- A Higher Chance of Meeting The Company's Goals
- Better Team Harmony
- Workforce Stability
- Higher Quality

- Not Resistant to Changes
- Brings Closure To Organization
- Empowerment
- Innovation
- Creativity And Adaptability
- Optimistic And Challenging Attitude

Review of Literature

Daft and Noe (2001) - This research article highlights motivation as the strength either within or external to a person that energizes, directs, and maintains behavior. Motivated employees do not shy back from doing something which is away from the expected traditional behavior in the working environment. Their motivation directs them to perform the task irrespective of lack of short term rewards.

Latham (2004) - A motivated employee may not perform well if the other members in the group are not dynamic. Human behavior depends on the response that he gates from the society for his every action and accordingly carries forward the same pattern through out his life. Researchers have very often focused on extrinsic factors because of its easy accessibility and simple understanding .Selecting variables to measure intrinsic motivation has always been debatable.

Anne and Barry (2005) - Psychologists have tried to provide a scientific reason behind why people behave the way they do in various working conditions. They have suggested that motivation is the factor that energies and provides zeal to react or proceed in an activity.

Bennet (1995) – The theories of motivation can be bifurcated in to content theories and process theories .Content theories focuses on what of motivation i.e. what are needs that motivate an employee in an organization to provide higher productivity and process theories focuses on how of motivation i.e. how the motivation process takes place for an individual.

Pinder (1998) - The degree of work motivation towards successful completion of goal varies from individual to individual within the same organization because it not only depends on external environmental factors but also is generated from within each individual.

Snr Asiamah (2010) -In his dissertation report he highlights some common motivational factors that leads to job satisfaction and employee retention in organizations which results into reduction in labor turnover and increased revenue collection.

Leadership Management

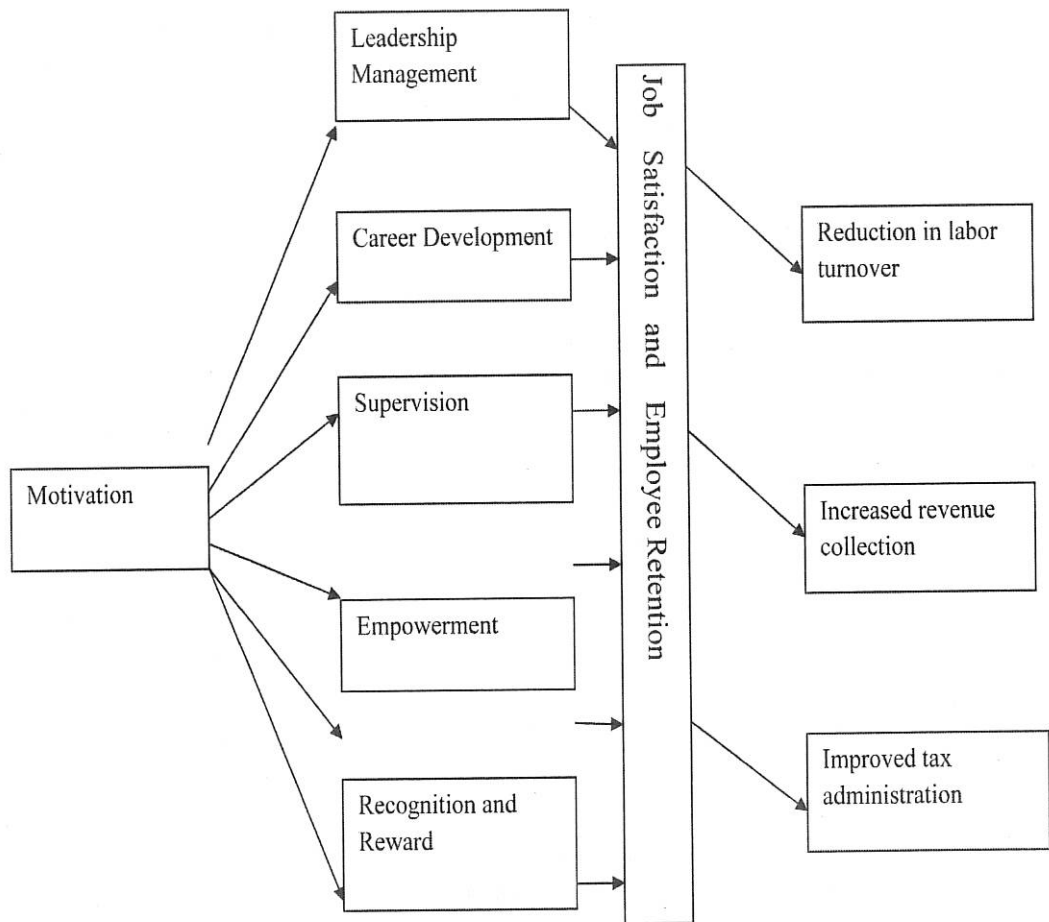


Figure 1 –Motivational factors facilitating employee retention
Adapted from Snr Asiamah, (2010)

Thomas (2000) - Management researchers and theorists' thought are dominated by studies on extrinsic motivators but such factors fails to justify the purpose completely. These factors needed to be complemented by intrinsic factors as it is the demand of today's environment. Deci and Ryan (1985) - They are the pioneers of extrinsic and intrinsic motivation theory. Activities that provide reward and pleasant in nature are grouped under intrinsic motivation and the activities which give immediate reward or avoids a punishment grouped under extrinsic motivation.

Deci and Ryan (2008)-In their theory which is more popularly known as Self-Determination theory (SDT) highlights the key difference between motivations ,whether they are autonomous or measured. Autonomous motivation is defined as being volitional, which means actions are self-directed and self-governed. Preference is the key issue in autonomous motivation. Controlled motivation is shaped by situations where pressure or demand on the individual is from forces external to the self. They also believe that the vast mainstream of the foundations of motivation are accredited to socio-cultural conditions pertinent to the individual. They believe that ecological factors are more vital to the study of motivation than the actual bio-psychological devices accountable for them.

Deci and Ryan (2008) - The SDT model recognizes the subsistence of intrinsic and extrinsic motivators. The model is based on the supposition that people are naturally inquisitive energetic and excited to succeed because these motives are sustaining and rewarding. This basically describes intrinsic motivation where stimulating, narrative experiences, and opportunities for mastery of trials are answerable for behavior. This natural need for growth is an important element of other motivation theories, such as Maslow's (1943) self-actualization, Herzberg's (1987) motivation factors, and McGregor's (1966) Theory Y. Extrinsic motivation is accountable for behavior for which the aim is to obtain a tangible payment or to avoid a punishment.

Reeve (2001) defined intrinsic motivation as an inner drive to search for self fulfilling rewards and satisfaction from activities that engage use of knowledge, skills, and abilities in the quest of personal as well as professional interests. Intrinsic drivers are innate and impulsive as they relate to the psychological predispositions towards meeting growth needs, enhancing personal illumination and addressing challenges of the unknown.

Thomas (2000) stated that intrinsic motivation emerged when logic and self management influenced employees to search for opportunities nurturing internal satisfaction and a sense of achievement. Intrinsic motivation flourished in an environment where employees created growth opportunities and risk taking was a predictable behavior.

Deci and Flaste (1996) defined intrinsic motivation as doing a task or activity for pure joy, whether or not rewards are in the offering. This type of motivation is generated from within by factors related to achievement, accomplishments, self-satisfaction and personal proficiency.

Hackman and Oldham (as cited in Boonzaier, Ficker, & Rust, 2001) formulated the job characteristics model (JCM) that has been defined as a vital resource for analyzing job characteristics and job design. The model, based on harmonizing job characteristics with psychological states influencing personal and work outcomes, has served as an essential concept in human resource management as well as organizational design processes.

The Oldham–Hackman model described internal work motivation (or intrinsic work motivation) as “employee experiences positive internal feelings when performing efficiently on the job and negative internal feelings when doing badly” (Boonzaier et al., 2001, p. 12). As Robbins (2001) stated, “The model demonstrates that inner rewards are obtained by individuals as they learn (knowledge of results) that they individually (experienced responsibility) have performed well on a task that they care about (experienced meaningfulness)” (p. 448). The Oldham–Hackman model illustrated the role of internal work motivation in achieving job satisfaction based upon the psychological impact of meaningful work and personal responsibility along with feedback related to process (Boonzaier et al.). Personal and work outcomes incorporated high levels of job satisfaction, intrinsic work motivation and efficacy on the job. The Oldham–Hackman model is generally viewed as applicable to employees of all ages.

Zineldin (2000) - Retention is a difficult concept and there is no single formula to retain employees in the organization .It can be defined as an obligation to continue in the job or with the organization on continuous basis.

Logan (2000) - Common retention factors can be categorized in to organizational culture, communication, strategy, pay and benefits, flexible work schedule and career development systems.

Agrela, et al (2008) – organizations need to focus on the retention factors as it leads to growth and success of the organization. According to them retention strategies should be oriented towards satisfying need of the employees and organizational change as it enhances employee productivity and excellence.

Boomer (2009) – Retention factors must include need and wants of employees at any age as it will leads to job satisfaction, loyalty and commitment.

Kupperschmidt (2000) - Generation can be defined as employees coming under a certain range of age, location they live and experiences they face in different developmental stages.

Twenge et al., (2010) -To generation Y, work is a means to an end; essentially they work to live as opposed to live to work.

Tay (2011) – In the previous era senior employees did not have the opportunity to receive specialized training before joining the job but the current generation (y) has the dual benefit of pre job training as well as sophisticated education. This makes them more professional and flexible towards change and work force diversity. They are great collaborators and they are motivated by team work and have longer retention period. Generation y people are more technologically advanced and enjoy challenging competition which stimulates and amuses them.

Yusoff & Kian (2012) - They have suggested looking at the characteristics of generation y which includes focused on self career, optimistic, pro diversity, team player, technology savvy, fun loving, causal and value prompt recognition and reward it can be suggested that if generation y gets appropriate intrinsic motivation they will flourish in a new direction to achieve organizational excellence.

After the review of literature certain gaps in the extant literature have been identified.

Research Gaps

- Despite the importance of the topic extrinsic work motivation has been the focal point for researchers involved in motivation.
- Intrinsic motivation researches are mostly theoretical and lack empirical backing.
- Managers in the past emphasized on extrinsic factors like money, company policy, and working conditions to motivate subordinates.
- Extrinsic motivation is the sole motivator in all generations.

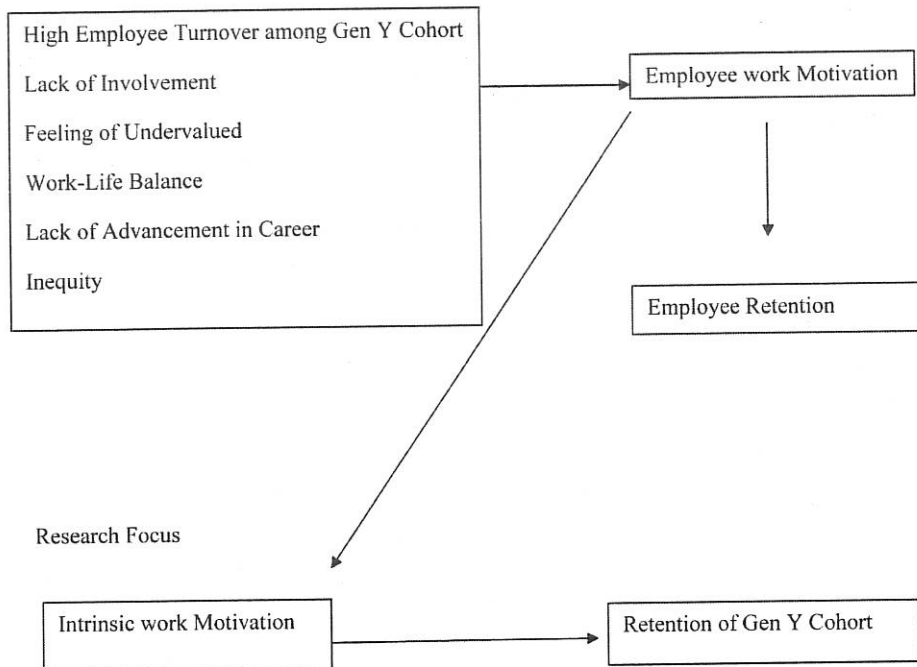


Figure 2-Author's own Conceptual Framework

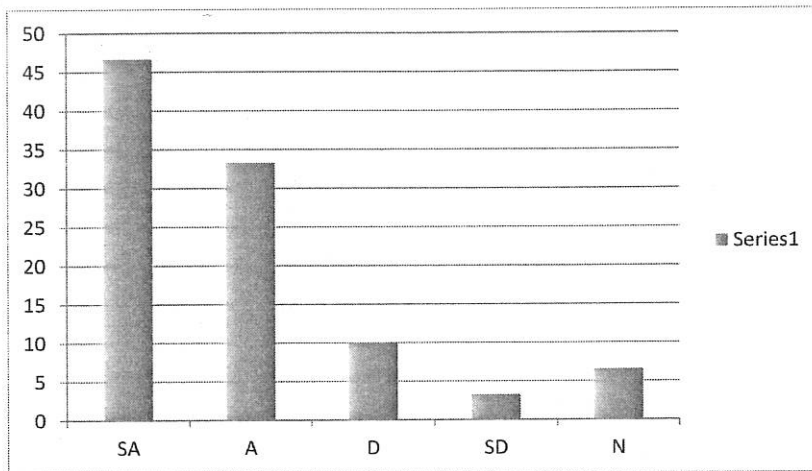
Research Objectives:

- To study the impact of work motivation on employee retention.
- To study the impact of intrinsic work motivational factors on employee retention among gen y cohort.

Research Methodology

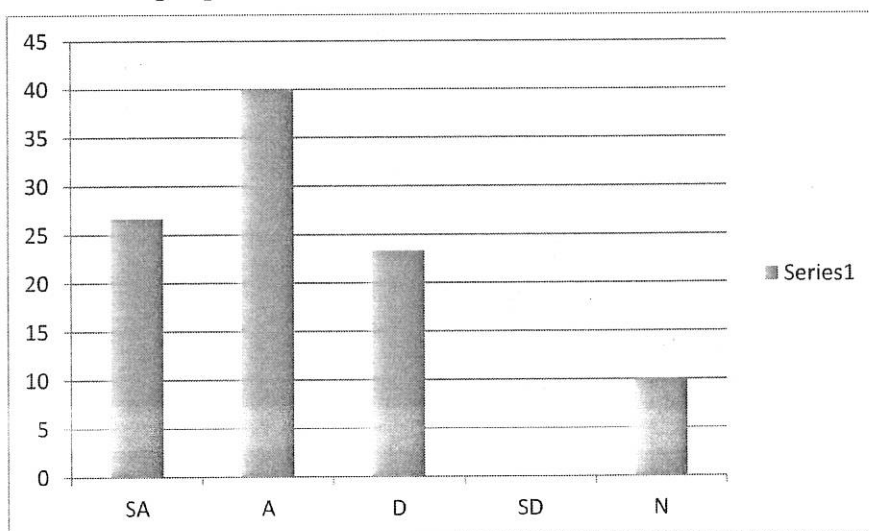
The paper will focus only on generation y employees. The paper shall be based on questionnaire collected from primary sample survey, consisting of 30 generation y employees working in IT sector. The questionnaire was framed with the intent that employees can put their desired value against each variable. The range of the value was 0% to 100%, based on their agreement that signified a full 100% or disagreement of 0 %.

Challenging Work-Challenging work is definitely a motivating factor for the generation y employees if it provides new opportunities and platform for progress as 46.6% people strongly agreed, 33.3% people agreed, 10% people disagreed, 3.3% people strongly disagreed and 6.6% people remained neutral in this concept.



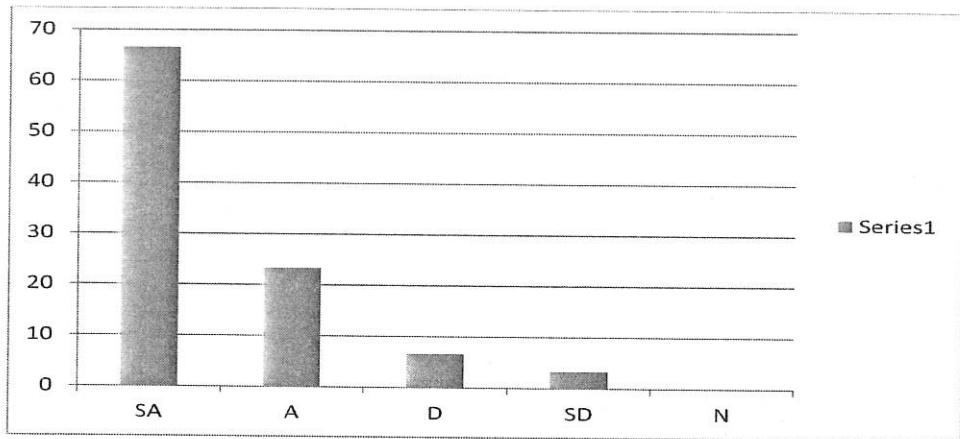
Curiosity

Curiosity is an important trait of a genius. I don't think we can find an intellectual giant who is not a curious person. **It makes our mind active instead of passive, makes our mind observant of new ideas, opens up new worlds and possibilities and brings excitement into our life.** 26.6% people strongly agreed, 40% people agreed, 23.3% people disagreed and 10% people remained neutral in this concept.



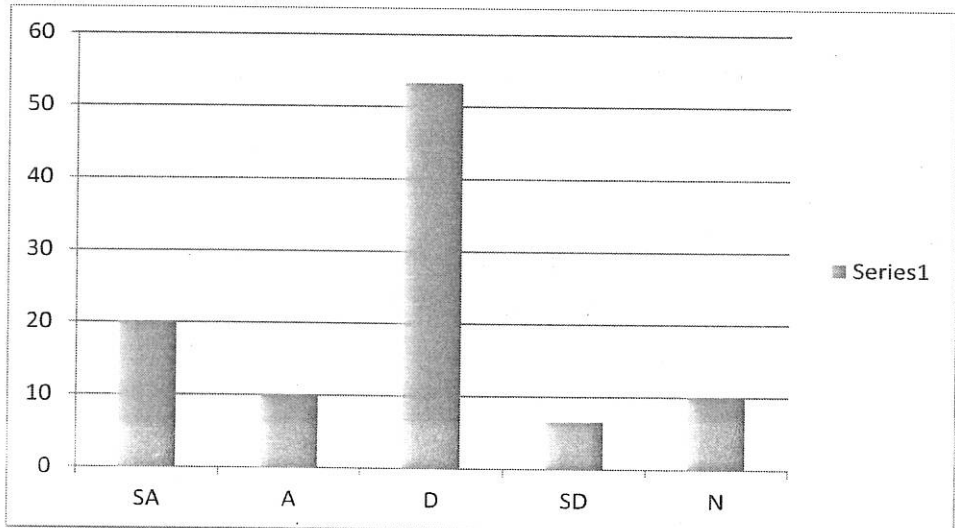
Control

A third factor influencing individual motivation is control, which refers to the basic human tendency to seek to control one's environment. {This is an individual factor because a person can feel in control without involving other people. Of course interpersonal factors such as winning a competition or gaining recognition could contribute to the feeling of control.} 66.6% people strongly agreed, 23.3% people agreed, 6.6% people disagreed and 3.3% people strongly disagreed with this factor.



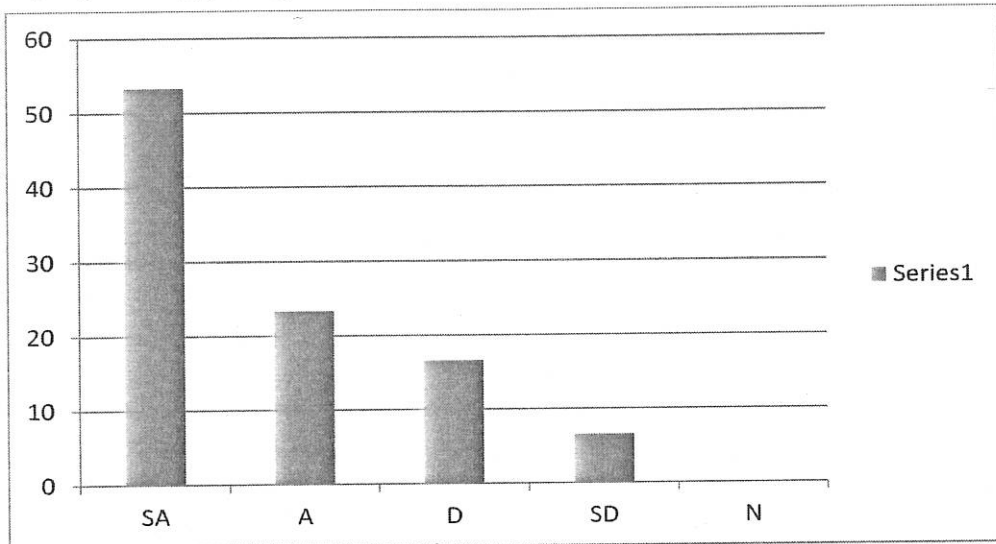
Fantasy

Employees use mental images of things and situations that are not actually present to stimulate their behavior. 20% people strongly agreed, 10% people agreed, 53.3% people disagreed, 6.6% people strongly disagreed and 10% people remained neutral with this factor.



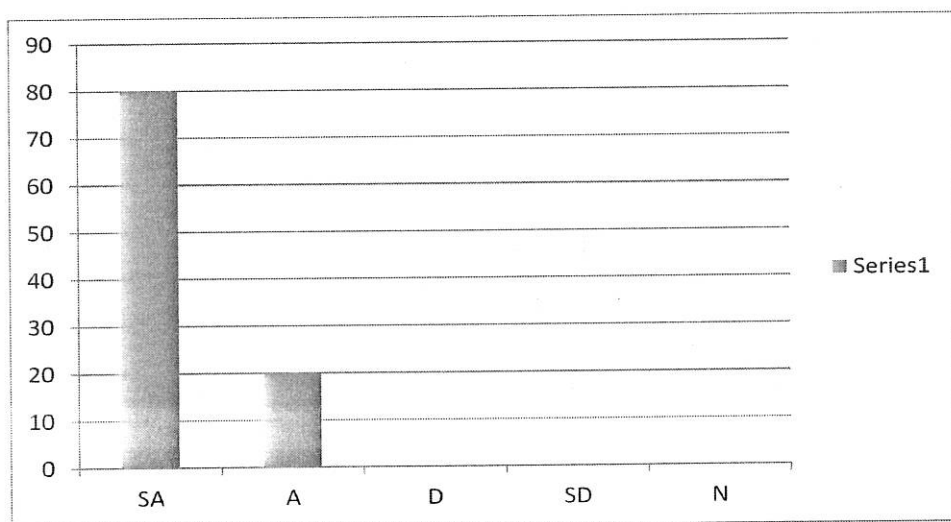
Competition

Employees experience satisfaction by comparing their performance favorably to that of others. 53.3% people strongly agreed, 23.3% people agreed, 16.6% people disagreed and 6.6% people strongly disagreed with this factor.



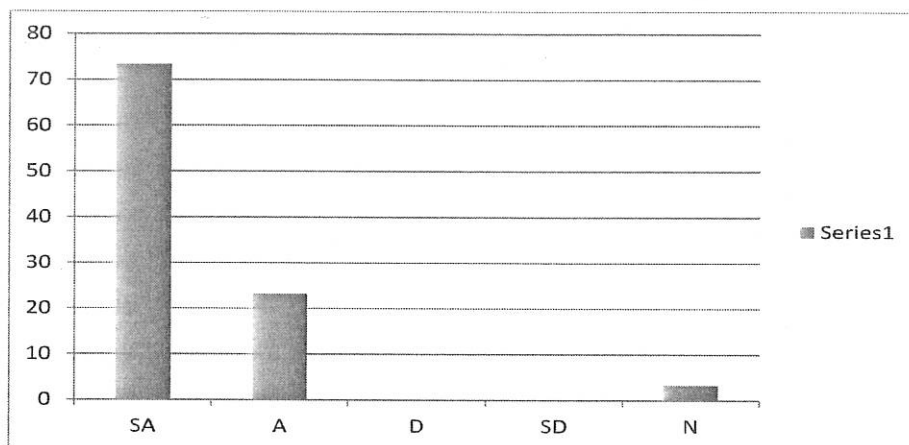
Co-operation

Cooperation occurs naturally as well as artificially; it is more important for some people than for others. Cooperation is a useful real-life skill and develops interpersonal skills. 80% people strongly agreed and 20% people agreed with this factor.



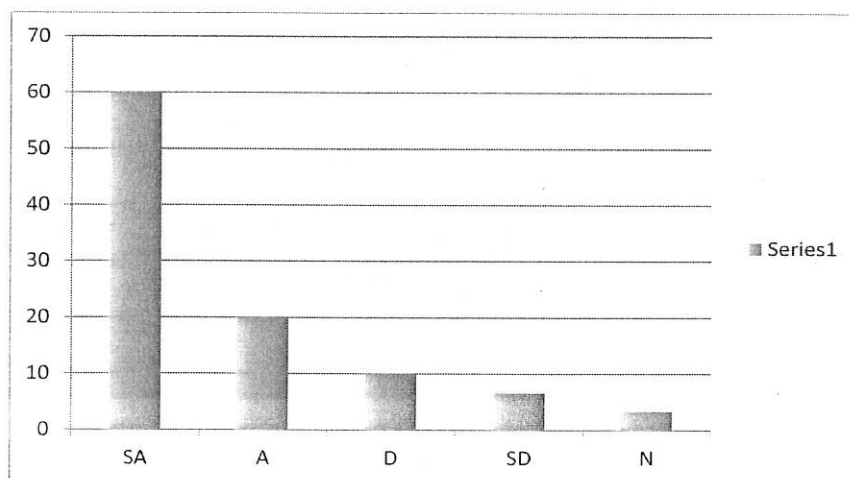
Recognition

Employees experience satisfaction when others recognize and appreciate their accomplishments. 73.3% people strongly agreed, 23.3% people agreed and 3.3% people remained neutral.



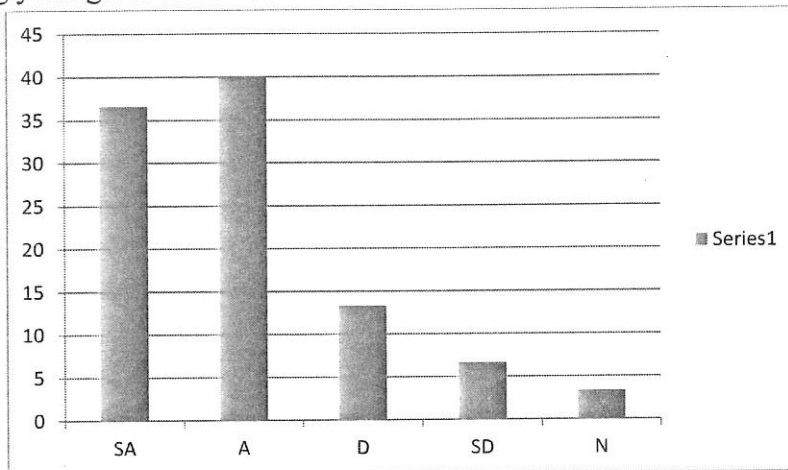
Sense of choice

We feel free to choose how to accomplish our work—to use our best judgment to select those work activities that make the most sense to us and to perform them in ways that seem appropriate. We feel ownership of our work, believe in the approach we are taking, and feel responsible for making it work. 60% people strongly agreed, 20% people agreed, 10% people disagreed, 6.6% people strongly disagreed and 3.3% people remained neutral.



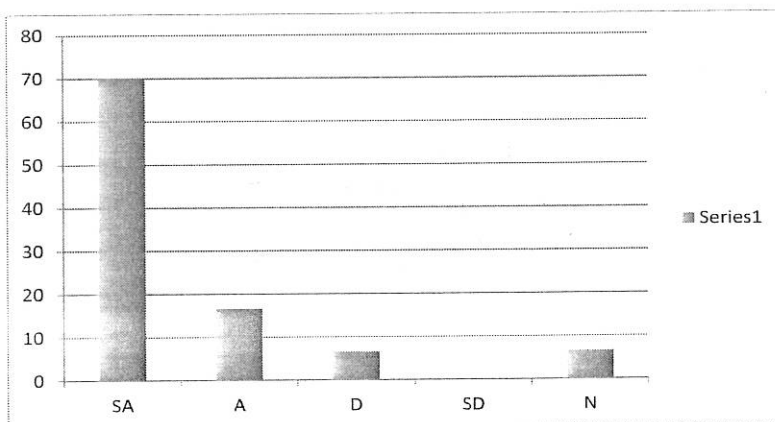
Sense of competence

We feel that we are handling our work activities well—that our performance of these activities meets or exceeds our personal standards, and that we are doing good, high-quality work. We feel a sense of satisfaction, pride, or even artistry in how well we handle these activities. 36.6% people strongly agreed, 40% people agreed, 13.3% people disagreed, 6.6% people strongly disagreed and 3.3% remained neutral.



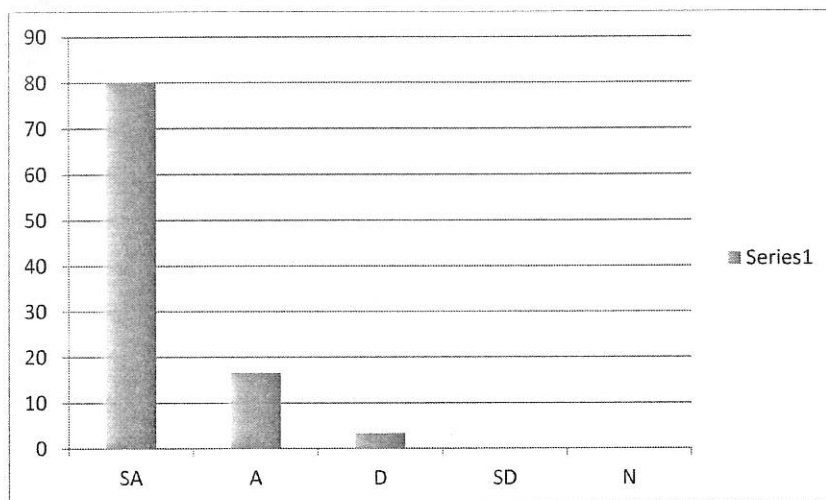
Sense of progress

We are encouraged that our efforts are really accomplishing something. We feel that our work is on track and moving in the right direction. We see convincing signs that things are working out, giving us confidence in the choices we have made and confidence in the future. 70% people strongly agreed, 16.6% people agreed, 6.6% people disagreed and 6.6% also remained neutral.



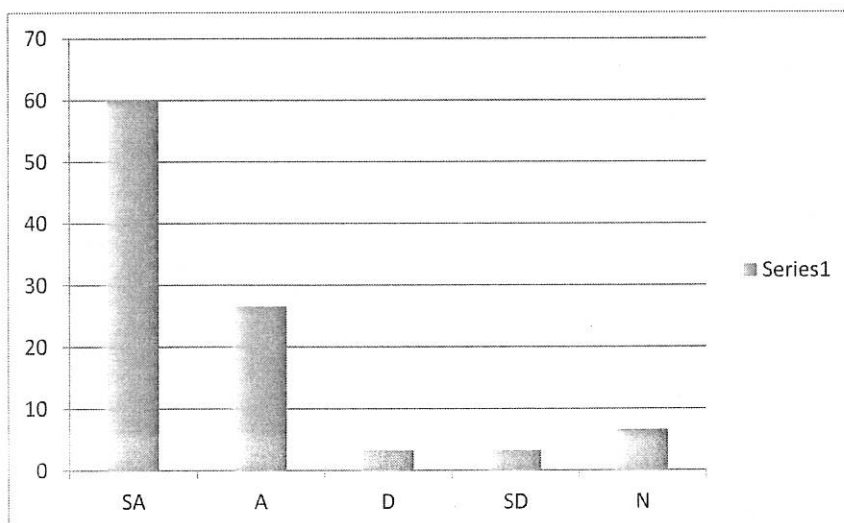
Happiness at work

Happiness provide relaxing work environment which ultimately leads to better efficiency in terms of work performance. 80% people strongly agreed, 16.6% people agreed and 3.3% people disagreed with the factor.



Sense of involvement

Job involvement brings the sense of commitment and loyalty among employees. 60% people strongly agreed, 26.6% people agreed, 3.3% people disagreed and strongly disagreed and 6.6% remained neutral.



Findings

1. It is a widely accepted premise that retention and productivity of workers is a function of how well the individual is motivated. Motivation plays a crucial role in improving the job efficiency and productiveness of a worker, irrespective of the rank he/she holds.
2. Generation y employees are well aware about intrinsic motivational factors.
3. The important intrinsic work motivational factors are challenging work, ability to control, competition, co-operation, Recognition, Sense of choice, sense of progress, Happiness at work and sense of involvement.
4. Among the intrinsic factors of motivation, the respondents have opined that it is job satisfaction and their likenesses to the work in addition to recognition by the superiors are important.
5. The respondents were of the opinion that when the management entrusts more responsibility on an employee, it signifies greater motivation as it marks the recognition of the work of the concerned employee.
6. Intrinsic motivational factors key to employee retention.
7. It was found that generation y employees are optimistic, pro diversity and team player.
8. Some intrinsic motivational factors are unexplored in comparison to extrinsic factors.

Concluding Remarks

The various reviews carried out shows that the intrinsic work motivation is an important issue for employee retention and especially among generation Y employees in the organization. Effective employee motivation and retention of skilled and talented employees should be the main aim of management. Huge turnover creates problem for not only the employers but also employees and clients. A lower turnover means a positive attitude towards clients. Well pleased clients in return provide higher satisfaction scores which indirectly generate higher revenue. Now the time has arrived to think out of the box and focus on intrinsic motivational factors which can also affects employee retention if properly used by the management. In coming years maximum employee population will be dominated by generation Y employees therefore employers must design the motivational program keeping into account generation y employees' preference. Extensive researches are required to fill the gap and provide new insights to intrinsic motivation, its forms, applicability and measurement so that it can also emerged as a powerful tool in the hands of the organization to retain their generation y employees who are dynamic, creative and skilled.

Suggestions

1. Intrinsic work motivational factors should be widely accepted by managers for employee retention.
2. Money should not be considered as the only motivational factor for each generation. We must try to explore other intrinsic factors.
3. Organizations should acknowledge employee perspectives.
4. Organizations should offer choices to their employees.
5. Organizations should encourage their employees to take risk.
6. Meaningful feedback must be given to the employees for better performance.
7. Motivation is an individual affair therefore it should not be common in nature.
8. There should be support from top management regarding implementation of intrinsic motivation.

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Competency Mapping of Middle level Leaders at Kurl On Ltd

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Abstract

Competency is one of the most important concepts for business to achieve success in any of the day-to day job performance responsibilities from task management to recruiting, training and development to advancement. Competency mapping is a process through which one assesses and determines one's strengths as an individual worker and in some cases, as part of an organization. The scope of the present study is to emphasize the specific skills which would make them valuable to a potential employer. The present study attempts to find out the competencies of the middle level leaders and to identify the competence gap between their actual and required performance at KURL ON Ltd.

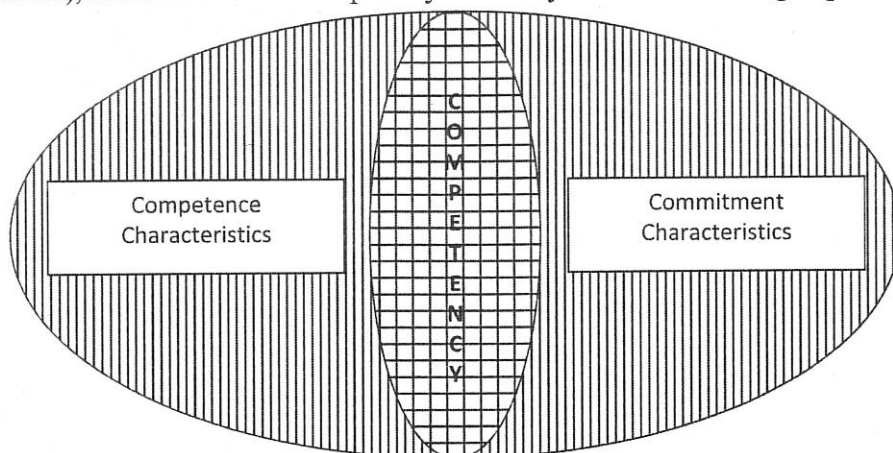
Introduction:

Competency is the capacity of an individual that leads to the behaviour, which meets the job demands within the parameters of the organizational environment and in turn brings about desired results. Whereas, competence is a standardized requirement for an individual to properly perform a specific job. It encompasses a combination of knowledge, skills and behavior utilized to improve performance.

Five Types of Competency

Attitude	Motives	The things a person consistently thinks about and wants and that causes action.
	Traits	Physical characteristics
	Self-concept	A person's perception towards self and the world
Knowledge Skill		Information a person has in specific area
		The ability to perform a certain physical or mental task

Identification), and to measure the competency deficiency of an individual or group of individuals (Corr



Competence Characteristics	Commitment Characteristics
Technical Knowledge	Self-confidence
Functional Information	Enthusiasm
Analytical Skills	Honesty and Integrity
Communication Skills	Accepting Challenges
Planning Skills	Winning Attitude
Organizing Skills	Determination
Interpersonal Skills	Self-improvement
Technical/Functional Skills	Open to new ideas
Conceptual Skills	Learning from mistake
Leadership skills	Concentration
Teambuilding skills	Patience
Problem solving skills	Perseverance
Decision-making Skills	Ownership of work
Time management skills	Enterprising
	Pursuit for perfection
	Result Oriented

Competency mapping consists of breaking down any role or job into its constituent tasks or activities and identifying the competencies (technical, managerial, behavioural, conceptual knowledge, attitudes, skills etc.) needed to perform the same effectively.

Review of Literature:

Competency Mapping is a process to identify key competencies for an organization and or a job incorporating those competencies through out the various processes (i.e. job evaluation, training, recruitment) of the organization.

Boyatzis (1982) defined a competency as “as an underlying characteristic of a person in that it may be a motive, trait or skill aspect of one’s self-image or social role or body of knowledge”.

In the words of Dubois (1993), competency was defined as “the employee’s capacity to meet or exceed a job’s requirements by producing the job outputs at the expected level of quality within the constraints of the organization’s internal and external environment.” Analysing the definitions of Competency, in other words, competency is the amalgamation of knowledge, skills, attitude and personality of an individual as applied to a job in the present and future environment that accounts for the success within the framework of organizational values.

Benefits of using Competency Mapping:

Competency mapping can play a significant role in recruiting and retaining people as it gives a more accurate analysis of job requirements, the competency of the individual, the difference between the two, and the development and the training needs to bridge the gap.

For the company, competency based practices

- Reinforce the corporate strategy, vision and culture.
- Establish expectations for performance excellence in systematic way, improved job satisfaction and employee retention.
- Increase the effectiveness of training and professional development programs
- Provide a common framework and language for discussing how to implement and communicate key strategies.
- Provide a common topic understanding and clarity of the scope and requirements of a job role.

For the Managers, competency based practices

- Identification of performance criteria to improve the accuracy.
- Provide more objective performance standards
- Provide a clear foundation for discussion between the manager and the employee about performance, and development

For the employees, competency based practices

- Identify the success criteria (behavioural standards of performance excellence) required to be successful in their role.

- Provide a more specific objective assessment of their strengths and specify the targeted areas for professional development.
- Provide tools and methods for enhancing their skills.
- Provide the basis for an exchange of ideas with their manager or team about performance and career related

Objectives of the study:

1. To understand the use and scope of competency mapping.
2. To identify the competence gap between the required performance and actual performance.

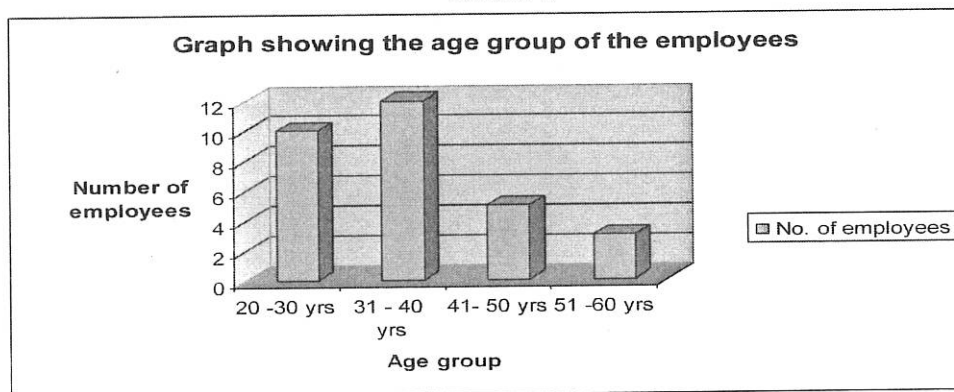
Method of study:

A sample of 30 employees (middle level leaders- supervisors and managers) were selected randomly from the company (KURL ON PVT. LTD, Bhubaneswar) for the investigation. Both primary and secondary data have been collected and used for the present study. The primary data was gathered by the methods of interview and observation. The secondary data was collected through the reference books, records and internet. A competency mapping questionnaire was used for the present study which consisted of 16 items based on Likert – 5 point scale. The questionnaire was administered to the respondents personally and the respondent had to make his/her response based on the five point scale. The sum of the values of each dimension –behavioural /functional competency gives the scores for the subject.

Result -analysis and Interpretation:

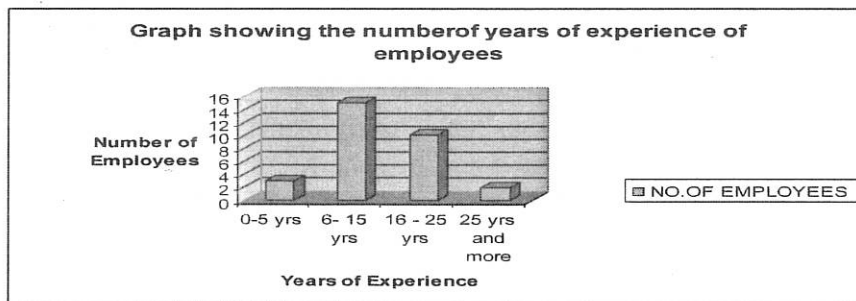
Selection of Age-group and Years of Experience:

Chart-1



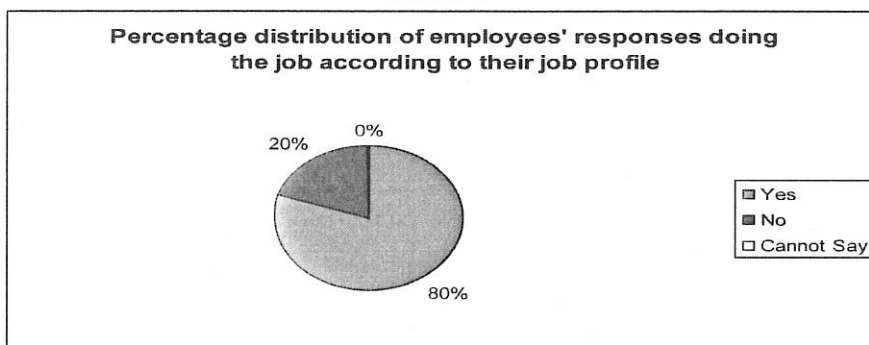
The above graph shows the different age groups and number of employees working in the organization.

Chart - 2



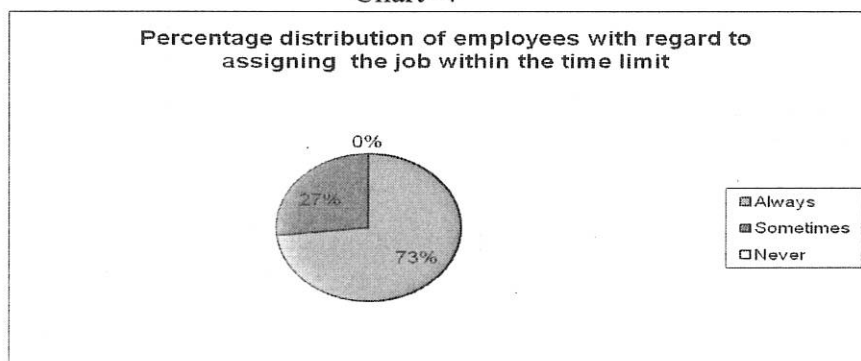
The above graph indicates the number of years of experience of employees in the organization.

Chart - 3



From the above graph, it is found that 80% of the respondents are doing the job according to their job profile, whereas, 20% of the respondents do not agree.

Chart - 4



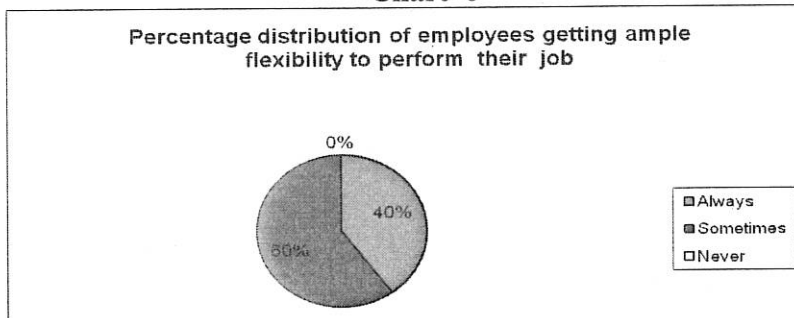
The chart reveals that 73% of the respondents always finish every work assigned to them within the time period. On the other hand, 27% of the respondents sometimes complete their work in time.

Chart-5



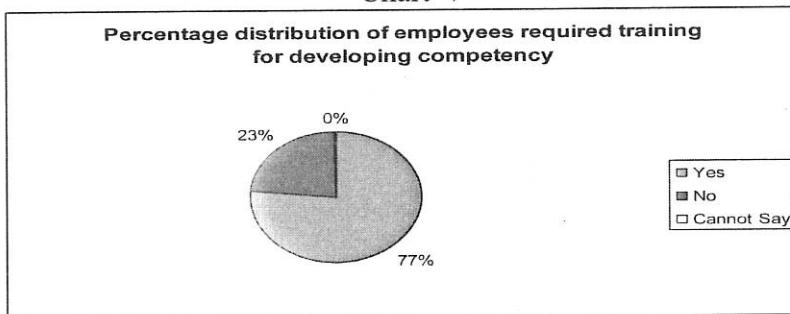
From the above graph, it is clear that 77% of the respondents are agreed to enhance their knowledge and skills for improving competency.

Chart-6



From the above graph, it is observed that 40% of the employees are agreed that if they will be given ample flexibility, they will perform better in the job assignment.

Chart -7



From the above graph, we can say that 77% of the respondents admit that training is required and useful for developing their competency, whereas only 23% do not require any training program.

Table -1

Competency	Actual or Existing	Required or Expected	Gap
Business Awareness	5	5	0
Technical Skill	4	5	-1
Organizational Awareness	5	5	0

From the above table it was observed that the employee working as Asst. Manager acquires the required competency level in the business awareness and organizational awareness but gap in the technical skill.

Table -2

Competency	Actual or Existing	Required or Expected	Gap
Customer orientation	5	5	0
Planning Skills	4	5	0
Leadership	5	5	1
Delegation of responsibility	4	4	0
Risk taking	4	5	1

In case of parameters like planning skill, delegation of responsibility, risk taking ability gap was found between the required and actual level. The middle level manager lacks planning skill as well as other parameters like delegation of responsibility, risk taking. But, he performs well in Leadership skill, customer orientation. Hence, training is required to enhance his planning skills as well as delegating the responsibility to the subordinates.

Findings of the study:

The competencies cover all the aspects which are needed to be there in an employee to do his job effectively. It was found that each and every employee at different job position requires competencies.

From the present study, majority of the employees (80%) are capable enough to perform well, on the other hand, only 20% of the employees are not up to the mark and require to enhance their competency through training. It was observed that most of the employees think that competency mapping is beneficial for their career development and personal growth as well as organizational growth. Most of the employees complete their work assignment within the time period while some of them need guidance and counseling by the superiors.

In case of Technical Skills & managerial skills gap analysis, it was found that the middle level manager lacks planning skill and delegation of responsibility and risk taking ability. Hence, . A few of the employees need training to perform their job comfortably to make up the gap between the actual and required competencies. Hence, the implementation of competency mapping would center on the gap that are necessary for the required job and can be improved by training which will develop the organization effectiveness and meet the business objectives.

Discussion and Conclusions:

Competency mapping is useful technique to identify the potentiality of an individual for a suitable job. It can be concluded that organization expect a competent person to be able to deliver desired results that meet the organizational objectives on quality, quantity and costs.

The process of competency mapping should be carried out in the organization in a regular basis both for the benefit of employees and for the organization.

In today's changing global environment, it could be greatly beneficial to ensure that management development programs (training and development) are conducted on different competency areas in order to meet the new standards and to update knowledge to perform to the satisfaction.

Last but not the least, as a cost effective measure and creating a sense of loyalty, the organization may decide in terms of developing a skilled person as internal trainer or employees who proved the requisite skill and expertise may be identified and developed as trainers.

Limitations:

1. There is limitation of time constraint for managers.
2. There is possibility of differentiation in perception of responding the questionnaire among the managers, supervisors to fill up the form.
3. There is possibility of personal biasness among the employees.

Recommendation :

- Training should be imparted to the employees based on required competencies.
- Competency mapping should be conducted for the employees every six months.

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Towards Sustainable Development Through Corporate Social Responsibility: Experience of Indian Corporates

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“Our lives begin to end the day we become silent about things that matter”

- Martin Luther King, Jr.

INTRODUCTION:

Corporate strategy howsoever carefully crafted will have limited legitimacy if it is not tempered by a sincere concern for public interest and social good. A business enterprise being a socio-economic entity has a responsibility towards society. The question whether corporate enterprises have social responsibilities is not a new one. However, in recent years it has become a matter of great concern of national and international organizations.

This is due to changing values and attitudes of all stakeholders such as employees, shareholders, as well as society at large represented by government, pressure groups and national and international institutions. Growing literacy, affluence, mass communication and many other local significant factors have also contributed to changing values and attitudes of the diverse sanctions of the society. The increasing role of these enterprises particularly in the economic life of the people at large has made these organizations a natural focus for all those keen in the economic, social and ecological future of the country. The growing awareness of the scale of ecological problems and of the limits to natural resources caused by nationals and internationals have made often the target by pressure groups for antipollution measures, environment protection and conservation. In the face of these trends, it is no longer fashionable for the business enterprises to take gleeful pride in making money. What is becoming more fashionable is to show that it exists to serve the society. It is now being increasingly realized world over that a firm can not afford to function and survive in the long run unless it behaves in a legitimate and socially responsible manner. Legitimacy of an enterprise depends essentially

on how responsible the firm is towards the social issues and responsible towards the protection of the interests of different sections of the society. Sustainability of business comes through increased interaction and regeneration of economic, social and environment resources leading to environment protection increase in standards of living of the society at large and training and motivation of the workforce.

According to the Brundland Report, a 1987 report from the United Nations, "Sustainable Development (SD) is a process of change in which the exploitation of resources, the direction of investment, the orientation of technological development and institutional change are in harmony and enhance both current and future potential to meet human needs and aspirations." Companies, which have involved and committed themselves for social initiatives, have automatically improved their shareholder value. Hence societal wellbeing is a pre-requisite for business prosperity. Such business organizations, which put people before profit and care for sustainable development, can only create a niche for themselves in this era of cutthroat competition. This is why Birla Group believes in trusteeship concept of management and is committed to plough back a part of their funds to make a meaningful difference to people's lives. Corporate management will have, therefore, to consider these issues, which have a profound impact on the survival of the corporation while making strategic decisions.

SHOULD BUSINESS BE SOCIALLY RESPONSIBLE?

Goyder argues: "Industry in the twentieth century can no longer be regarded as a private arrangement for enriching shareholders. It has become a joint enterprise in which workers, management, consumers, the locality, Government and trade union officials all play a part. If the system which we know by the name enterprise is to continue, some way must be found to embrace many interests which go to make up industry in a common purpose." Later, in 1978, while delivering the C.C.Desai Memorial Lecture, he reiterated his plea that if the that if the corporation has to function effectively, it has to be accountable to the public at large; and he sought to equate the suggestion of the responsible company with the trusteeship concept advocated by Gandhiji, the aim of which was to ensure that private property was used for the common good. The declaration issued by the international seminar on the social responsibility of business held in India in 1965 also correlated the Gandhian concept of trusteeship with the social responsibility of business as "responsibility to customers, workers, shareholders and the community."

There has been a growing acceptance of the plea that business should be socially responsible in the sense that the business enterprise, which makes use of the resources of society and depends on society in enhancing the welfare of the society of which it is an

integral part. The 'High-Powered expert Committee on companies and MRTP Act (Sachar Committee), in its report submitted to Government in August 1978, observed that "in the development of corporate ethics, we have reached a stage where the question of the social responsibility of business to the community can no longer be scoffed at or taken lightly." While presenting his keynote address in the World Management Congress at New Delhi in December 1979, Peter Drucker rightly asserted that the most important social responsibility for any business, particularly capital starved developing nations, is to protect its capital by earning adequate surplus which is at least equal to the cost of capital. An organization, which is running into losses, is indeed perpetrating a social injustice.

H.S.Singhania classifies the nature of social responsibility of business into two categories:

- a) The manner in which a business carries out its own business activities; and
- b) The welfare activity that it takes upon itself as an additional function.

The first involves the acceptance of the fact that business is not merely a profit making occupation but a social function, which involve certain duties, and requires that appropriate ethics are followed. In addition to its commercial activity, business also plays a role in promoting social welfare activity even direct.

Arguments for Social involvement of business:

- 1) Business, which survives in using the resources of the society, has a responsibility towards it.
- 2) Business, which is an integral part of the social system, has to care for the varied needs of the society.
- 3) Business, which is resourceful, has special responsibility to the society.
- 4) Social involvement of business would foster a harmonious and healthy relationship between the society and business to the mutual benefit of both.
- 5) Social responsibilities like recycling of waste may have favourable financial effects.
- 6) Social involvement may discourage additional government regulation and intervention.
- 7) Social involvement may create a better public image for the company, which may help it in attracting customers, efficient personnel and investors.

Arguments against social involvement of business:

- 1) Business should confine to its own business. There are government and social organizations to carry out social activities.
- 2) Involvement in social activities could adversely affect the economic health of a business enterprise.

- 3) If the cost of the social involvement of the business is ultimately passed on to the consumers, there is no point in exalting the social involvement of business. Sometimes there could even be a net loss to the society because of the corporate sector undertaking such activities.
- 4) Many companies involvement themselves in social activities because of the tax exemptions on the income spent on special social purposes.
- 5) If the social involvement of a business enterprise causes an increase in the price of its products, it could affect its competitiveness both in the domestic and international markets.
- 6) Social involvement of business could lead to an increase in the dominance or influence of business over the society.

BENEFICIARIES OF CORPORATE SOCIAL RESPONSIBILITY:

1) Responsibility to shareholders :

The responsibility of a company to its shareholders, who are the owners, is indeed a primary one. The fact that the shareholders have taken risk in making investment in a business should be adequately recognized. To protect the interests of the shareholders and employees, the primary objectives of a business to stay in business. To safeguard the capital of the shareholders and to provide a reasonable dividend, the company has to strengthen and consolidate its position. Hence, it should develop and improve its business and build up its financial independence.

2) Responsibility to the employees:

The success of an organization depends to a very large extent on the moral of the employees and their whole-hearted co-operation.. Employee morale in turn, to a large extent depends on the employer-employee relationship and responsibilities to the employees/workers. These include:

- The payment of fair wages.
- The provision of conducive working conditions.
- Fixing working standards and norms.
- Provision of labour welfare activities.
- Arrangement for proper training and education to the workers.
- Opportunity for participation in management.

3) Responsibility to consumers:

According To **Peter Drucker**, "there is only valid definition of business purpose; to create a customer." Drucker observes: "The customer is the foundation of a business and

keeps it in existence. He alone gives employment. To supply the wants and needs of a consumer, society entrusts wealth-producing resources to the business enterprise. It has widely recognized the customer satisfaction shall be the key to satisfying the organizational goals. Important responsibilities of the business to the customers are:

- To provide goods and services of improved quality, reasonable prices and easily available.
- To provide required after sales service.
- Not to cheat or mislead customers by deceptive advertisements.
- To provide an opportunity for being heard and to redress genuine grievances.
- To understand customer needs and to take necessary measures to satisfy these needs.

4) Responsibility to the community:

A business has a lot of responsibility to the community around its location and to the society at large. These responsibilities include:

- Taking appropriate steps to prevent environmental pollution and to preserve the ecological balance.
- Rehabilitating the population displaced by the operation of the business.
- Contributing the overall development of the locality.
- Taking steps to conserve scarce resources.
- Contributing to research and development.
- Development of backward areas.
- Promotion of ancillarisation and small-scale industries.
- Making possible contribution in furthering social causes like the promotion of education and population control.

5) Responsibility to the suppliers:

The business has also responsibility towards those who supply raw materials, machines, equipment and finances. It is expected of the business to ensure timely payment of the dues. To the suppliers of funds, the business is responsible for payment of interest and dividend regularly. They also expect high degree of transparency in its operations.

THE INDIAN SITUATION:

The Indian business sector presents a mixed picture as far as social responsibility is concerned. J.R.D. Tata, who was instrumental in conducting the first social audit in India and perhaps in the world, was of the opinion that while on the side of production, of growth, of efficiency, Indian industry, on the whole, did remarkably well, usually against odds and inspite of crippling infrastructural shortages unknown in advanced countries, on the

distributional side, however, its record was often poor, in some respects, dismissal, judged by the size of the black-market, the volume of black money and the general corruption that pervaded our economic life. It is gratifying to note that a number of leading companies in India have shown recognition of the social responsibility of the corporate sector. The business community has been instrumental in setting up hundreds of institutions of public service like schools, colleges, hospitals, research institutes, libraries and places of religions of worship. Some of the leading enterprises have extended welfare measures like health and medical facilities to people of the surrounding villages. Many businessmen have risen up to the occasion to help the victims of droughts, floods, earthquakes and other natural calamities.

One of the important externalities of industrialization is the serious ecological damage it has inflicted. The problem of environmental pollution caused by industries is a matter of serious concern. Though some enterprises have taken pollution abatement measures, many-both in the private and public sectors continue to be major offenders against the environment.

The social responsibility of business is usually advocated for the private sector, presumably on the assumption that the public sector is socially quite responsible. But the fact remains that the public sector in India is yet to prove that it is more responsive to society than the private sector. In some cases, in fact, the record of the public sector is more dismal than that of the private. As far as the pollution of the environment is concerned, the public sector is as guilty as the private.

Many public sector enterprises in India have undoubtedly failed to discharge their primary responsibilities- increase in the productivity and production, efficiency in the provision of the services, etc. This is reflected in the mounting losses of many public enterprises. The huge losses incurred by the Indian public sector are not the result of any charity; they are the inevitable outcome of inefficiency, irresponsibility and mismanagement at various levels. The failure of the public sector in discharging its primary obligations has made the plight of the common man worse than it would have been, for it resulted in shortages, higher prices and more taxes.

The Sachar committee suggested that companies in the public sector, which were very much a part of the total corporate sector and accounted for about 70 percent of the total investment in the corporate sector, must reckon with the social cost and social benefits arising out of any given investment. As a matter of fact, social cost-benefit analysis is accepted as one of the prime considerations for making any investment in the public sector.

It is natural, therefore, to expect from the private corporate sector that, in the matter of investment, it will also show a similar consideration of social cost and social benefit. The

accountability of the public sector to the people through parliament must find its parallel in the private sector in the form of social accountability, at least to the extent of informing the public about the manner in which it has or has not been able to discharge its social obligations in the course of its economic operations.

Even our Economist-Prime Minister, **Dr. Manmohan Singh**, has also reiterated the importance to corporate social responsibility of business by saying, *“These are good times for Indian business. But with greater opportunity comes greater responsibility. You must pay due attention to improved corporate governance. You must be sensitive to the urgent need to protect our environment and to prevent degradation of our land, water, and air resources. You must ensure that the interests of your shareholders and stakeholders are best served. Even as you demand a more hospitable environment for business, you must become more socially responsible.”*

Corporations both in the public and private sectors, have joined hands to become good corporate citizens by contributing a part of their profits towards generating employment for women, supporting the disadvantaged people, establishing schools, providing scholarships for higher studies and providing healthcare services in rural areas, either directly or indirectly. Few examples can be cited of corporates like Tata Steel and Infosys Technologies Ltd. In the private sector and ONGC and SAIL in public sector. Large public sector companies are investing upto 50% of their profits towards social upliftment and community development.

CSR in SAIL:

Corporate Social Responsibility (CSR) begins by being aware of the impact of its business on society; and SAIL has been practicing CSR right from its inception. SAIL has founded with well-articulated socio-economic objectives towards the people of India, i.e. employees, customers, suppliers and community. The credo of SAIL specifically highlights the commitment towards society at large, which states inter-alia “We value the opportunity and responsibility to make a meaningful difference in people’s lives.”

A lot of work has been done to improve the quality of life in and around the plants/units and townships. SAIL has taken effective measures in the field of environment conservation, health and medical care, education, women upliftment, providing portable drinking water and ancillary development. By systematically addressing a gamut of issues such as health and medical care, education, access to water, sanitation, power and roads, women’s empowerment, generation of employment, electricity sports, culture, etc at each of its plants and units, SAIL has contributed immensely to the economic development of its peripheral areas. By partnering

creatively with small, local entrepreneurs, NGOs, State Government and the centre, SAIL has ensured that the benefits arising out of its activities actually reach the grassroots level and not merely remain on paper. SAIL is committed to linking business opportunity and corporate responsibility in ways that fulfill one of SAIL's core purposes **'To make a meaningful difference in people's lives.'**

Under peripheral Development various activities are being undertaken around plants/units up to a radius of 16 kilometers. Several socio-economic surveys reveal considerable benefits emanating from SAIL's efforts that reach interiors up to a radius of 16kilometers. Programmes are undertaken by each plant in close co-ordination with the State government, District Administration as well as the local panchayats, social organizations and people's representatives of the area. All plants/units are making special efforts to initiate new projects in the area of road connectivity, construction of bridges/culverts, access to improved water sources, etc.

SAIL has bagged the prestigious Business world-FICCI-SEDF Corporate Social Responsibility Award – 2006. This is the first time that a public sector enterprise has won the award since it was instituted in 1999. President of India Dr A.P.J. Abdul Kalam presented the award to Mr S.K. Roongta, Chairman, SAIL, at the FICCI Auditorium on May 7, 2007. A total of 33 companies had participated in the Business world-FICCI-SEDF Corporate Social Responsibility Awards – 2006 contest.

CSR in ONGC:

Companies in the energy sector-especially ONGC have committed resources to set up research and development institutes with experienced and highly qualified manpower support in the oil and gas sectors for exploration, drilling, reservoir management, production technology, ocean engineering, safety and environment protection. Also resources have been deployed to adopt a few villages to implement Ex-President **Dr.A.P.J.Abdul Kalam's idea of PURA (Provision of Urban Amenities in Rural Areas)**. The company has also imbibed rich values in its employees for the cause of environment protection and health and safety of its people.

CSR in Infosys Technologies Ltd.:

In the private sector, Infosys Technologies has set up an example. To distribute its substantial wealth and formalize its social support initiatives, the founder, Mr.Narayanmurthy and his wife set up Infosys foundation on March 1997 which receives 1% of the company's after tax profits every year. The foundation provides support to disadvantaged people directly or through organizations. It prefers to donate in kind rather than in cash. For example, the

foundation has given books Kannada worth Rs.10,000/- to a village library to strengthen the local language. In the field of education the foundation has instituted 26 scholarships for PhD scholars in 13 prestigious institutions. It has set up science centers and libraries. About 1000 libraries have been started by the foundation. It has committed to give 30% of its funds to old people, the destitute and the handicapped, 15% for rural development, 30% for education of talented but poor children, 15% for cultural activity and 10% for health care both in villages and cities.

CSR in TATA Group:

Considered as pioneers in the area of CSR, the TATA group has played an active role in nation building and socio-economic development since the early 1990s. A survey conducted by the website www.indiangos.com revealed that Tatas spent Rs.1 billion on community development and social services during the fiscal 2001-02-the highest by any corporate house in India. For example, Tata Motors and Tata Chemicals have stretched their wings into various activities towards social and sustainable development. Tata Motors being the leading automobile industry in India bagged the Golden Peacock Award for the year 2004 for its valuable contribution towards economic, community development and corporate social responsibility.

Tata Chemicals on the other hand is the largest inorganic chemical complex in the country that produces the highest synthetic soda in the world and is well known for its world-class energy efficiency standard and has worked on varied fields of environmental conservation, community development and safety. The major success of Tata Chemicals is towards community development under the umbrella of Tata Kisan Kendras (TKKs) and Tata Kisan Sansar (TSS). It had promoted Tata Chemicals Society for Rural Development (TCSRSD) for the benefit of rural population by providing all sophisticated technologies like satellite mapping, Geographical Information System (GIS), etc. for selecting and using right kind of seeds from sowing to post-harvest stage. The Kendras provides a wide range of services like: credits to the farmers, insurance of crops against natural disasters, availing buyback facilities, etc. These have resulted in economic stability of farmers.

CSR MODELS USED IN THE INDUSTRY TO ACHIEVE SUSTAINABLE DEVELOPMENT:

Stakeholder Involvement:

Stakeholders are people who enhance the functioning of a corporate entity. Employee, customers, suppliers, the government and rest of the society have stake in the organizations. It is also the responsibility of the stakeholders to create and develop a sustainable environment for the cause of future generations. A few companies deduct a minor amount as voluntary

contributions. Some others collect contributions from interested consumers inviting them to donate directly through mail for a certain cause.

Micro-credit and Enterprise Programmes:

It involves providing loans to establish micro business in order to induce selfsufficiency and sustainable development. NGOs (Non-Government Organizations) and SHGs (Self-Help Groups) come forward to associate themselves with such initiatives of the corporate entities.

Raising Funds for Co-operative Banking:

Companies such as Citibank have set up an independent wing called Citibank India Community Partners to extend micro credit to low income women in urban areas.

Volunteering:

Corporates provide training and development facilities to NGOs with the help of their employees in areas like planning, marketing, fund raising, documenting, and etc. to make use of their full potential for community and social development. For example, Coke has tied up with Indian Oil and Cancer Patients Association. Coke provides the Kiosks and the equipment, which are located at Oil stations, and are run by cancer patients.

Charity, Philanthropy and Direct Donations:

It aims at providing economic support to underprivileged people.

Sponsorships of Events:

Various events like exhibitions, fares and festivals are organised to raise funds for a cause. This way the organizer gets monetary relief and the corporate partner gets recognition.

CONCLUSION:

A business enterprise can serve society only when it operates successfully. Profit is essential for the survival of a business organization and also for the support of all noneconomic activities. Profit is to a business what food, air and water are to an individual. Just as a drowning person cannot afford to spend energy worrying about the starvation in the country, the unsuccessful enterprise must ensure its own survival before tackling major social problems. Unless a business is able to make profits, the question of coping with social responsibilities voluntarily is largely academic. Thus, economic goals of business have built-in-social purposes. They are in fact, means to the social ends to the welfare and public interest. The relationship between business and society is just like 'a ship and sea'.

Just as no ship can reach the other side of its destination without cooperation and sanction from the sea, business can also not stand, survive and succeed for a long period without social acceptance and sanction. Hence it can be concluded in saying that the social considerations are the foundation on which the sustainable economic development of a country

rests and in which corporate social responsibility has a major role to play. Business organizations should maintain a trade-off between economic interests and social demands and believe in “**Jiyo Aur Jine Do**” (a Hindi saying) i.e. “**Live And Let Others Live**”.

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An Assessment of HRD Climate- A Case Study of Nalco

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ABSTRACT

The effective performance of human resource depends on the type of HRD climate that prevails in the organization; if it is good, then the employees' performance will be high but if it is average or poor then the performance will be low. An organization can become more dynamic and growth oriented by proper selection of people and by nurturing their competencies. Organizations are continuously improving the human resource development climate to meet the requirements of competitive and dynamic environment in the changing global scenario. Human resource development climate is an integral part of organizational climate. Organizational climate is a set of policies, practices and conditions which exist in the working environment to improve the skills of employees. The present paper, examines human resource development climate of National Aluminum Company Limited (NALCO), India. In this study, five-point Likert-scale, item-wise mean score and corresponding percentage scores and standard deviations have been used to evaluate the data and to draw inferences about prevailing human resource development climate in NALCO.

KEYWORDS: HRD, HRD climate, HRD mechanisms, HRD outcomes, Job performance

1. INTRODUCTION

An organization's success is determined as much by the skill and motivation of its members as by almost any other factors and HRD aims at achieving higher and fuller development and utilization of human resource potential and for that purpose creating appropriate environment, values and culture for HR growth in organizational context. Human resources development is a process by which the employees of an organization are helped, in a continuous planned way, to

- Acquire or sharpen capabilities required to perform various function associated with their future roles
- Develop their general capabilities as individuals and discover and exploit their potentials for their own and/or organizational development purposes.
- Develop an organizational culture in which supervisor-subordinate relationship, teamwork and collaboration among subunits are strong and contribute to professional well being, motivation and pride of employee.

HRD Climate is characterized by the tendencies such as treating employees as the most important resources, perceiving that developing employee is the job of every manager, believing in the capability of employees, communicating openly, encouraging risk taking and experimentation, making efforts to help employees recognize their strength and weakness, creating a general climate of trust. A developmental climate is necessary for effective HRD initiatives and implementation of HRD strategies. The structures, systems and techniques used by an organisation to help employees acquire and strengthen their capabilities are called HRD mechanisms which facilitate favourable HRD climate in the organisations. Thus, HRD Climate is an integral part of an organizational climate. According to Richers & Schneider (1990:22) define organizational climate as the “shared perception of organizational policies, practices and procedure, both formal and informal”. It is also defined as “a characteristic of an organization which embodies members’ collective perception about their organization with respect to such dimensions as autonomy, trust, cohesiveness, support, recognition, innovation & fairness” (Moran & Volkwein, 1990:20). However organisations differ in the extent to which they are successful in promoting favourable HRD climate and hence an attempt is made to make a comparative study based on a comprehensive measure of HRD climate in NALCO.

2. REVIEW OF LITERATURE

Recognizing the importance of HRD climate, Center for HRD, Xavier Labour Relations Institute (XLRI, India) developed a 38-item HRD climate questionnaire to survey the extent to which development climate exists in organizations. The 38 items included in the questionnaire can be grouped into three categories such as general climate, OCTAPAC culture and HRD mechanisms. The general climate items deal with the importance given to human resources development in general by the top management and line managers. The OCTAPAC items deal with the extent to which openness, confrontation, trust, autonomy, pro-activity, authenticity

and collaboration are valued and promoted in the organization. The items dealing with HRD mechanisms measure the extent to which HRD mechanisms are implemented seriously. Using this instrument the first survey of HRD climate in Indian organizations was carried out by T. V. Rao and E. Abraham (1986) among 41 organizations in India. The study found that the general HRD climate in the organizations appears to be at an average level. The most important factor contributing to this seems to be a general indifference on the part of the employees on their own development. This was followed by the top management's lip sympathy and intellectual positivism to HRD but no emotional investment.

In another study, E. Abraham (1989) found that HRD climate is a powerful intervening variable in translating HRD practices into profit. Rao and Abraham (1991) studied the human resource development climate in the surveyed organisations and found it to be at average level in India. Aileni and Prasad (1995) examined the relationship between organisational climate and job satisfaction of the lower level managers in a public sector undertaking. The study reveals that the satisfied group gave top ranks to interpersonal relationship, risk taking and management of rewards.

On the other side, the dissatisfied group gave top priority to supervision, communication and decision-making. Venkateswaran (1997) made a study in a public sector undertaking in India and found that, to a large extent, a favorable HRD climate was prevalent in the organization under study. Jain and Singhal (1997) study took into account three human resource development mechanisms including management policy, potential appraisal and organisational development to study variances of human resource development climate on account of these mechanisms. The effect of personal factors on human resource development climate was found to be low but positive. Pillai (2000) made an attempt to study the influence of the human resource development climate existing in banks on the learning orientation of the employees. The findings of the study show that about 57 percent of respondents perceive the learning, and development climate existing in banks as moderate. Pattanayak (2000) conducted a study on, the effect of shift-work and hierarchical position on satisfaction, commitment, stress and human resource development climate in a steel plant. The study calls for greater emphasis to be laid on human resource development interventions for improving organisational synergy. Tripathi, S. and Tripathi, N. (2002) studied the relationship between organisational climate and organisational success; which includes effectiveness, job satisfaction, organisational commitment and intention to quit. The results show that the climate is highly correlated with all components of effectiveness. Ganesan, Samuel, Rajkumar and Saravanan (2002), studied the 'Determinants of Employee Relations Climate in Public Sector Undertakings.' The study revealed that by improving factors like working conditions, level of supervision, communication

and worker's participation etc. favourable climate can be achieved. Purang (2006) in a comparative study of Public, Private and Multinational organizations shows that the human resource development climate scores of the two private organisations and the MNC are significantly higher than the two PSUs. Majee (2006) in the study of Chittaranjan Locomotive Workshop finds moderate level of HRD Climate with a lot of scope for improvement because HRD climate is the lifeblood for organization. Mufeed (2006) highlights the need for a focus on key elements of human resource development in hospitals. Lim and Morris (2006) study reveals that trainees' characteristics, instructional factors and organisational climate are closely correlated with both the trainees perceived learning and learning transfer collectively. Srimannarayana (2007) attempted to assess the extent of human resource development climate in Dubai organisations, such as shipping, banking, tourism, trading and food businesses. The results reveal moderate level of general HRD climate in the organisations.

3. OBJECTIVES AND SCOPE OF THE STUDY

In this study the following objectives are established for having a detail analysis over the presiding HRD CLIMATE in NALCO, corporate office, Bhubaneswar.

- To study the HRD policies and practices in NALCO.
- To assess the extent to which HRD climate exists in the organization favourable for implementation and extent of HRD pattern.
- To suggest how the climate could be more humanized.

The present study of HRD climate is conducted in NALCO corporate office, Bhubaneswar, Smelter and CPP, Angul, Odisha. The Study includes the executives of different departments in the organisation for the analysis and attainment of objectives. The views of employees were taken through primary and secondary sources. The study covers one of the significant HR subsystems "HRD Climate".

4. RESEARCH METHODOLOGY

The present study was undertaken to assess the HRD climate existing in NALCO, India as perceived by its employees. The data for the study has been collected from NALCO, corporate office in Bhubaneswar from primary and secondary sources. In the primary source the data are collected through survey method by distributing questionnaire to employees. The Questionnaire comprises of all close-ended questions to simplify the analysis & interpretation of the data. In the secondary source the data are collected from various books, magazine, company's manual, other relevant documents and websites. The sample size was 60. The instrument used for the study was a standard questionnaire to measure HRD climate developed by T. V. Rao. To analyze the results, various statistical measures such as Percentage, Mean and Standard Deviation were performed through SPSS 19 and MS Excel 2010.

5. ANALYSIS AND DISCUSSION

Empirical approach is adopted in the study, in order to collect the first hand information. Sampling procedure has been adopted by canvassing predesigned structured questionnaires. Modifications were made wherever necessary for the actual interpretation of the questions to avoid non-response. HRD Climate survey questionnaire developed by Prof. T. V. Rao was used as principle instrument for data collection (with some modifications). The questionnaire was developed using a five point scale for each statement and the respondents were asked to assign their rating on the scale ranging from very much true to strong agreement over the issue. The Percentage (%) has been calculated for the determination of the extent of influence of the factor taken for the study, to HRD Climate. The Standard deviation is so obtained as to determine the deviation in responses of the respondent on each question.

Table 1: (Item-wise Mean Standard Deviation & percentage of the Total Sample)

Items	Mean	Standard deviation	Percentage
1. Top management goes out of its way to make sure that employees enjoy their work.	3.55	1.09	63.75
2. Top management believes HR to be an extremely important resource and that they have to be treated humanely.	3.83	1.06	70.75
3. Development of subordinates is seen as an important part of their job by seniors and the top management.	3.8	0.97	70
4. Personnel policies facilitate development.	3.51	0.947	62.75
5. Top management is committed to employee development and is willing to invest their time.	3.65	1.102	66.25
6. Senior executives take active interest on juniors and help them to improve.	3.28	0.865	57
7. The organization helps people who lack competencies to help acquire competencies.	3.28	0.884	57
8. Managers believe that employee behaviour is changeable at any stage.	2.76	1.079	44
9. People here are helpful to each other.	3.9	0.9513	72.5
10. There is an informal atmosphere and employees discuss their personal problems with their superiors.	2.93	0.9719	47.5
11. Psychological climate here is conducive to development.	3.6	0.88	65
12. Seniors guide juniors for the future responsibilities and roles.	3.56	0.83	64
13. Top management identifies and utilizes employee potential.	3.69	1.05	67.25
14. People are encouraged to learn from their mistakes.	2.74	1.11	43.5
15. Employee takes behavioural feedback given to them seriously.	3.05	0.925	51.25
16. Employee takes pains to find out strength and weaknesses from their superiors and colleagues.	2.59	0.984	39.75
17. Training is taken seriously and learning is implemented.	3.4	1.3044	60
18. Opportunities are provided for employees to try out training-learning.	3.26	0.971	55

The important factors contributing highly to climate in organization seems to be that the top management believes employee to be an extremely important resources and treated them humanely with the highest mean value of 3.83. Senior executives take active interest on juniors and help them to improve which has mean score of 3.28. The most important thing is people are help full to each other which secured 72.5%, which is the highest percentage among the items. Here seniors guide their juniors and prepare them for future responsibility. But in case of item number 17 the value of standard deviation is 1.30, which means the view

of the employees in case of training is taken seriously and learning is implemented is highly deviating from each other. Also top management ensures that employees enjoy their work, employee potential is better utilized and they invest more time in employee development.

6. CONCLUSION

It can be concluded from this study that there exists a good/average HRD climate in NALCO. As we know now a day's HRD climate plays a very important role in the success of any organization because directly or indirectly it affects the performance of its employee. Employees are the valuable asset of any organization. Climate is the atmosphere that employees perceive and it is created in their organization by practices, procedures and reward. A sound climate is the long time proposition by any organization. The study was an attempt to contribute to a better understanding of the HRD Climate in the organization. The study reveals that the climate is conducive as people are helpful towards each other. The employee of NALCO has a favorable attitude towards HRD policies and practices of the organization. Most of the employees are highly satisfied with the prevailing human resources development practices, policies and climate in the organization and to top it all the top management is highly committed to provide a better HRD climate for potential development of employees and provide them with initiatives and practices that will make the employees to enjoy their work.

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Environmental Awareness among Primary School Learners in Odisha

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ABSTRACT:

The present study investigated primary school learner's environmental awareness in Odisha. Four hundred twenty students were selected through the stratified random sampling technique from primary schools of Koraput district, Odisha. Subjects consisted of boys and girls. They were assessed using the Environment Awareness Ability Measure (EAAM). Results indicate that there are significant differences between students in their level of environmental awareness. Also there are significant differences between them in environmental awareness across and groups with regard to their gender. Also type of school management (Government and private) is a factor, which can affect student's environmental awareness in the district.

Key words: Environmental awareness, Causes of pollution, Conservation of soil, Forest, Energy, Human health, Wild life

Introduction

The world today has felt that the imminent threat to humanity has come from the destruction of the earth's environment. The earth is the only planet in the highly complex universe that has the capability to support and sustain human life and other living things. Without realizing this, man is continuously destroying it. "Man has lost the capacity to foresee and forestall. He will end by destroying the earth. Man can hardly even recognize the devils of his own creation" (Albert Schweitzer, quoted by Panneerselvam, 1996). By continuously assaulting his own environment man has started digging his own grave thereby endangering the existence and survival of living species. His approach to nature is to beat it into submission. This has led to a devastating consequence of threatening the man's existence on this earth. An alarming death knell has already started blowing because of the proliferation of human numbers in the third world developing countries (Sadik, 1990). The depletion of resources, both renewable and non-renewable, are at stake due to erratic use and destruction of environment by the

man which has led to serious ecological problems causing imbalance in nature. The problem of environmental pollution on account of technological growth has become menacing.

Hence, a serious global concern has been shown today for maintaining the balance of nature and making the earth a safe and healthy place to live in for the present and future generations. Preservation, protection and proper management of environment and controlling pollution in the nature are no longer local problems. These have assumed global importance for ensuring continuance of living species on the planet earth. For the last four decades there has been a growing awareness about the intrinsic link between economic growth and protection and enhancement of the environment. The United Nations Environment Programme has further identified the close nexus between environment and development. It has accepted the fact that the future depends on striking a viable balance between the two. Thus, protection and preservation of environment have assumed utmost importance in all developmental sectors, in general, and in education, in particular. It is argued and accepted by almost all that a judicious concern and sensitivity on the part of human beings for the environment can check the environment degradation to a greater extent. Hence, an environmental awareness is needed to be developed amongst all, particularly in young children – the inheritors of the future, in this endangered planet. People who are ignorant and indifferent to their environment must be educated.

1.1 Approaches of Environmental Education :

The global environmental issues could be mitigated if the concept of development is re-conceptualized emphasizing the relations between human beings and nature, being mutually supportive and sustainable. What is needed first is to educate the mankind to be aware of its own environment, to have concern for its protection from being destroyed further and to manage it properly. This task can only be well-performed by designing a well-knit environmental education programme. If ecological balance is to be maintained and living beings are to be saved from extinction, then there is no other alternative than to create environmental awareness through education. Environmental education, in this context, becomes an inevitable component of core curriculum beginning from the early stage of schooling.

1.2. Concern for and Focus in Environmental Education :

Realizing the magnitude of global environment problems and their adverse effects on mankind the Stockholm Conference (1972) specifically recommended that Unesco and other international agencies would establish an international programme in Environmental Education.

The programme was conceived to be interdisciplinary in approach to be organized in schools and out of schools encompassing all levels of education and directed towards general public with a view to educating them to manage and protect their environment.

In response to recommendations of Stockholm Conference (1972), International Environmental Education Programme (IEEP) was launched in joint collaboration with UNEP and UNESCO. Subsequently in 1976, an Asian regional meeting was held in Bangkok to discuss the programme of environment education. In 1980 the Regional Workshop on environmental education was held at Bangkok and specific recommendations were given for implementing environmental education programme in Asian Region. The Environmental Education though is of recent origin has also a historic genesis which is discussed in the subsequent paragraphs in this report. Now almost all the developing countries are implementing the programme of Environmental Education at school level. Environmental Education as the outcome of a reorientation of various disciplines (Natural Sciences, Social Science etc.) and of different educational experiences enables the learner to achieve an integrated perception of the environment and to act towards it in a way that is more rational and attuned to social realities, now and in future. Environmental education helps in programming learning experiences ranging from simple to complex. Environment is full of concrete things which children may examine, classify, interpret and then draw their own conclusions. The principle of Environmental education is that it makes the child's education problem-based for understanding the environment and the hazards of its pollution.

1.3. Environmental Education and its Objectives:

The environmental education, as a powerful instrument in understanding, preventing and solving environmental problems, have the following objectives as recommended by Tbilisi Conference (1977):

- **Awareness:** To help individuals and social groups develop an awareness of and sensitivity to the total environment and its allied problems.
- **Knowledge:** To help individuals and social groups gain a variety of experience and acquire a basic understanding of the total environment and its associated problems.
- **Attitude:** To help individuals acquire a set of social values, attitudes, strong feeling of concern for the environment and the motivation for actively participating in its protection and improvement.

- **Skills:** To help students acquire the skills for identifying and solving environmental problems.
- **Participation:** To help students develop a sense of responsibility and urgency towards environment so as to ensure appropriate action to solve environmental problems and avoid future problems.
- **Evaluation :** To help the individuals evaluate environmental measures and educational programmes in terms of ecological, political, economic, social aesthetic and educational factors.

1.4. Environmental Education at the Primary School Level :

It is unanimously opined that before solving the environmental problems one needs to be well aware of such problems and understand their cause of occurrence. The environment experts are of the opinion that the primary stage is the sensitive stage for learning and for forming attitudes. Hence, it is proper to start with the awareness programme. The National Policy on Education, 1986 and its revised formulation in 1992 has rightly stated in Para 8.15 that: "There is a paramount need to create a consciousness of the environment. It must permeate all ages and all sections of the society, beginning with the child".

1.5. Objectives :

The major objectives of the study are :

- To study the level of attainment of competencies in environmental awareness of the primary school learners.
- To analyze the learning attitude between boy and girl students in their level of environmental awareness in.

1.6. Materials & Methods

The present study is an attempt to examine the environmental awareness of primary school learners in relation to residential background, sex and type of school. This section explains the hypotheses, sampling, instrument, procedure, scoring and statistical techniques used for the study. The details of sample for the development of the environment awareness study are enumerated below:

Table 1.1

Sample for development of the Environment Awareness study

Sl. No.	Category of School	Number of Schools	Number of Students		
			Boys	Girls	Total
1.	Government	07	160	80	240
	Non-Government	07	122	58	180
	Total	14	282	138	420
2.	Rural	05	88	32	120
	Urban	09	194	106	300
	Total	14	282	138	420
3.	English Medium	03	59	36	95
	Oriya Medium	11	223	102	325
	Total	14	282	138	420

Table 1.2

Management variation-wise distribution of the sample

Category of School	No. of Schools	No. of Students		
		Boys	Girls	Total
Government	19	130	120	250
Non-Government	16	160	110	270
Total	35	290	230	520

Table 1.3

Distribution of the sample according to Rural – Urban variation

Category of Schools	No. of Schools	No. of Students		
		Boys	Girls	Total
Rural	22	110	90	200
Urban	13	180	140	320
Total	35	290	230	520

Table 1.4

Categorization of the sample on the basis of Socio-Economic Status

Category	Score Range	No. of Students		
		Boys	Girls	Total
High	More than 20	Nil	Nil	Nil
Medium	10-20	206	178	384
Low	Less than 10	84	52	136
Total		290	230	520

Table 1.5

Medium of instruction variation-wise distribution of the sample

Category of Schools	No. of Schools	No. of Students		
		Boys	Girls	Total
English Medium Schools	06	120	100	220
Oriya Medium Schools	29	170	130	300
Total	35	290	230	520

Following null hypotheses were formulated for testing the assumptions:

Hypothesis 1 There will be no significant difference in the level of environment awareness among secondary school students.

Hypothesis 2 There will be no significant difference between boy and girl students in their level of environmental awareness in.

RESULTS & DISCUSSIONS

In this study the level of environmental awareness has been identified on the basis of their scores on the environment awareness ability measure under two levels using the criteria – average maximum weight and minimum weight for the total number of items in the scale + SD

of the scores obtained on the scale. Table shows number and percentage of primary students under different levels (Average and High) of environmental awareness.

Table 1.6
Rank order of Environmental awareness of students

Rank	Dimensions	Mean	SD	Weight age
				%
1	Conservation of human health	11.41	2.37	58.36
2	Conservation of wild life and animal husbandry	1.71	0.54	43.61
3	Conservation of soil, forest, air and etc.	9.86	2.32	38.68
4	Causes of pollution	9.76	2.02	35.55
5	Energy conservation	4.37	1.52	31.84

The results of the ANOVA tests are presented in Tables 5, 6, 7 and 8. These Tables show F-value, significance and mean value of student's environmental awareness scores based on their country as well as gender and type of school. Tables 5 and 6 indicate that there is a significant difference between Indian and Iranian students in all the sub factors of environmental awareness. In sub factors like 'Cause of pollution' ($F=37.947, p<0.000$), 'Conservation of soil, forest, air and etc.' ($F=44.249, p<0.000$), 'Energy conservation' ($F=41.326, p<0.000$), 'Conservation of human health' ($F=143.155, p<0.000$) and 'Conservation of wild life and animal husbandry' ($F=5.194, p<0.023$) Iranian students scored significantly higher than Indian students. There is a significant difference between boy and girl students in some sub factors of environmental awareness. In sub factors like 'Energy conservation' ($F=6.066, p<0.014$), boy students scored significantly higher than girl students whereas in 'Conservation of human health' ($F=4.253, p<0.039$) girl students scored significantly higher than counterparts. The significant interaction effects between countries and genders for three sub factors of environmental awareness indicate that in Iran boy students have more awareness about Conservation of soil, forest, air and etc.'

Table 1.7.

Mean scores for various dimensions of student's environmental awareness with reference to location and gender

Environmental awareness of students	Gender	Mean
Cause of pollution	Boys	9.64
	Girls	9.87
Conservation of soil, forest, air and etc.	Boys	9.45
	Girls	10.28
Energy conservation	Boys	4.46
	Girls	4.27
Conservation of human health	Boys	11.04
	Girls	11.78
Conservation of wild life and animal husbandry	Boys	1.68
	Girls	1.74
Total	Boys	36.31
	Girls	37.91

Table 1.8.

Result of two-way ANOVA for mean students environmental awareness Score in various areas with reference to country and gender

	Source of variation	F-value	Significance
Cause of pollution	Between countries (A)	37.947	0.000
	Between gender (B)	0.931	0.335
	Interaction (A x B)	0.992	0.319
	Between countries (A)	44.249	0.000
Conservation of soil, forest, air and etc.	Between gender (B)	2.646	0.104
	Interaction (A x B)	22.344	0.000
	Between countries (A)	41.326	0.000
	Between gender (B)	6.066	0.014
Energy conservation	Interaction (A x B)	0.014	0.906
	Between countries (A)	143.155	0.000
	Between gender (B)	4.253	0.039
	Interaction (A x B)	14.008	0.000
Conservation of human health	Between countries (A)	5.194	0.023
	Between gender (B)	0.247	0.619
	Interaction (A x B)	5.216	0.023
	Between countries (A)	108.156	0.000
Conservation of wild life and animal husbandry	Between gender (B)	0.935	0.334
	Interaction (A x B)	12.239	0.000
Total	Between gender (B)	0.935	0.334
	Interaction (A x B)	12.239	0.000

From Table, it is found that the overall environmental awareness scores indicates that there is no significant difference between boy and girl students ($F=0.935$, $p<0.334$), therefore the hypothesis 2 is accepted.

Conclusion

In the study nine hundred and ninety – one students were selected through the stratified random sampling technique of primary secondary schools of Koraput district. The main findings of the present study are:

- In this study it was found that there is a significant difference in the level of students' environmental awareness between the different learners. The study found that the number of students with average level of environmental awareness is more.
- Result indicated that in total there is no significant difference between boy and girl students and their level of environmental awareness.
- The present study highlighted that in total there is influence of type of school management on level of student's environmental awareness.
- More than 70 percent of students in the locality informed that their level of environmental awareness is high.
- Boy and girl students in this study have the same level of environmental awareness and gender is not a factor, which affects their environmental awareness.
- Type of school management has impact on environmental awareness of students.

Teachers can play an important role in educating their students about environment which is possible only when the teachers themselves have the necessary level of environmental awareness, for this purpose, the government should introduce and enrich environmental education programmers in both in service and pre service teacher programmers. Various co-curricular activities in primary schools may be encouraged to help in developing student's environmental awareness.

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