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ROLE OF GOVERNMENT OF INDIA IN ENHANCING KNOWLEDGE MANAGEMENT PRACTICES IN MSMEs

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ABSTRACT

Micro, Small and Medium Enterprises (MSMEs) is the largest sector by its contribution to employment generation, exports and economic development. The dynamic globalised business environment poses many challenges to the sector. The traditional machine power no longer is considered to provide competitive edge and is replaced by human / intellectual power. Knowledge Management a new buzz word in the world of business and academia and its implementation is found to benefit the organization. Primary objective of this paper is analysing the contribution of Government of India to foster MSME sector from knowledge management perspective. An analytical research is done by collecting and analyzing secondary data through books, journal articles and websites. An elaborate study undertaken reveals that government of India through its ministries and offices is taking tremendous effort to aid the growth of MSME sector and also to tackle the impediments to it. There is very little research on Role of Government in enhancing MSMEs from Knowledge Management Perspective especially in India. This paper will throw light on this aspect.

KEYWORDS

Government of India, Intellectual capital, Knowledge Management, MSMEs.

INTRODUCTION

Micro, small and medium enterprises (MSME) is the largest sector in terms of providing employment and exports. When MSMEs are characterized by (Dr. A.P.Pandey & Shivesh, 2007) low cost of production, high propensity to adapt technology, greater operational flexibility, the sector also faces challenges in the globalised economy. Industrial policy 1991 opened the gates to products and services from other countries and subsequent policies have increased this trend. Domestic industries, especially Small scale sector faced heightened level of competition in terms of quality, features, prices and the like. The welfare of the MSME sector lies with adaptability to the new situation which warrants the firms to follow innovative practices. One of the major impediments to MSME sector to focus on innovative practices is finance. It is vital that Government should protect and support the wellbeing of MSMEs by policies, subsidies and schemes (Ross Levine, 2005).

Knowledge management is accepted worldwide as one such innovative practice for MSMEs. This paper analyses the government's role in enhancing knowledge management practices for MSMEs. Paper has three sections: i) Current status of MSMEs , ii) Knowledge management and its need iii) Role of government and other related organizations in enhancing knowledge management practices in MSMEs.

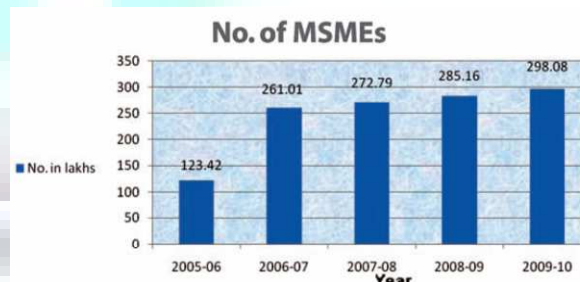
1. CURRENT STATUS OF MSMEs IN INDIA

The fourth census on MSME shows that the size of MSME sector is 2.98 million, the largest employment provider in the country. A comprehensive picture on the size of MSME is shown in the table 1. The recent years have witnessed a steep increase in the number of MSMEs, from 123.42 million in 2005-06 to 298.08 million in the year 2009-10.

TABLE 1: MSME SECTOR IN INDIA

Number of MSMEs	29.8 million
Contribution to India's GDP	17%
Employment provided	69.54 million
Contribution to exports	40%

(Source: MSME Annual Report,2011)

**2. KNOWLEDGE MANAGEMENT**

For several decades the world's best-known forecasters of societal change have predicted the emergence of a new economy in which brainpower, not machine power, is the critical resource. But the future has already turned into the present, and the era of knowledge has arrived. --"The Learning Organization," Economist Intelligence Unit. Globalization led to an increased level of competition for SMEs internationally in terms of quality and innovation, uncertainty as shown by fluctuations in economic conditions, proliferation of ICT, technological advancement in manufacturing practices etc. , make SMEs to hone their skills even for survival and then for sustainable development. As Economic intelligence unit rightly says that the traditional factors of production land, labour and capital can no longer guarantee sustainable competitive advantage. The place is duly claimed by intellectual capital or knowledge.

The world is undergoing a knowledge revolution and it is time for India to make a transition to knowledge economy. Knowledge economy was erroneously considered to be more apt for high technology or ICT industries. The role played by knowledge concept covers any industrial segment or economy which uses new or existing knowledge to improve productivity like agriculture, industry and services and increase overall welfare. World Bank report released in 2005 states,To get the greatest benefits from the knowledge revolution, the country needs to press on with the economic reform agenda that it put into motion more than a decade ago and continue to implement the various policy and institutional changes needed to accelerate growth. India undoubtedly has many critical ingredients for becoming knowledge economy like largest domestic market It has a large and impressive Diaspora, creating valuable knowledge linkages and networks. The list goes on: macroeconomic stability, a dynamic private sector, institutions of a free market economy, a well-developed financial sector, and a broad and diversified science and technology (S&T) infrastructure....

Hence, this paper analyses the government's role in enhancing knowledge management practices for MSMEs. Paper has three sections: i) Current status of MSMEs, ii) Knowledge management and its need iii) Role of government and other related organizations in enhancing knowledge management practices in MSMEs.

2A. KNOWLEDGE AND KNOWLEDGE MANAGEMENT DEFINED

From a practical perspective, APQC defines *knowledge* as information in action. Until people take information and use it, it isn't knowledge. In a business context, knowledge is what employees know about their customers, each other, products, processes, mistakes, and successes, whether that knowledge is tacit or explicit.

Several definitions have been in use for knowledge management and a few are given below:

1. As early as 1949, Mayo defined KM as a management concept which involves processes like managing the generation of new knowledge; capturing, storing and retrieving knowledge and experience; sharing, communication, collaborating and transferring; and using and building on what is known.
2. Nonaka and Takeuchi, 1995 definition of KM is the process of applying a systematic approach to the capture, structure, management, and dissemination of knowledge throughout an organization in order to work faster, reuse best practices, and reduce costly rework from project to project.
3. Grey, 1996 defined KM as a collaborative and integrated approach to the creation, capture, organization, access and use of an enterprise's intellectual assets.
4. O'Dell and Grayson (1998) defined KM as a conscious strategy of getting the right knowledge to the right people at the right time; it is also helping people share and put information into action in ways that strive to improve organisational performance.
5. Levinson, 2004 defined KM as the process through which organisations generate value from their intellectual and knowledge-based assets. Most often generating value from such assets involves codifying what employees, partners and customers know, and share that information among employees, departments and even with other companies in an effort to devise best practices.
6. APQC definition of knowledge *management* (KM) - KM is a systematic effort to enable information and knowledge to grow, flow, and create value. The discipline called KM is about creating and managing the processes to get the right knowledge to the right people at the right time and help people share and act on information in order to improve organizational performance.

There are two types of knowledge: Tacit and Explicit. Explicit knowledge is comparatively easy to harness but harnessing tacit knowledge which resides in the minds of the individuals is a challenge. In 1990s, knowledge and knowledge management became the buzz word in the world of academia and industries. Numerous research works are undertaken and surprising findings are published.

Few of such findings are given below:

S.No.	Author (Year)	Findings
1	Alavi and Leidner (2001)	Useful organizational resource
2	Michael Zack, James McKeen and Satyendra Singh, 2009	KM practices were found to be directly related to organizational performance which, in turn, was directly related to financial performance.
3	Davenport and Grover, 2001	Competitiveness hinges on the effective management of intellectual resources
4	Yannis Caloghirou, Ioanna Kastelli, Aggelos Tsakanikas, 2004	Knowledge is a significant resource of innovative capacity of firms
5	Pang-Lo Liua,b, Wen-Chin Chena, Chih-Hung Tsai, 2005	There is a positive effect on new product development performance for those companies that strongly implement knowledge management method
6	Vic Gilgeous and Kaussar Parveen, 2001	Knowledge capture, storage, transfer as the Core competency for manufacturing effectiveness
7	Research report, Griffith University-School of Management & BML Consulting, 2002	Long term benefits like revenue growth, enhancing competitive advantage, employee development, product innovation and short term benefits like reducing costs, improving marketing strategies, enhancing customer focus and facilitating profit growth may be achieved by KM practices.
8	Rajesh K. Pillania, 2008	knowledge management initiatives lead to high performance in industries
9	Pang-Lo Liu a, Wen-Chin Chen b, Chih-Hung Tsai a, _	Knowledge has currently become a main part of manufacturing resources and a prerequisite for success in the production environment.
10	Arnaldo Camuffo ^a ; Anna Comacchio ^b Venice, 2005	The increasingly fierce competition deriving from globalization and ICT has challenged this approach calling for new ways to develop, diffuse and retain knowledge in SMEs.
11	Daniel Palacios Marque's and Fernando Jose' Garrigo's Simo'n, 2006	firms that adopt knowledge management practices obtain better results than their competitors.
12	Uwe Cantner, Kristin Joel and Tobias Schmidt, 2009	v innovation strategy targeted at consumers and continuous R&D activities are positively related to knowledge management usage by innovative German firms.

Hence, knowledge management can be considered to provide a sustainable competitive advantage.

2B. NEED FOR KNOWLEDGE MANAGEMENT IN MSMEs

It is imperative to understand that the world is transforming from an independent and lightly linked society to one of inclusion with a larger, more deeply interconnected global community. This poses challenges to organizations in general and SMEs in particular in terms of survival, sustainability and growth. Knowledge Management practices will be able to provide solution to some of the deep rooted problems faced by MSMEs.

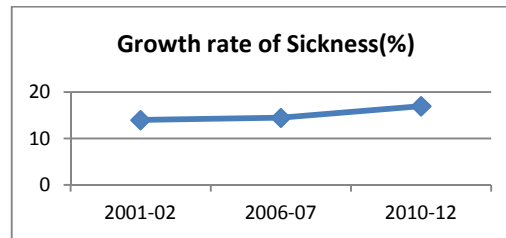
While on one side, new policies and schemes are formulated to strengthen MSMEs, on the other end, they face challenges and limitations which are unique to MSMEs are low capital base, concentration of management functions in one/ two persons, inadequate exposure to international environment, inability to face impact of WTO regime, inadequate R&D and lack of professionalism. In addition, accessing technology and maintaining competitiveness poses a serious problem to the growth of MSMEs. The problems mentioned above lead to following challenges.

CHALLENGE 1: SICKNESS IN MSMEs

Like any other economy, Indian economic development lies with the growth of MSMEs and is evident from the growth of the sector over the period of years. But at the same time, we cannot ignore the fact that sickness in SMEs are also growing astronomically as given in fig. MSMEs are essentially at risk and have been struggling to stay upright for quite some time now. This is borne out by the Fourth Census of MSMEs (2006-07) which reveals that as many as 480,946 units have closed down over the five year period while another 77,723 MSMEs have been declared sick by March 2010. The malaise has not been confined to traditional sectors alone but is more widespread across industry. An immediate question that arises is: What causes sickness in MSMEs? According to an AIMA Study – August 2003, the constraints faced by the Indian SSI Sector has been observed as follows:

CAUSES FOR SICKNESS

- | | |
|----------------------------------|--------|
| a. Market related | 25% |
| b. Finance related | 70% |
| c. Government Policy related | 12.78% |
| d. Power related/ Infrastructure | 14.0% |
| e. Technology | 14.6% |

**CHALLENGE 2: LACK OF COMPETITIVENESS**

The Global competitiveness Index (GCI) 2011-12 (world economic forum, 2011) shows India in 51st position in 2010-11 among 142 countries. India slides down to 56th position in the year 2011-12. The GCI is the indicator of the performance of the economy in terms of ten variables viz. status of public institutions & private institutions, Infrastructure, macroeconomic environment, Health and primary education, higher education and training, labour market efficiency, goods market efficiency, financial market development, technological readiness and market size. In addition, business and innovation are also taken as variables. It is stated that the basic drivers for competitiveness are not improved at all and India fails miserably in terms of public and private institutions. Even though, Competitiveness is an indicator of the overall nation's performance it affects the MSMEs as they form the pillar of the economy.

CHALLENGE 3: LACK OF INNOVATION

Similarly, The Global Innovation Index (GII) rates India in 41st, 56th and 62nd position in the years 2009, 2010 and 2011 respectively. GI is a study conducted by experts from INSEAD and its Knowledge Partners to put into perspective the new trends and practices in innovation across the world. The indexing of countries on innovation parameters will not only showcase the excellence of lead countries but also help in finding the gaps for the laggards. GI provides insight into the innovation gaps that need be filled, which makes it a readily available guide for National policy makers.

The decline in the position gives an alarm that the country failed to analyse and bridge the gap as well as to make progress in innovation. The report further adds that India doesn't find a place in top R&D generators but is one of the top R & D users and R & D importers.

Research studies that are carried out in MSMEs and large organisations be it project, service or manufacturing organizations across the globe emphasize the importance of knowledge and knowledge management. Competitiveness and innovation activities need large amounts of new knowledge. Knowledge is inextricably linked to core competence. Knowledge management should be considered seriously by MSMEs not only to improve innovation and competition but also to avoid falling prey to sickness due to various reasons.

3. ROLE OF GOVERNMENT IN ENHANCING KM PRACTICES IN MSMEs

"We need systematic work on the quality of knowledge and the productivity of knowledge--neither even defined so far. The performance capacity, if not the survival, of any organization in the knowledge society will come increasingly to depend on those two factors. But so will the performance capacity, if not the survival, of any individual in the knowledge society." - **Peter F. Drucker**, *The Age of Social Transformation*, *The Atlantic Monthly*, November, 1994.

Key condition for ensuring long term sustainability of MSMEs is to continuously improve their processes and role of Governments in helping them to tackle the challenges is significant. The programs designed by the Governments should focus on promoting technology in line with competitiveness orientation. (Denis Lagace, 2003). Knowledge management is considered important and several governments have taken initiatives in studying the status of KM in organizations like OECD survey. Similarly Indian Government also funded projects on Knowledge management. Government of India has taken many measures to enhance MSMEs in the country. It strives hard to thrive the MSME sector by industrial policies, five year plans, subsidies, Creating SEZs & EOZs, tax concessions etc. We attempt to explore the role of Indian government in enhancing the KM dimensions for MSMEs.

Government of India formed the "Ministry of MSMEs" in the year 2007 by merging Ministry of Agro and Rural Industries and Ministry of Small Scale Industries with a sole objective of developing MSMEs. The Government also established the National Board for Micro, Small and Medium Enterprises (NBMSME) for monitoring, analyzing and reviewing the effectiveness of policies and programmes and suitably recommend the Government in formulating the policies for the growth of MSMEs. The other institutions that formed exclusively with the same objective are given in the table 2:

TABLE 2: INSTITUTIONS FOR THE WELFARE OF MSMEs

Central Government/ Institutions/ PSUs	State Government / Institutions / PSUs
<ul style="list-style-type: none"> Chief Controller of Accounts Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) Small Industries Development Bank of India (SIDBI) Ministry of Food Processing Industries Ministry of Rural Development Ministry of Textiles National Manufacturing Competitiveness Council (NMCC) Department of Information Technology Department of Heavy Industry Department of Industrial Policy & Promotion Department of Commerce 	<ul style="list-style-type: none"> State Directorate / Commissionerate of Industries State Khadi Boards Andhra Pradesh State Financial Corporation Delhi Financial Corporation Gujarat State Financial Corporation Himachal Pradesh Financial Corporation Jammu & Kashmir State Financial Corporation Madhya Pradesh Financial Corporation Orissa State Financial Corporation Uttar Pradesh Financial Corporation Pradeshya Industrial & Investment Corporation of Uttar Pradesh (PICUP)
Industry Associations	International Organisations
<ul style="list-style-type: none"> SME India National Bank for Agriculture & Rural Development (NABARD) Laghu Udyog Bharati (LUB) SME Network - Network of Small and Medium Enterprises Associations & Members Federation of Indian Chambers of Commerce and Industry (FICCI) Confederation of Indian Industry (CII) The Associated Chambers of Commerce and Industry of India (ASSOCHAM) Federation of Indian Micro and Small & Medium Enterprises (FISME) World Association for Small and Medium Enterprises (WASME) India Trade Promotion Organisation (ITPO) Technology Innovation Management and Entrepreneurship Information Service Technology Bureau for Small Enterprises (TBSE) 	<ul style="list-style-type: none"> International Network for SMEs WIPO Small and Medium-Sized Enterprises United Nations Industrial Development Organization World Trade Organisation European Commission - Enterprise & Industry Innovation - SMEs Canadian International Development Agency Small and medium-sized enterprise information center, Canada SME Centre, Hongkong Small and Medium Enterprises in Ireland SME Information of Japan Ministry of Economy, Mexico World Trade Centre, Mumbai Small and Medium Enterprise Development Authority, Pakistan Swedish International Development Agency Small and Medium Enterprises Development, Washington, USA Department for International Development, UK

Source: <http://msme.gov.in/msme-links.htm>

These institutions facilitate the KM practices viz, Knowledge Creation, Knowledge Capture, Knowledge Storage, Knowledge Transfer and Knowledge Application in MSMEs. Planning Commission has identified twelve strategic challenges while formulating XII five year plans. Out of the twelve, the Ministry of MSME has substantive role to play in the following areas (MSME Annual Report 2010-11). All these four areas are related closely to knowledge management:

- a) Enhancing the Capacity for Growth
- b) Enhancing Skills and Faster Generation of Employment
- c) Markets for Efficiency and Inclusion
- d) Technology and Innovation

3A) KNOWLEDGE CAPTURE / ACQUISITION / TRANSFER

Knowledge is the whole essence of any activity and it is a hub of business activities. Data and information about various organizational routines reside with the individuals either tacitly or explicitly and with the organizations in the form of documents, manuals etc. But interpreting the information in the right sense for the organizations improved performance is a skill.

Knowledge capture or acquisition is the first process in the KM cycle. The impediments of this phase is the accuracy of the information collected in terms of scope, breadth, depth, credibility, timeliness, relevance, cost, control, and exclusivity. Source of data must be of highest quality and should not lead to information overload. GoI, through ministry of MSME provides sustenance for the welfare of MSMEs through various schemes. It is important to note that while knowledge capture happens simultaneously the next phase i.e knowledge transfer also take place among the participants. Conferences, trade fairs, exhibitions, workshops, seminars and the like provide an excellent platform for an individual and the organizations to share and capture knowledge hand-in-hand.

MEMORANDUMS OF UNDERSTANDING (MOU)

Ministry of MSME entered into many MoUs with international bodies of various countries across the globe. This will facilitate the Indian MSMEs to have an international exposure, a better understanding of business environment and also to establish networks/clusters. The details of MoUs entered by MoMSME with other partner ministries/ organizations are given below:

- Ministry for Cooperatives and Small and Medium Enterprises of the Republic of Indonesia
- The Ministry of Industry and Commerce, Republic of Mozambique
- Small and Medium Business Administration of the Republic of Korea
- Government of the Republic of Botswana on Cooperation in the field of Small, Medium and Micro Enterprises
- Ministry of Trade and Industry of Arab Republic of Egypt
- Government of the Republic of Tunisia
- The National Agency for Small and Medium-Sized Enterprises and Co-Operatives of Romania
- The Ministry of Commerce, Industry, Investment Promotion, Tourism and Cooperatives, Republic of Rwanda
- The Secretariat of Economy of the United Mexican States
- The Government of Republic of Uzbekistan
- The Government of the Republic of Lesotho
- Democratic Socialist Republic of Sri Lanka
- Ministry of Small and Medium Size Enterprises and Handicraft in the People's Democratic Republic of Algeria
- Government of the Republic of Sudan

CONFERENCES/TRADE FAIRS/SEMINARS

- i) International cooperation scheme paves way for technology upgradation and infusion for modernizing and promoting MSMEs. Under the scheme, MSME business delegates are deputed to participate in international exhibitions, trade fairs; buyer-seller meets in India and abroad. They are also deputed to visit other countries for exploring potential areas for technology infusion and upgradation, facilitating joint ventures, foreign collaboration etc. Assists MSMEs to conduct international conferences and seminars on topics and themes of interest to the MSME.
- ii) Scheme of surveys, studies and policy research probes into the issues, challenges and opportunities for MSMEs by empirical and analytical studies. These studies in turn help the policy makers to suitably assist the growth of MSMEs. Agencies that are involved in surveying are leading management, technical, and consulting and research institutes such as IIMs, IITs, CSIR, CIPET, IISc, CRISIL, EDI etc. A complete list of agencies is available with Ministry of MSME, India website.
- iii) NSIC provides marketing assistance to MSMEs. The objectives of the scheme in Knowledge Capture are to facilitate formation of consortia of MSMEs, to provide platform for interaction with large buyers, to enrich marketing skills, to enhance marketing capabilities and competitiveness of the MSMEs. NSIC also conducts MSME international tradefairs.
- iv) Schemes under coir board, India provide assistance in enhancing efficiency of conversion of husk to fiber and yarn which is currently at 40% due to traditional methods and un(der) skilled labour. The coir board through its scheme, facilitate technology upgradation and thus improve productivity and quality. It also conducts various skill development programmes exclusively for coir workers.
- v) Through office of development commissioner,
 - National Manufacturing Competitiveness Programme (NMCP) Schemes focuses on strengthening MSME operations and sharpen their competitiveness.
 - Micro & Small Enterprises Cluster Development Programme (MSE-CDP) – The primary objective of this programme is to build capacity of MSEs through formation of consortia and associations, to build common facility centres (for testing, training centres, raw material depot, effluent treatment, complementing production processes etc.). Clusters can provide a common platform for all MSEs for interaction and knowledge capture pertaining to their industries.
 - MSME MDA (Market development assistance)- main focus is on funding MSMEs to capture knowledge by visiting exhibitions and trade fairs.

TRAINING & SKILL DEVELOPMENT

NSIC provides technical support to SSIs through 'NSIC Technical Services Centres(NTSC)' and a number of extension and sub centres spread across the country. The range of technical services provided through these centres include training in Hi-Tech as well as conventional trades, testing, common facilities, toolkits, energy audit, environment management etc. NTSCs are established in different location across the country which provides specialized training in specific areas.

- NTSC, OKHLA - Machine Tools, Design & Testing, Rural Technology and Computer Applications.
- NTSC, HOWRAH - Plastic Machinery and Instrumentation
- NTSC, RAJKOT - Diesel Engine Development & Testing, Energy Conservation, Energy Audit, Sheet Metal and Wood Working Machinery
- NTSC, CHENNAI – CAD/CAM/CAE training, CNC programming, VLSI design, Hardware maintenance, CISCO routing, energy audits etc.
- NTSC, HYDERABAD - Electronics and Computer Application.
- NTSEC, ALIGARH – CAD , CAM, CAE, Computer courses, ISO audit training etc.
- NTSEC, RAJPURA - Domestic Electrical Appliances.
- NTSEC, GUWAHATI - Training on Sheet Metal, Leather Wear, Energy Audit & Enterprise Building.
- FFDC (Fragrance & Flavour development center) was established in the year 1991, by SIDO(Small industries development organization) conducts exclusive training programmes on Commercial Cultivation of Aromatic crops, its processing and marketing, Value Addition in Essential Oils and Aroma Chemicals and Creation Methodology for Fragrances and Flavours, Comprehensive training programme covering all aspects of essential oil, fragrance & flavour

industry including information on policies, finance, management aspects etc., Fragrance & Flavour Creation and its Application, Quality Assessment of Essential oils/aroma chemicals using modern instrumental techniques and Essential Oils, Perfumery & Aromatherapy.

- Indian Institute of Entrepreneurship conducts training and skill development programmes regularly. To name a few, jute diversified products, food processing, bamboo product manufacturing, handloom, electrical house wiring, woolen garment making, beauty products, steel fabrication, weaving and the like.
- MoMSME has also been supporting the efforts of State Governments/ Union Territories, Industry Associations, Financial Institutions, Technical/ Management Institutions, other Non-Governmental Organisations (NGOs), etc. for establishment of new training institutions as well as strengthening of the infrastructure of existing training institutions.
- National Institute of MSME (ni-MSME) has 4 theme-focused Schools of expertise, under which 14 Centres of Excellence and 5 Cells are functioning cumulatively to pursue specific activities. These centers provide customized/tailor made/collaborative programmes for the client organizations.

In addition to this access to latest information in connection with technology up gradation and its transfer is provided to SSIs through the 'Technology Transfer Centre' at New Delhi.

3B) KNOWLEDGE CREATION

GII report, 2011 brought out the fact that India is one of the largest R & D importers and users but not R & D generator. The statement implies that India doesn't create knowledge extensively but only use. The measures taken by Gol on this particular issue is tremendous.

- In 2011, two milestone events which focus on knowledge creation in MSMEs took place viz. Foundation stone of NSIC Business Park was laid at the NSIC Complex in Okhla Industrial Estate, New Delhi and MSMEs INTELLIGENCE PORTAL was launched for disseminating Marketing Intelligence to MSME sector in the country.
- Coir board's Science and Technology scheme facilitate The Research and Development activities through the twin research institutes; the Central Coir Research Institute, Kalavoor and Central Institute of Coir Technology, Bangalore. The R & D units strives on identifying new user areas for utilisation of coir and coir waste (coir pith), modernisation of production infrastructure for elimination of drudgery in manual operation thereby attaining higher productivity and improvement in quality are integral parts of the research efforts. Collaborative research with research organisations, institutes, universities are also undertaken on varied applications of coir, development of new products, new machinery, product diversification, development of environment friendly technologies, technology transfer, incubation, testing and service facilities are the areas which are given priority consideration.
- MoMSME undertakes research and development programmes to provide competitive edge to MSMEs through its schemes and partner organizations/institutions.

3C) KNOWLEDGE STORAGE AND DISSEMINATION

It is a paradox to call data and information storage as knowledge storage. According to Peter F. Drucker in The New Realities, "Knowledge is information that changes something or somebody—either by becoming grounds for actions, or by making an individual (or an institution) capable of different or more effective action". Data is raw and has no significance unless given meaning. It becomes information. Knowledge is the appropriate collection of information that it's intent is to be useful. (Ackoff). Knowledge management is not data management, information management, human resources management, information technology or intellectual property rights management (Rajesh K Pillania, 2009).

But one cannot deny that a reliable database is a key input to policy decision making process. This is true for MSMEs in view of the sector size and wide disparity among the enterprises within the sector. Ministry of MSME facilitates the data storage through many measures as given under:

- Office of the development commissioner conducts periodic census for strengthening and updating the data base on MSME sector. So fact the office has conducted four censuses in the year 1971-72, 1992-93, 2002-03 and 2006-07.
- A feature "SME Showcase" from office of the development commissioner offers information resources like yellow pages(Information on SSI clusters), project profiles for new entrepreneurs and provides the links to other important trade resources.
- NSIC has launched "Infomediary Services", a unique scheme which provides a one-stop, one-window bouquet of aids like information on business, technology and finance. The site also exhibits the core competence of Indian SMEs in terms of price and quality-internationally, as well as domestically. NSIC's Infomediary Services use a professionally managed HR base and modern technology for dissemination of vital information-websites, sector-specific newsletters (both print and electronic), and e-mails.
- NSIC introduced ISO 9000/ISO 14001 Certification Reimbursement Scheme with a sole motive of urging the MSMEs to acquire Quality management system (QMS) ISO 9000 certification/environment management (EMS) ISO 14001 certification. The scheme reimburses the expenses incurred to the extent of 75% or Rs. 75,000/- whichever is lower. QMS and EMS are the systems that establishes a good data base of the activities and also the action plan for further improvement.
- In addition, MoMSME, its offices and all the partner organizations publish news bulletins, books, magazines, brochures etc. which also serve as a knowledge bank to MSMEs.
- Offices of MoMSME, training institutes also have a library with abundance of information related to MSMEs waiting to serve the seeker of knowledge.

3D) KNOWLEDGE APPLICATION

This is the last phase of the KM cycle. Knowledge gained or created will not be meaningful unless applied. Applying such knowledge in the operations of MSMEs is found to deliver the following benefits:

1. Lift Productivity and Efficiency
2. Increase revenue by lowering costs, avoiding wastages and duplication
3. Improve quality
4. Open new markets
5. Improve the Service and Support of Customers (CRM)
6. Improve the ability of the organization to Manage Change
7. Attract, and retain motivated, loyal, and committed Talent
8. Improve Decision-Making
9. Help the enterprise to grow more Network Connections
10. Extend the global Reach, Richness, and Scope of the enterprise
11. Enhance creativity and innovation in organizations
12. Lead to better competitive position

Government of India fosters MSMEs' innovative skills for competitive advantage by providing financial assistance for technology up gradation. Technological environment is dynamic and there is a pressing need for MSMEs to acquire state-of the art technology to strive for innovation. Gol motivates the firms to innovate, to be competitive and to be more productive by awards and rewards every year.

FINANCIAL ASSISTANCE FOR TECHNOLOGY UPGRADATION, QUALITY UPGRADATION

- MoMSME offers Credit Linked Capital Subsidy Scheme which aim at facilitating technology upgradation by providing 15% upfront capital subsidy to manufacturing MSEs, on institutional finance up to Rs.1 crore under the scheme.

- Technology and Quality Up gradation Support to MSMEs: The scheme facilitates Capacity Building of MSMEs Clusters for Energy Efficiency/Clean Development Interventions, Implementation of Energy Efficient Technologies in MSME sector, Setting up of Carbon credit aggregation centres and encouraging MSMEs to acquire product certification licences from National/International bodies.

AWARENESS ON INTELLECTUAL PROPERTY RIGHTS

To develop competitiveness, National Manufacturing Competitiveness Programme (NMCP), launched a programme "Building Awareness on Intellectual Property Rights for the Micro, Small & Medium Enterprises (MSMEs)". The primary objective of the programme is to create awareness through Sensitization Programmes on IPR, to provide financial assistance for Grant on Patent / GI Registration and to set up IP Facilitation Centre (IPFC). The programme aims to enable MSMEs to attain global leadership position and to empower them in using effectively the tools of Intellectual Property Rights (IPR) of innovative projects.

AWARDS

Ministry of MSMEs awards the innovative firms (Successful knowledge application) and R & D firms (successful in Knowledge creation) every year. These awards and rewards motivate and stimulate the organizations to be more innovative and productive.

1. National awards for quality products in various segments of manufacturing companies like knitwear, ceramic, plastic, furniture, electric power etc.
2. National award for R & D efforts in Micro & Small Enterprises

3E) PARTNER ORGANISATIONS

It is understood by the fact that the MSME sector is the largest by size and contribution. It is essential to acknowledge the significance of MSMEs and the need of the hour is to hone and foster the sector by various measures. Government of India through its ministries is doing an appreciable contribution to the welfare of the MSMEs. But Government alone cannot provide all due to constraints on time and distance. It is a herculean task to cater to the requirements of the enterprises across the nation. Hence MoMSME has partnered with other organizations like CII, FICCI etc. (mentioned elsewhere) to facilitate the knowledge management practices of MSMEs.

CONCLUSION

The paper attempts to analyse the measures taken by Government of India to nourish and flourish MSME sector from knowledge management perspective. All the schemes and measures described are directly given by MoMSME. The contribution by partner organizations, state governments, international organizations and industry associations is beyond the scope of this paper. It is an attempt to comprehensively study the role of Government of India in enhancing knowledge management practices in MSMEs.

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APPENDIX**ABBREVIATIONS USED**

CIPET	:	Central Institute of plastic Engineering & Technology
CRISIL	:	Credit Rating and Information Service of India Limited
CSIR	:	Council of Science and Industrial Research
GoI	:	Government of India
IISc	:	Indian Institute of Science
IIT	:	Indian Institute of Technology
MSME	:	Micro, Small and Medium Enterprises
MoMSME	:	Ministry of Micro, Small and Medium Enterprises
NIMSME	:	National Institute of Micro, Small and Medium Enterprises
NSIC	:	National Small Industries Corporation
NTSC	:	NSIC Technical Service Centre
R & D	:	Research & Development

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