International Journal of Latest Engineering and Management Research (IJLEMR)
ISSN: 2455-4847
www.ijlemr.com || Volume 04 - Issue 06 || June 2019 || PP. 138-141

Project Risk Boundaries by using cause and effect Instrument (Case Study in Al Mansoor Co. for Civil Construction)

Prof. Dr. Naghm H. Al Nama'a
College of Business Economics
Al- Nahrain University

Abstract: The paper aims to determine the risks faced by projects and work to manage those risks, by using the tool reason - the effect to identify those risks and determine its impact on the objectives of the project, if they occur and to provide appropriate solutions to Hit residential complex port by the General Mansour Construction Contracting Company.The use of style personal interview with the heads of departments and project managers in the Mansour company to get to know the company's risk and the use of the scheme Ishikkawa- effects, to identify risk, sub-causes and their roots and collected own theoretical side of the books, research and information messages and Alatarih as well as publications in both Arabic and English and the research found the importance of identifying the main reasons causing the risk and its role in the development of appropriate solutions to avoid them in the future by planning for these risks and to develop appropriate responses in each case so as to reduce a large proportion of the risks and the completion of projects, time and cost specified and to achieve the company's objectives and the need to develop methods and techniques used in the private BOQ pricing analysis projects through the adoption of modern techniques and to study the market and visit the work site to ensure accuracy stomach tables and in accordance with the schedule and the cost of the project.

Key words: Project management, risk management, Ishikkawa analysis, outline analysis (cause-effect).

Introduction:

Many companies faced many risks during their business processes; which lead to crisis especially the uncertainty of managing any project to achieve their goals. The most industry sector that has high level of risk and uncertainty is construction especially during estimating the cost, time scale, and others.

Risk management is a process of choosing an affective as well as efficient process to decrease the uncertainty then decreasing the threats as much as possible that could any company faced. Although, to compete in global businesses, any company faces risk especially when trying to get the opportunity from other rivals.

Decisions in dynamic life as it is in the 21th century with rapid unbalanced changes affect all decisions and the worse situation is that the uncertainty of forecasting of future (Musa, et al; 2011: 24-25). Therefore, being ware enough to distinguish between risk and crisis is very important; risk; refers to a possible accident that affects the company; while the crisis, refers to a real accident that affects the company overall and it is a part of risk management (Gilpin & Murphy, 2008: 13). Moreover, many risks come from the differences between what is expected and what either happened if these differences are positives or negatives for example the duration of achieving the project (time scale), or over costs or lack of quality (Pieplow, 2012: 14-15). In addition, Oxford definition is considered risk as "either opportunity of possible risk, fail, damage or other negative boundaries" (Wehmeier et al, 2009 : 1313).

According to these considerations; the elements of risk or uncertainty are not recognized during the project life (Fadun, 2013: 225); but there are many distinctive features that could form the risk frame such as; historical data that help us to determine what is going on in such similar cases, risks could be measured if joining these risks with their achievements, then accordingly it could be manageable through specialized department in risk management (Najem, 2013: 248-249).

As mentioned earlier, working on a dynamic environment full of technological developments caused the uncertainty especially in economic policies in the country that studied here, moreover the social changes also caused these risks; but in general as studied here the most frequent risks are (financial, managerial, logical, process, commercial, security, strategic, logistics, safety, reputation, technology, risk of stakeholders or shareholders) as Campbell mentioned in 2005.

After a brief explanation, risk management can be defined as "a set of methods and used pressures in a project to manage the risks and focusing on uncertainty that affect the project" (Toader, et al 2010: 454). Campbell insists that (it is the arranged application for certain policies, procedures, management duties such as analysis, assessment, and controlling risks), (Campbell, 2005: 7).

Although, the nature of projects are different from one to another and from one stage to another for example industrial, agricultural, and it could differ even in the degree of risks, but in general there are certain stages for most projects started from four stages, five, nine or more stages (Al Shemeri, 2007: 27). Starting from definition stage, to design and develop the product or service stage, then construction stage and finally delivery stage (Arcibald, 2013; O'Berien, 2015; Heagney, 2012; Larson & Gray, 2017). These stages in most projects have the same features such as; level of employee and related costs, which decreased at the beginning of project then increased during the construction,then decreased again (Al Zubaidi, 2012: 23-24). In addition, effect of risk, which is high during starting time, then decreased, and finally the time scale changing effects, which considered as a high level one the project starts then decreases during the last stage but with high costs of corrections (Meredith & Mantel, 2009: 14).

Literature Review

Analyzing Risk Management:

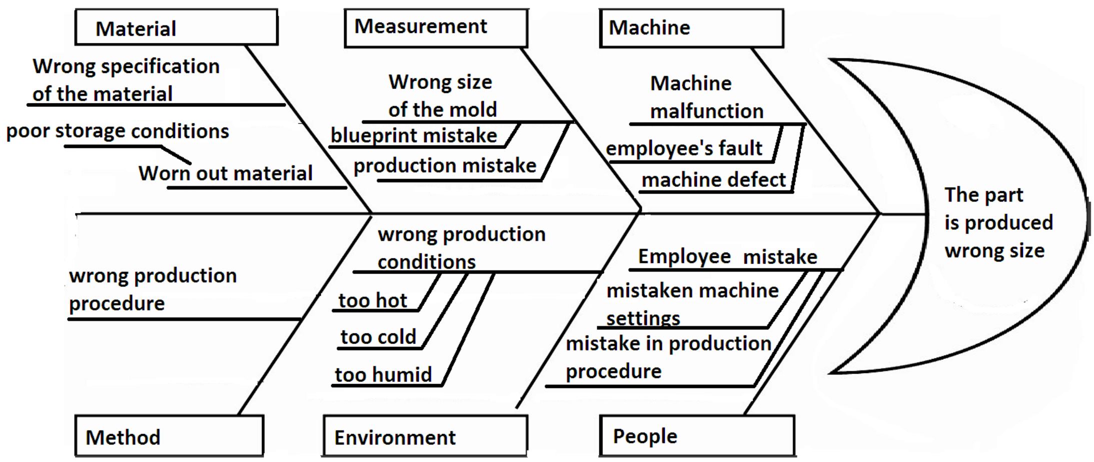
Project management with respect to risk management is "knowledge application, tools, technical usage of technology, skills that all worked together to create a unique product or a service" (Kenny, 2003: 43). It is also "every requirements that required achieving the project in a certain period of time, under recommended budget with respect to the other logistics and quality" (Williams, 2008: 190).

Many studies treated the project through many essential feature (as one measurable target, time scale, budget, uniqueness and zone area) (Greene &Stellman, 214: 17; Brewer &Dittman, 2010: 13; Meredith & Mantel, Jr, 2012: 11-13). These features lead to achieve the goals in a SMART goal that refers to (S-specific, M-measurable, A- agreed upon, R- realistic, T- timed scale) (Andler, 2011: 177; Tetteh, 2014: 31).

Most previous studies insist on analyzing the project's risks as a process to illustrate the loses types or trying to select the threats and even trying to know the hidden causes then how to face these causes and trying to decrease the risk or in such cases eliminating these risks through creating other opportunities. Moreover, studies refer to many tools that could considered in selecting and analyzing these risks as follows:

- Interviewing; it is the way of having the data from collecting information face to face, communication channels and then transfer them into knowledge by certain experts, stakeholders, shareholders (Marco &Thaheem, 2014:76).
- Fish-bone Analysis or Cause- Effect Diagram;it is a tool that designed by Japanese creator called Ishikkawa to control the quality problems in 1960s.

Fish-bone diagram used to make a quantitative analysis through drawing a fish-bone diagram that joined the causes and their effects (Bose, 2012: 18). The main problem formed into the head of the fish, then bones refer to the causes of these problems (main and sub- causes) till reaching the tail of the fish that refers to the solution of the problem as shown below (Varsha et al, 2015: 639).



Methodology:

This paper tried to select the risks & boundaries that construction sector faced especially in Iraq through using the Fish-bone diagram (cause- effect); and trying to find out the solutions for these problems. The paper dealt with one civil company that is specified in construction that is called Al Mansour Company, this company has a great history all around the country in achieving many civil, services projects.

The paper aims to answer the following questions:

- Is there any responsible department to identify the problem (risk)?
- What are the indicators to select the risk?
- Is there any descriptive indicators to describe risk?
- What is the project management response towards these risks?

Discussion:

According to studies and with reference to fish-bone diagram that used here to analysis the situation of Al Mansour civil company for construction;there is an obvious lack of knowledge towards using the novel techniques in project management. Moreover, there is a lack of how to deal with risks during the project life starting from estimating the budget to respecting time scale and so on especially under unsafety conditions that happened in Iraq. Although; project management in Iraq faced unbelievable situation but if risk management is stand in a scientific way, the results will be different. Training and developing skills in many programs especially those that related to safety, changing environment, and instability in economic could be a good chance to exam the indicators of risk and project management.

References:

[1]. Al Shameri, Abed Muhamed, 2007, "Project Management as a unique sample: design, computerized, and application: Applied study in some Iraqi construction co." Baghdad, Iraq

[2]. Andler, Nicolai, 2011," Tools for Project Management, Workshops and Consulting", Second revised and enlarged edition.

[3]. Archibald, Russell D., Filippo, Ivano Di, Filippo, Daniele Di,2012," The Six-Phase Comprehensive Project Life Cycle Model Including the Project Incubation/Feasibility Phase and the Post-Project Evaluation Phase" stituto Italiano di Project Management/ISIPM

[4]. Baars, Wouter,2006," Project Management Handbook *Version 1.1", San* Francisco, CA 94105 USA

[5]. Bose, Tarun Kanti, 2012, " Application of Fishbone Analysis for Evaluating Supply Chain and Business Process-A Case Study On The ST James Hospital, International Journal of Managing Value and Supply Chains (IJMVSC) Vol.3,No 2

[6]. Brewer, Jeffrey L., &. Dittman, Kevin C.,2010," Methods of IT Project Management", printed in the United states of America ,copyright by pearson Education, Inc., Upper Saddle River, New Jersey.

[7]. Campbell, David,(2005),"Risk Management Guide for Small Business", Globel Risk Alliance Pty Ltd jointly with NSW Department of state and Regional Development.

[8]. Davies, Terence John Cooke,2001,"Towards improved project management practice: Uncovering the evidence for effective practices through empirical research. USA: Dissertation.

[9]. Fadun, Olajide Solomon,2013," Risk Management and Risk Management Failure: Lessons for Business Enterprises" International Journal of Academic Research in Business and Social Sciences

[10]. Gabel, Mark,2013," *Project Risk Management Guidance for WSDOT Projects"* Washington State Department of Transportation Administrative and Engineering Publications

[11]. Gilipin, Dawn R. and Murphy,P,J.,2008,"Crisis Management in complex World, Oxford University Press,Inc., Oxford, Printed in the United States of America.

[12]. Greene ,Jennifer and Stellman,Andrew,2014," Head First PMP 3rd Edition", Printed in the United States of America

[13]. Heagney, Joseph,2012," Fundamentals of Project Management: Fourth Edition", *Printed in the United States of America, American Management Association, 1601 Broadway, New York*

[14]. Kenny, John , 2003, "Effective Project Management For Strategies Innovation And Change In An Organizational Context ", Project Management Journal , March.

[15]. Kerzner, Harold, 2003, "Project Management: A Systems Approach to Planning, Scheduling, and Controlling". John Wiley, eighth edition, Printed in the United States of America

[16]. Larson, Erik W.& Gray, Clifford F.,2011,"Project Management: The Managerial Process, Fifth Edition", Published by McGraw-Hill/Irwin, a business unit of The McGraw-Hill Companies, Inc., 1221 Avenue of the Americas, New York, NY

[17]. Loader, David.,2006," Advanced Operations Management: Second Edition", Copyright John Wiley & Sons Ltd, England.

[18]. Marco, Alberto De & Thaheem, Muhammad Jamaluddin , 2014," Risk Analysis In Construction Projects: A Practical Selection Ethodology" American Journal of Applied Sciences 11 (1).

[19]. Meredith, JackR.&Mantel,Jr,Samuel,2012,",Project Management: A Managerial Approach" Copyright john Wily & Sons Singapore Pte. Ltd, Printed in Asia

[20]. Musa, ShuqariNurai, Ebraheem Nour, Wasem, Muhamed Al Hadad, Suzan, Samer Dheb, 2012, "Risk Management", 1st publishing, Amman, Jordan

[21]. Najeam, Abbood, Najeam, 2012, "Leadership & Innovation Management", 1st publishing, Dar Al Safaa for Publishing, Amman, Jordan.

[22]. O'Brien, Timothy M.,2015," DIA Information Technologies Project Life Cycle Process", Office of the Auditor Audit Services Division City and County of Denver.

[23]. Pieplow, Bob, 2012,"project risk management handbook: A Scalable pproach",Version1.Scalable Project Risk Management.

[24]. Project Management Institute (PMI), (2008), A Guide to the Project Management Body of Knowledge, 4th edition, Project Management Institute, Newton Square, PA

[25]. Project Management Institute 2004, "A Guide to the Project Management Body of Knowledge" (PMBOOK® Guide), 3rd edition, Project Management Institute, Newton Square.

[26]. Schwalbe, Kathy, 2007," Information Technology Project Management, Revised, Sixth Edition", Printed in the United States of America.

[27]. *Tetteh ,BA. Isaac ,2014,"* Faculty of Economics and Administration" Master Thesis, Masaryk University

[28]. Toader, Cosmina-Simona , Brad,Ioan, Radac, Andreea Mihaela Andreea Mihaela,MarinMarin,Diana,2010," Aspects Regarding Risk Management in Projects", Banat's University of Agricultural Sciences and Veterinary Medicine, 300645 -Timişoara,, Calea Aradului, 119, Romania

[29]. Varsha, Wakchaure, Siddhi. H, Pandhare, R.N, Kachave, S.R., Chaudhari, 2015, " A Review On: Fishbone Diagram", World Journal of Pharmaceutical Research, Volume 4, Issue 4.

[30]. Wehmeier, sally, Mcintosh, Colin, Turnbull, Joanna,2009, "Oxford Advanced Learner's Dictionary" 4th printing, Printed in China.

[31]. Williams, Meri, 2008,"The Principles of Project Management", First Edition, Published by Site Point Pty. Ltd, Printed and bound in Canada.