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Risk Management: A Step towards Sustainable Development

Hardeep Singh[1] and Bikram Pal Singh[2]

[1]Department of Training & Placement, BKSJEC Amritsar, Punjab, INDIA,
[2]Punjab Technical University, Kapurthala, Punjab, INDIA.
geniussodhi@rediffmail.com, eminentsodhi@gmail.com

Abstract

Risk is the chance of personal injury, or property damage or loss, determined by combining the results of individual evaluations of specific elements that contribute to majority of risk concerns. Risk generally is a function of severity (an event's potential consequences in terms of degree of damage, injury or impact on a mission) and probability (the likelihood of an individual event will occur). Risk may directly affect the productivity, profitability, service, quality, reputation, public image, brand value and earnings of an organization. Even then to survive in this competitive world, risk is essential to progress. The opportunity to succeed also carries the opportunity to fail. It is necessary to learn to balance the possible negative consequences of risk with the potential benefits of its associated opportunity. Risk may also be defined as the possibility to suffer damage or loss. Therefore to go ahead in life and achieve highest success, risk management standards are required for the proper identification and assessment of such uncertainties or damage or loss or unfortunate events, so as to maximize realization of objectives. In real sense, risk management is a decision making tool, people in an organization use to increase effectiveness by anticipating hazards and reducing the potential of loss, thereby increasing the probability of a successful mission. Effective risk management requires establishing and following a rigorous process. In risk management practices, a prioritization process is followed whereby risks with the greatest loss and the greatest probability of occurring are handled in descending order. Risk management should be transparent, systematic, structured and dynamic based on the best available information. To conduct this study, exploratory qualitative approach has to be used. Theoretical frame work has to be developed from the literature, data to be collected from the multiple sources of evidence in addition to books, news papers, journals, websites and other professional magazines. A series of interviews, have to be conducted with risk management experts of organizations. A survey has to be developed, based on refined questionnaire with risk management experts of company. In this research paper our main focus is to highlight how risk management principles and techniques contribute towards the sustainable development.

Keywords: *Risk, Sustainable Development, Risk Management, Damage/Loss.*

1. Introduction

The slightest freak of nature – heavy rain, a fire, a date on a calendar – can wipe out any business entirely. This is not the case: the devastation is not total, the destruction is not total, the destruction is not complete there are counter measures that can be brought to bear to avoid any destructive outcome. In the present scenario of competitive world, the opportunity to succeed also causes the opportunity to fail, therefore, probability of risk happening exists which can come from uncertainty, accidents, natural causes and disasters. Risk can be of any category. Categories that can be considered are: facilities – all buildings, air conditioning, furnishings and other support equipments; equipments-all equipments located in the business organization may be laboratory equipments or other office equipments; software – all programs and documentation that would be lost if computer facility were completely destroyed; records and file-all magnetic data files that would be lost if the facility were completely destroyed; data and information; an arbitrary value methodically applied to represent the value information maintained in the computer facility including all loses that might occur were the data compromised but not necessarily destroyed; fraud and theft; major accidents; and even human resources (employees).These risks may directly affect the productivity, profitability, service, quality, reputation, public image, brand value and earnings of an organization. Therefore effective risk management standards are required for the purpose to progress the risks so as to maximize the realization of objectives. Risk management, acts as a decision making tool, leads to the proper identification and assessment of uncertain and unfortunate events so as to minimize the probability of risk happens. From an organizational point of view, risk management is a central part of any organization's strategic management. It is the process whereby organizations methodically address the risks attaching to their activities with the goal of achieving sustained benefit within each activity. Risk management also increases organizational effectiveness by anticipating hazards and reducing the potential of loss thereby leads to the sustainable development. The strategies to manage risk includes transferring risk to another party, avoiding the risk, reducing the negative effect of the risk and accepting some or all the consequences of a particular risk. In enterprise risk management, a risk is defined as a possible event or circumstance that can have negative influence on the enterprise in question. Its impact can be on the very existence, the resources, the products and services or the customers of the enterprise. In this paper we investigate the status of risk management and find out how industry has integrated risk management with their development process.

2. Risk Management vs Problem Management

The single greatest obstacle with the concept of risk management the organizations/people are facing in this competitive world is in distinguishing it from that of problem management. The two are so closely inter wined that risk management is often perceived as problem management, and therefore is of no special consequence. This perception makes the correct application of risk management an uphill battle as well. The confusion is easy to understand, since:

2.1. people practice problem management every day, whereas risk management is not;

2.2. people have been trained to think about resolving problems, or exploiting opportunities, but not risks;

2.3. risk is an unpleasant, emotive word that often makes the taboo in organizations;

2.4. problem management and risk management use the same underlying processes, which add to the confusion;

2.5. problem management is intuitive, whereas people are uncomfortable dealing with the "technical" aspects involved in risk management such as probability.

Further adding to the difficulties is the fact that in some situations, say in trying to deal with the effects of a crisis, problem management is risk management. As the figure-1 depicts, past becomes prologue, as yesterday's risks are today's problems, whereas some of today's problems, whereas some of today's risks may be tomorrow's problems.

3. Meaning of Risk Management

Risk Management means planning how risk will be managed in the particular project. Risk management must be developed during the programme/project formulation phase. Risk management is the total process of identifying, measuring and minimizing uncertain events affecting resources.

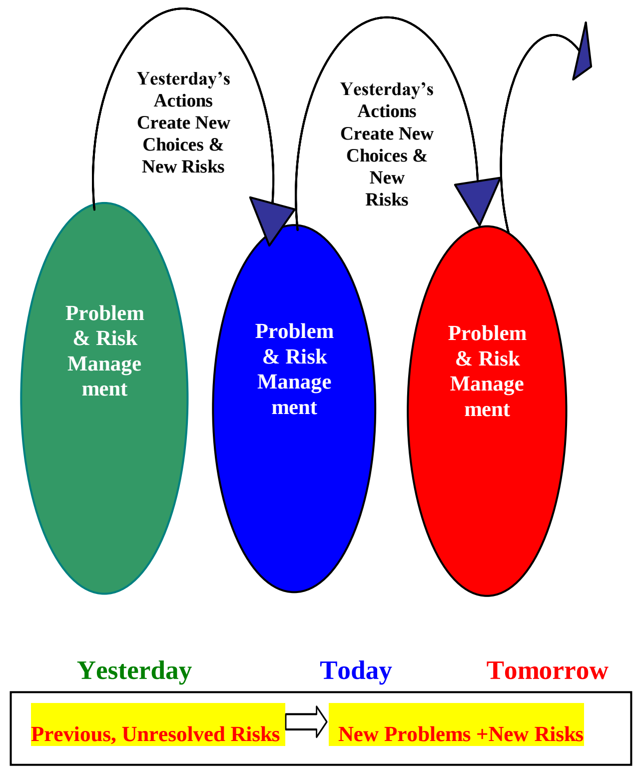

Figure No.-1 Past is Prologue

In a business context, risk management is about reducing the cost of managing risks. Risk management is about 3 R's: Returns, Risks and Ruin. In the past, substantial resources have been expanded doing complex analysis of specific risks to the business organization. Rather than to try to precisely measure risk; security efforts are better served by generally assessing risks and taking actions to manage them. While formal risk analysis needs not to be performed, the need to determine adequate security will require that a risk-based approach be used. This risk management approach should include a consideration of the major factors in risk management: the value of system, applications, threats, vulnerabilities and the effectiveness of current or proposed safeguards. Risk management protects assets; controls and minimizes liability exposures; reduces volatility In business mainly for extraneous elements; optimizes operational efficiency; and contributes to efficient allocation of capital and resources within the organization. Strategic decision and risk management teaches to articulate the decision problem to be solved, explore choices to be considered, quantify the impact of uncertainty, and commit to a decision with confidence.

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Sensible risk management is not about creating a totally risk free society; generating useless paperwork mountains; scaring people by exaggerating or publishing rival risks; stopping important recreational and learning activities for individuals where the risks are managed; and reducing protection of people from risks that cause real harm and suffering. Sensible risk management is ensuring that workers and the public are properly protected; providing overall benefit to the society by balancing benefits and risks – both those which arise more often and those with serious consequences; enabling innovation and learning mot stifling them; ensuring that those who create risks manage them responsibly and understand that failure to manage real risks responsibly is likely to lead to robust action; and enabling individuals to understand that as well as the right to protection, they also have to exercise responsibility. Many risk practitioners agree that risk management has not yet peaked, and that there is some way to go before its full potential as a management support tool is realized. A number of initiatives are under way to extend the boundaries of the subject, and there is a danger that risk management could dissipate and lose coherence if some sense of overall direction is not maintained.

4. Definition of Risk Management

Risk Management is defined as a continuous process which identifies risks, analyzes risk along with its impact and prioritizes risk. Risk management is imply a practice of systematically selecting cost effective approaches for minimizing the effect of threat realization to the organization. According to the definition given in ISO31000 as the effect of uncertainty o objectives; Risk management is the identification, assessment and prioritization of risks followed by coordinated and economic application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events or to maximize the realization of opportunities. Risk can come from uncertainty in financial markets; protect failures, legal liabilities, credit risk, accidents, natural causes and disasters as well as deliberate attacks.

5. Ideal Risk Management

In ideal risk management, a prioritization process is followed whereby the risks with the greatest loss and the greatest probability of occurring are handled first, and risks with lower probability of occurrence and lower loss are handled in descending order. In practice the process can be very difficult, and balancing between risks with a high probability of occurrence but lower loss versus a risk with high loss but lower probability can often be mishandled. Intangible risk management identifies a new type of risk that has a 100% probability of occurring but ignores by organization due to lack of identification ability. For example, when deficient knowledge is applied to a situation, a knowledge risk materializes. Relationship risk appears when ineffective collaboration occurs. Proper-engagement risk may be an issue when effective operational procedures are applied. These risks directly reduce the productivity of knowledge workers, decreases cost effectiveness, profitability, service quality, reputation, brand value, and earnings quality. Intangible risk management allows risk management to create immediate value from the identification and reduction of risks that reduce productivity. Risk management also faces difficulties in allocating resources. This is the idea of opportunity cost. Resources spent on risk management could have spent on more profitable activities. Again, ideal risk management minimizes the negative effect of risks.

6. Principles of Risk Management

The International Organization for Standardization (ISO) identifies the following principles of risk management. Risk Management should:

6.1. create value

6.2. be an integral part of organizational processes;

6.3. be part of decision making;

6.4. explicitly address uncertainty;

6.5. be systematic and structured;

6.6. be based on the best available information;

6.7. be tailored;

6.8. take into account human factors;

6.9. be capable of continual improvement and enhancement.

7. Process of Risk Management

This section describes the process of risk management which consists of six steps:

7.1. Risk Identification: During the Risk Identification phase, one makes an inventory of potential risks that may have impact on the achievement of the predetermined objectives.

7.2. Risk Analysis: During the Risk Analysis phase, one analyzes each risk independently by studying the identified risk and accessing its impact, probability, risk exposure and severity. One then groups and analyses the related risks to facilitate their collective mitigation. Afterwards, one consolidates the risk prioritization and creates top-priority risk list.

7.3. Risk Management Planning: In the Risk Management Planning phase, one creates concrete plans that determine strategies, options and actions for managing the identified risks.

7.4. Risk Tracking: In the risk tracking phase, one continuously monitors and controls the risk according to the risk management plan. To make certain that risks are effectively monitored and controlled, one first ensures that there are risk monitoring procedures established. For each risk or risk group, one then continuously monitors and records the status. In cases when the status changes, one takes measure as specified in the plan. Finally one updates and records the risk status.

7.5. Risk Post-Mortem Analysis: In the Risk Post-Mortem Analysis phase, one collects and evaluates the risk management process and its results. Using it, one then creates or updates the organizational risk taxonomy, if needed. Finally, one identifies success and failures in the process and generates lessons learned. This in turn provides an important historical feedback for improving the future risk identification and management process.

8. Need of Study

In competitive times the challenge is to manage the risk in an appropriate and standardized way. There has been a great urgency of risk management as best as possible to compete well in today’s innovative business world of high technology. To survive in today’s tough competitive business environment and to introduce sustainability in our business risk management is mandatory to apply in practical form. The need of the study arises for the purpose to make an appropriate balance between the possible negative consequences of risk with the potential benefits of its associated opportunity. For this a conceptual clarification of fundamental building blocks of the risk and uncertainty is needed. Further more to say, as risk management, leads to increase in sales and profits of organization that further leads to growth and development of the organization/business and provides a secure future to the business. Lastly it is very much right to say that risk management is deciding factor for tomorrow’s business. The purpose of this paper is to explore risk management in today’s business world of high competition.

9. Objectives of the Study

The main objectives of our study are as follows:

9.1. To identify the status of risk management.

9.2. To realize the contribution of risk management in sustainable development.

9.3. To study how risk management identifies uncertain or unfortunate events so as to maximize the realization of objectives.

9.4. To study how risk management standards improve productivity, profitability and quality of an organization.

10. Research Methodology

Research methodology used during the study conducted in this research paper is based upon real data (may be primary or secondary).To conduct this study, exploratory qualitative approach was in practice. Theoretical frame work was developed from the literature, data collected from the multiple sources of evidence in addition to books, news papers, journals, websites and other professional magazines. A series of interviews (Personal Interviews and Telephonic Interviews), not discussed in this paper, were conducted with experts of organizations. The case study data helped refine the meaning, definition, major players, benefits, need and success factors that companies indicated important in their move to commence. A survey was developed, based on refined questionnaire with management experts (individuals involved with planning, development and implementation of risk management in business organizations so as to sustain the business).

11. Empirical Data

Empirical Data is the detail of facts that are factual and reliably acceptable. We have discussed here the empirical data of Nestle, Maruti Suzuki and HCL.

11.1. Risk Management by Nestle

Nestle is the world’s leading nutrition, health and wellness company. With over 283,000 employees, the company has operations in almost every country in the world. The people know more by brands and the portfolio covers practically all food and beverage categories, with market leaders like Nestle, DRUMSTICK, NESCAFE, STOUFFERS, KITKAT, Nestle GOODSTART, Nestle PURE LIFE and PURINA , to name a few. According to Nestle "…….risks are not obvious but their effects are, hence the need for Best practice to avoid failure…….." Risk Management Centre was created in 2001 to coordinate activities related to risk management in Quality, Security, Treasury, Compliance, Operations, and IT etc. Overall objective of risk management process at Nestle is appropriate management of risks which could have a material impact on Nestlé's business. Risk management process covers Enterprise Risk Management – 'anticipate'; Loss Prevention: fire, natural and safety – 'prevent'; Business Continuity Management – 'plan'; and Risk Financing: risk retention, risk transfer and claims management – 'finance'. Risk management process at Nestle highlights most relevant business risks; support cross-fertilization between different businesses; provides relevant information for management change; helps to focus only on relevant risks, lean management (avoiding that management puts too much resources on managing low/medium risks); functional support helps keeping process efficient and pragmatic.

11.2. Risk Management by Maruti Suzuki Ltd.

Maruti Suzuki India Limited is one of the India's leading four-wheeler automobile manufacturers and market leader in the car segment, both in terms of volume of vehicles sold and revenue earned. The company headquarter is in Gurgaon, Haryana.

Maruti Udyog Limited (MUL) was established in February 1981, though the actual production commenced in 1983 with the Maruti 800, based on the Suzuki Alto key car which at the time was the only modern car available in India. Its only competitors- the Hindustan Ambassador and Premier Padmini were both around 25 years out of date at that point. By 2004, Maruti has produced over 5 Million vehicles.

On 17 September 2007 Maruti Udyog was renamed Maruti Suzuki India Limited.

Maruti Suzuki offers 13 models, Maruti 800, Alto, Ritz, A Star, Swift, Wagon R, Zen Estilo, Dzire, SX4, and Grand Vitara. Swift dzire, A star and SX4 are manufactured in Manesar; Grand Vitara is imported from Japan as a completely built unit (CBU); remaining all models are manufactured in Maruti Suzuki's Gurgaon Plant.

The company operates in an environment which is affected by various factors some of which are controllable while some are outside the control of company. The activity of risk management in the company is reviewed by the audit committee through a sub committee, Executive Risk Management Committee (ERMC). The ERMC includes the managing director and CEO and all managing executive officers of the company. It reviews the risk management activities of the company on regular basis. In addition to scanning for any new risks that may arise due to changes in the business environment. While the possibility of a negative impact from one or more risks cannot be totally precluded; the company proactively takes a reasonable step and makes efforts to mitigate significant risks that may affect it. ERMC fully concentrates on geographical risks as well. Any natural calamity in such as earthquake, or man made factors like industrial relation problems or political uncertainty may significantly impair the business operations of the company. The company has taken specific steps for information systems continuity as stated in the IT section. ERMC also works on competitive risks. As a number of global and home grown vehicle manufacturers are growing day by day and launching new products using new technologies to give a competition to the company. The company is conscious of this fact. It has also identified R&D and customers connect initiatives to build its competitive advantage further.

ERMC also looks after commodity price risk. Raw material and components comprise of three fourth of the total sales price of a car. The main risk to the company is from price movements in steel and ferrous materials, aluminum, plastics, rubber and precious metals like platinum, palladium and rhodium. While the company does not have much room in price negotiation on commodities, in the past five years it has been able to control and reduce its material cost from 82.3% to 76.4% despite heavy commodity price increases. These initiatives include a programme on raw material yield improvement and consolidation of raw material purchase along with its suppliers. In addition the company has an elaborate and structured programme of cost reduction across the entire supply chain. To deal with such risks and more, the company has established an appropriate risk management framework. All such risks have been identified and categorized based on their nature and significance. The detailed mitigation plans for each such risk have been formulated, effected and reviewed periodically.

The company regularly monitors the risk inherent in the business and arising out of external factors such as government policies, regulations and economic situations. The root cause of the risks is analyzed and mitigation plans are implemented for containment. The status of the implementation of plans is reviewed by ERMC at regular intervals. Maruti Suzuki is exposed to foreign exchange and commodity risk due to its global operations. The company has an effective foreign exchange hedging policy for mitigating the risk which involves using hedging tools to reduce the volatility in earnings on account of adverse foreign exchange rate and commodity price movements.

11.3. Risk Management by HCL

HCL is a $5 billion leading Global Technology and IT Enterprise that comprises two companies listed in India – HCL Technologies and HCL Info systems. The 3-decade – old Enterprise, founded in 1976, is one of India's original IT garage start-ups. Its range of offering spans Product Engineering, Custom and Package Applications, BPO, IT Infrastructure Services, IT Hardware, Systems Integration and distribution of ICT products. The HCL team comprises over 56,000 professionals of diverse nationalities, who operate from 19 countries including 360 points of presence in India. HCL has global partnerships with several leading Fortune 1000 firms, including leading IT and Technology firms.

HCL has a rich experience of professionals across all facets of risk. HCL's experience spans application development, enhancement and maintenance in the area of: credit risk; market risk; liquidity risk; fraud management; credit scoring models; simulation and valuation models and compliance solutions. HCL has an exclusive Risk Centre of Excellence (CoE) focused on delivering Risk Management Solutions to banks and financial institutions across the globe. HCL provides end to end technology services in the risk landscape, including Feed integration, Modeling and Analytics, Risk data repository, Regulatory Reporting, System Integration and Technology Consulting.

12. Survey of Risk Management

A survey of risk management was done through an administered questionnaire, which had a mix of open ended and close ended questions. The questions were designed to assess corporate treasuries from the view point of senior management focus and internal consistency of risk management process. The responses were normalized using standardized procedures. A self-filling structured questionnaire was sent to 200 CEOs from key vertical segments in various cities of India. Of this only 50 replied. The household survey was conducted amongst the companies available in Punjab.

13. Survey Results

Survey Results are as follows:

13.1. Risk management is different from problem management. 78% of the CEOs were of this opinion while 10% of CEOs were of other opinion and the rest could not analyze this opinion.

13.2. Risk management controls and minimizes liability exposures. More than 65% of the respondents were of this opinion.

13.3. Risk management is a deciding factor for improvement in productivity, profitability and quality of an organization. Only 69%of the respondents were of this opinion.

13.4. Risk management standards promote operational efficiency of a business organization. 66% of the respondents agreed with this point.

13.5. It is necessary to align risk management activities with all the management activities. 64% of the respondents agreed this opinion.

13.6. Lack of awareness is the major factor impeding the implementation of risk management. 52% of the respondents were of this opinion.

13.7. Risk management is happening. Only 49% of the organizations contacted in the survey claim to be using risk management.

13.8. Risk education is also an important factor that is utmost for implementation of risk management. Only 23% of the respondents were of this opinion.

13.9. Professional certifications and college degrees in risk management are need of the hour. 42% of the CEOs were of this opinion.

14. Findings

14.1. Risk management provides a useful decision support for the choice of strategies, arrangements and measures.

14.2. Business organizations are using standardized tools and guidelines under the assumptions that formal approaches will make risk management effective and successful.

14.3. Risk management needs conceptual clarification of the fundamental building blocks of the risk and uncertainty assessment.

14.4. Risk management standards improve productivity, profitability, quality, reputation, public image, brand value and earnings of an organization.

14.5. Risk management tools and techniques are very effective to achieve sustainable development of an organization.

14.6. Since risk management identifies uncertain and unfortunate events therefore it maximizes realization of objectives.

14.7. There is utmost need of risk education along with corporate training for the employees of a business organization.

15. Future of Risk Management in India

The future of risk management is bright. Regulators and managers are recognizing the importance of risk management as a way to minimize losses and improve business performance. Risk management will continue to gain acceptance as the best way to ensure that affirms internal and external sources work effectively and efficiently in optimizing its risks/return profile. The rise of CRO goes hand in hand with the trend towards risk management. Risk management is a key driver towards the success of an organization. Many companies have created a post of CRO and other will also follow the trend in the coming times. Advanced technology will have a profound impact on risk management. Beyond the internet, the increase in computing speed and decline in data storage costs will provide much more powerful risk management systems. Even individual investors will be able to apply advanced risk/return measurement tools in managing their investment portfolios. Moreover, the development of wireless and handheld communication devices will enable the instantaneous escalation of critical risk events and allow risk managers to respond immediately to emerging problems or new opportunities. As the practice of operational risk management gains acceptance and as data resources become more available as a result of company and industry initiatives, a measurement standard will emerge for operational risk. As companies recognize the need to train and develop their risk management staff, corporate training programmes will increasingly feature risk management. These training programmes will likely be a combination of internal and external resources and include internal workshops, external conferences, and internet based training tools. Universities will also introduce various professional graduate, post graduate degrees and diplomas in risk management like B.Tech. in Risk Management, MBA in Risk Management, Post graduate diploma in Risk Management and so on.

The salary gap among risk professionals will continue to widen. The trend towards the appointment of CROs has created an exciting career path and attractive compensation opportunities for risk professionals. However, the new career opportunities will be available for risk professionals who continue to develop new skills and gain new experiences, while others will be left behind. The salary gap that has developed over the past several years will continue to widen in the next 10 years. On the other hand, the compensation for risk professionals with cross functional skills will increase faster than in other professions due to rising demand for their services. On the other hand, the risk professional with narrow skills or in limited intermediary roles will not enjoy above-average raises, and they may in fact experience declining job security as their jobs become less relevant in the new world of risk management.

16. Suggestions

16.1. Organizations must provide satisfactory knowledge and experience about risk management to all its employees or members at all levels.

16.2. It must be determined what roles should risk management activities do and how these roles cooperate with the roles of other activities of an organization.

16.3. Organizations must have appropriate tools for recording risk information at regular intervals of time.

16.4. There should be a standardized communication link between the development team and risk manager.

16.5. Organizations must take a flexible risk management process model.

16.6. Organization must take a flexible risk management process to fit for the development process model and the project needs.

16.7. Organizations must take appropriate balance between all of its processes at all levels in order to avoid too much or too little focus on one or the other processes.

17. Conclusion

In today's world everyone should know how to manage risk. Being able to identify, examine and manage property and/or liability loss exposures in a way to meet personal or business needs and objectives can help business organizations protect themselves against negative effects. There is also an urgency to create awareness and train the risk management staff. Lastly, we conclude – Risk management is a deciding factor for tomorrow's sustainable business.

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"Professor Joginder Singh Jogi"

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HARDEEP SINGH
MBA/MPhil (Management)/FRPM (Gold Medalist)/PhD Research Scholar
Rashtriya Vidya Saraswati Puraskar Awardee

The author belongs to Amritsar (The City of GOLDEN TEMPLE) situated in Punjab state in INDIA. Having graduation in Humanities in 2000 from Guru Nanak Dev University Amritsar, Punjab, INDIA, the author holds MBA degree (2002) with specialization in Personnel Management (HRM) and additional specialization in Marketing Management from Symbiosis Institute of Management Studies (SIMS), Pune, Maharashtra, INDIA and MPhil in Management in 2009 from Vinayaka Mission Research Foundation University (VMRF), Salem, Tamilnadu, INDIA. The author has Honours Diploma in Web-centric Computing from National Institute of Information Technology (NIIT), Amritsar, Punjab, INDIA. Apart from this the author has Post MBA Diploma in Training and Development from Indian Society for Training & Development, Recognized by Govt. of India, Ministry of HRD, New Delhi, INDIA (2010). He is further pursuing Doctorate Degree in Management. The author's major field of study includes any Research related to Management Studies.

He has total nine years experience. Currently he is employed at Baba Kuma Singh Ji Engineering College (BKSJEC) Amritsar, Punjab, INDIA from 12th June, 2007. He has earned Research Fellowship Programme in Management (FRPM) from IIMT, Hissar, Haryana, INDIA. He is currently in process of authoring three books titled – Human Resource Management

(HRM); Total Quality Management (TQM); and Principles of Engineering Economics and Management Techniques (PEEMT) in association with his colleague Mr. Bikram Pal Singh.

Mr. Singh is a Life Member of "International Association of Computer Science and Information Technology (IACSIT)", Singapore; Life Member of "The Institution of Electronics and Telecommunication Engineers (IETE)", Delhi, INDIA; Complementary Member of BPM Institute.org.; Life Member of "Punjab Commerce and Management Association (PCMA)", Chandigarh, INDIA; Member of International Forum of Researchers, Students and Academicians (IFRSA); Member of International Economics Development and Research Center (IEDRC), Hong Kong; and Member of Marketing in Asia Group (MAG), Melbourne, Australia. Mr. Singh has received Gold Medal in Research Fellowship from IIMT, Hissar, Haryana, INDIA. Mr. Singh has received Rashtriya Vidya Saraswati Puraskar. More over he has received Award of Honor from DAV College, Malout, Punjab, INDIA. His outstanding achievements include "Peer Reviewer" for ICMLC 2011; "Key Note Speaker" (Invitation Letter can be produced when asked for) and Peer Reviewer of SA Journal of Human Resource Management (SAJHRM). He has been selected as Technical Committee of 2011 3rd International Conference on Mechanical and Electrical Technology (ICMET 2011), Dalian, China. August 26-27, 2011. (Technical Committee Confirmation Letter issued by Ms. Zeng Zhu Committee Secretary of the ICMET 2011). Mr. Singh's Appreciations include Appreciation from "International Journal of Research in Commerce & Management (IJRCM) ISSN 0976-2183" and "Asia Pacific International Journal of Research in Business Management" ISSN 2229-4104".for invaluable research papers. Mr. Singh has attended 7 (seven) International Conferences; twelve (12) National Conferences; and has 25 (twenty five) Research Papers, 5 (five) International Publications; and 15 (fifteen) National Publications.

BIKRAM PAL SINGH B.Tech./MBA

This author belongs to a well educated Amritsar based family. He has done his B.Tech. in CSE from Punjab Technical University, Kapurthala (Punjab) before doing MBA with major specialization in Marketing Management and minor in Information Technology (IT) from ACET, Amritsar, Punjab, INDIA.

He has total five years experience (six months industry experience and four years teaching experience). Currently he is employed at Baba Kuma Singh Ji Engineering College (BKSJEC) Amritsar, Punjab, INDIA affiliated to Punjab Technical University (PTU), Kapurthala, Punjab, INDIA and Approved by All India Council of Technical Education (AICTE), New Delhi, INDIA. His current research interest includes any area related to Management.

Assistant Professor (Mr) Singh is a Life Member of "The Institution of Electronics and Telecommunication Engineers (IETE)", Delhi, INDIA; Complementary Member of BPM Institute.org. Mr. Singh has received Award of Honor from DAV College, Malout, Punjab, INDIA. Mr. Singh's Appreciations include Letter of Appreciation from "International Journal of Research in Commerce & Management (IJRCM) ISSN 0976-2183" for invaluable research paper. Mr. Singh has attended 7 (seven) International Conferences; twelve (12) National Conferences; and has 20 (twenty) Research Papers, 3 (three) International Publications; and 15 (fifteen) National Publications.