LITERATURE REVIEW

Ramakrishnan (1996)

In this Paper the author briefly describe a system for forms-based, workflow management that helps members of a software development team overcome geographical barriers to collaboration. Our system, called the Web Integrated Software Environment (WISE), is implemented as a World Wide Web service that allows for management and measurement of software development projects based on dynamic analysis of change activity in the workflow.

KOMIYA (1994)

The authors aim at constructing an integrated software project management system with an object database. This paper describes a process model for software project management that forms the basis of the system. This paper also describes a framework for inducing the sequence of operations that the project manager must perform: issuing instructions to workers in accordance with a plan based on the process model, progress evaluation based on progress reports sent from the workers, and analysis of the impacts of any problems detected. In order to provide these facilities, we analyse the actions triggered per unit of activity from the viewpoint of project management. Based on this analysis, this paper proposes a finite state machine model involving the actions and the states changed by the actions.

Bart Baesens (2011)

This paper has a predictive model is required to be accurate and comprehensible in order to inspire confidence in a business setting. Both aspects have been assessed in a software effort estimation setting by previous studies. However, no univocal conclusion to which
The technique is the most suited has been reached. This study addresses this issue by reporting on the results of a large scale benchmarking study. Different types of techniques are under consideration including techniques inducing tree/rule based models like M5 and CART, linear models such as various types of linear regression, non-linear models (MARS, multi layered perception neural networks, radial basis function networks and least squares support vector machines), and estimation techniques that not explicitly induce a model (e.g. a case based reasoning approach).

P. Sinha (2011)

The paper has even though data warehousing (DW) requires huge investments, the data war market is experiencing incredible growth. However, a large number of DW initiatives end up as failures. In this paper, we argue that the maturity of a data warehousing process (DWP) could significantly mitigate such large-scale failures and ensure the delivery of consistent, high quality, “single-version of truth” data in a timely manner. However, unlike software development, the assessment of DWP maturity has not yet been tackled in a systematic way. In light of the critical importance of data as a corporate resource, we believe that the need for a maturity model for DWP could not be greater.

H. Thayer (2005)

In this paper a little more than 20 years ago, the guest editors assembled several papers on software Engineering project management for the January 1984 edition of IEEE Transactions on Software Engineering. Those papers portrayed the state of the practice in SEPM and looked into its future. They decided to revisit SEPM and assemble another set
of articles that reflect how SEPM had Advanced over the past 20 years and offer a fresh prediction of what lies ahead.

**Bani Ali (2005)**

This study surveyed 497 project management software users in a wide variety of project-driven organizations to examine the relationships among: computer self-efficacy, information quality, system functionality, ease of use, project complexity, performance impact, organization size, project size, and user education, training and experience level. The findings indicated that information quality and project complexity are the dominant factors in explaining the levels of perceived system utilization; system functionality and ease of use have a significant effect on software usage; and that a strong relationship exists between perceptions of usage of software and project managers' performance.

**Methanias Colaco (2009)**

This paper elaborated on data quality is one of the bases for effective data mining. Flexible, consistent and extensible data storage is one of the requirements for effective data analysis. For more than 15 years, researchers in the database and decision making world have been studying the construction of data repositories for data analysis. Named data warehouses, these repositories are historical databases, which are separated both logically and physically from the organization production environment and designed to store data gathered from this environment.

**Xi’an, Shaanxi, (2010)**

The paper has the model drives system structure is the new software develops ideological system that be put forward faces to object management group. In the paper, take
complicated problem oversimplifies and abstract problem pictorially as base, Take software project manages process visualization and controllable as basic goal. Suggest managerial innovation pattern that software project management process derived by model at first. Ensuring that the model drives software project management process comes true smoothly, through building-up theory and method system entirely.

**Aaron Doty (1999)**

This paper discusses a Web-enabled expert system, Project Management Advisor (PMA), which will provide alerts and corrective actions for some of the common problems that plague software development projects. PMA was developed as a part of a CyberCollaborator built to facilitate collaborative project work. The development and evaluation of a collaborative generic expert system for identification and analysis of anomalies in project plan data is expected to be useful to many software development teams and managers in a wide variety of organizations. PMA is a field prototype and was evaluated using 11 real world project plans. The preliminary analysis of the findings is presented and discussed.

**Min Tjoa (1997)**

This paper has a Data Warehouse (DWH) contains a large amount of aggregated data, collected from the various operational, enterprise-wide data sources. The DWH will be logical modeled as a virtual n-dimensional data-cube. Analyses against this n-dim data-cube allow the decision makers (e.g. executives, middle management, controllers, etc.) to view their enterprise in various different ways.

**Panah,A (2010)**
In this paper the author explains data mining which is a new method in retrieving the high amount of information has been introduced. Data mining nowadays plays an important role in searching the information on the web that include a high variety data types. For reaching this goal, datamining techniques for automatic discovering and extracting the web based information has been used as webmining.

**Mylopoulos (2005)**

In this paper the authors had described the commercial software release management is primarily concerned with the timely release of the next version of a product. There are a number of objectives in any new release of software, including: implementation of new features, repair of known defects, and maintenance of the overall quality of the software to facilitate future evolution. Deciding on the degree to which each of these objectives will be met is a chronic problem, with real-time consequences for managers responsible for software releases.

**Kewen Li (2009)**

This paper explains resource-constrained multi-project management is of vital importance in software engineering as it has more uncertainties must be considered. Based on the detailed analyses to popular and significant approaches, such as CPM, PERT, CCPM, and the dynamic characteristics of software multi-project management, this paper argues a dynamic model with project and activity weights to solve the scheduling problem on resource-constrained multi-project, and analyzes an example in detail. The method can also be suitable for similar complicated project management in other domains.

**Sue Newell (2012)**
In this paper the author has explained mini-track focuses on several areas of IT and project management that are of interest to academics and practitioners: Managing in a multidisciplinary and global technical team environment; using IT-based project management tools and techniques effectively; identifying emerging tools and techniques for managing information system projects; leading and managing teams in technology based project organizations, and with internal and external project stakeholders.

Toshihiko Yamakami (2010)

This paper impacted software industry since its birth. The magnitude of its impact is increasing day by day in a global scale. It is critical for any software vendor to take an appropriate position in the open-source-involved software engineering. The software engineering metrics needs a social dimension to cope with open-source-involved context. After more than a decade of open source activities, open source is still on the stage of identifying its position in the software industry from the quality control, project management and business model perspectives. In this paper, the author attempts to identify the macro view of the open source activities from the publicly available activity logs.

Edwin Morris (2010)

This paper explains today’s rapidly changing environment it is no longer possible for isolated systems to provide all the capabilities that are necessary to fulfill a mission. Therefore, there is an increasing trend towards interconnected systems of systems that provide capabilities not available in a single system. However, existing software and system engineering practices do not scale well to SoS—engineering a system of systems
(SoS) is still an open problem with significant challenges. Understanding these challenges and providing engineering solutions will require a two-pronged approach. First, a top-down approach that models an SoS at an abstract level is essential to understand key concerns that exist independent of the technologies used to implement the SoS.

A. Cernian (2011)

The paper explains Semantic Web is a project and vision of the World Wide Web Consortium to extend the current Web, so that information is given well-defined meaning and structure, enhancing computers and people to work in cooperation. Semantic technologies are being added to enterprise solutions to accommodate new techniques for discovering relationships across different database, business applications and Web services. In this paper, we present an architectural model for a software tool which combines the use of Semantic Web mechanisms with database metadata and data warehousing mechanisms. If the benefits of the Semantic Web concept are combined with a powerful database server, then the information management will be much improved.

Eero Vainikko (2010)

In this paper the author explains SciCloud is a project studying the scope of establishing private clouds at universities. With these clouds, researchers can efficiently use the already existing resources in solving computationally intensive scientific, mathematical, and academic problems. The project established a Eucalyptus based private cloud and
developed several customized images that can be used in solving problems from mobile web services, distributed computing and bio-informatics domains. The poster demonstrates the SciCloud and reveals two applications that are benefiting from the setup along with our research scope and results in scientific computing.

**Xiaopeng Lin(2010)**

In this paper author explains about Cloud computing is usually defined to deliver infrastructure, platform and software as services, which is available as a pay-as-you-go model for users. A paradigm of Cloud computing for EDA service is presented in this paper, and a hierarchical architecture of Web-EDA system implemented with Cloud computing is described in detail. Based on this proposed system structure, we developed a prototype of the Web-EDA system for sharing EDA Tools and project management of IC design. It shows that Cloud computing for EDA service is possible to be implemented distributedly and brings maximum benefit to both users and vendors.

**WANG Qian (2010)**

The paper elaborated on the process of software development project is divided into such phases as requirements, design, coding and testing phases. During the project planning period, only by an accurate grasp of customer demands, can we prepare a definite project scope specification and create the project work breakdown structure (WBS). There are differences in culture and organizational background, technology and focus among stakeholders of project, the project manager should integrate multi-perspective views by making use of effective communication management to achieve eventual success of the project.

**Mohammed Abdi, P.D.D.Dominic (2010)**
This paper explains Enterprises are moving fast to transform into service orientation to maintain their competitive advantage. In order to meet rapidly changing demands, and achieve true agility an enterprise needs strategic IT alignment with business strategy integrated with Service Oriented Architecture (SOA). As enterprises transform service oriented enterprises, the challenge of aligning IT strategy with business strategy and the use of IT to meet customer demands becomes an important research issue. The primary aim of this paper is to develop a model which explains the interplay between strategic alignment dimensions of governance, communication, and architecture enabled by SOA, and enterprise agility.

**Lianzhong Liu (2010)**

This paper explains more and more software organizations are developing software projects under the control of software process. To solve the lack of software process support in current requirements management (RM), an RM methodology related with software process was analyzed. By the definition of RM process and requirement change management, the combination of RM functions depending on process was expressed. An RM tool prototype based on this scheme was also introduced. Primary application shows effective improvement of process ability in RM

**Dejun Chen (2009)**

This paper explains concept of Service Oriented Architecture (SOA) has had a significant impact not only on software engineering but on the analysis of an organization’s business layer as well. In this paper we demonstrate that using the SOA concept into the Enterprise Architecture (EA) framework makes the best of the synergy existing between these two approaches. We will examine the characteristics of this relationship before proposing a
roadmap for integrating SOA and EA into the Service Oriented Enterprise Architecture (SOEA). Some managerial aspects leading to a successful implementation of this kind of projects will be discussed.

Zhuo Zhang, Hongji Yang (2010)

This paper explains SOA migration is a complicated task. To ensure the migration performance, some directions on modeling migration approaches are needed. A user-oriented SOA migration model is proposed in this paper. The model is defined as a 6-tuple. The detailed descriptions on each tuple are addressed. Especially, the concrete algorithm on matching scheme and final SOA migration scheme are provided. The model can benefit the planning and deployment of a SOA migration project. A case study on the migration schemes of an internal management system for primary and secondary schools is provided to further depict this model. Through analyzing the results, we conclude that the performance of this model is promising.

Zou Wen-ping (2010)

This paper explains recent years the engineering accidents, especially those occurred to large-scale public projects were paid more and more attention by engineers and even the normal public. The large-scale public projects involved such numbers of participants and complicated procedures, which challenge to the traditional project security management. There is should be anew method to do with the modern engineering’s risk manage requirement. This article summarized the risk factors in all the engineering process as the risk theoretical research foundation. In this paper, considering the disadvantages of disserverment and isolation each engineering process stages of traditional engineering risk management method, the idea of project’s life-cycle method is introduced in the risk
analysis for improvement the traditional disadvantage. This article also shows how to determine the risk sources and the risk liability by analyzed the stages’ risk possibility of project life-cycle. These works will help to build up an analysis basement for engineering risk control research.

**Farzaneh Mahdian (2010)**

This paper explains software architectures play an important role in developing large, complex and distributed systems. Service-Oriented Architecture (SOA) is a flexible, loosely coupled and dynamic architecture for developing different distributed systems. Since using this architecture is every day increasing in the design of software systems, creating dependable services in this architecture is one of the main challenges. In this paper, we review dependable services in the level of service-oriented architecture.

**Zheng Chan (2010)**

This paper explains about Cloud environments offer a variety of concrete and abstracted entities which need to be identified. An example of cloud environment is the European project RESERVOIR, which similarly to other platforms characterized by a high level of dynamism, needs to identify and resolve resources. RESERVOIR has to manage allocation, deallocation and migration of virtual machines from an execution context to another. Such tasks could trigger identity and name alterations; in addition, a virtual machine may hold one or more names, identifiers, and representations in various execution environments.

**Scott Tilley (2010)**

This paper explains regression testing is often performed as part of the software maintenance process. The amount of tests cases for a large-scale system can range from
several hundred to many thousands, requiring significant computing resources and lengthy execution times, often precluding their use in an interactive setting. Traditional approaches to reduce the execution time for regression testing typically focus on excluding selected tests from the suite that need to be run after a change is made to the system.

Antonin Chazalet (2010)

This paper explains Cloud Computing raises several issues about Service-Oriented Architecture (SOA) and Virtualization. It also raises questions related to services contractualization, contracts management and compliance checking. These contracts (i.e., Service Level Agreements) apply to the target systems and services. Issues and solutions related to contracts compliance checking are also referred to as Service Level Checking (SLC).

Roy Oberhauser (2010)

This paper explains consistently improve software quality management, greater automation and tighter integration of quality tools and measurements in the software engineering environment is essential. However, automation of software quality management faces numerous challenges such as project uniqueness, project dynamics, efficiency, and limited time and quality expenditures. In this paper, an approach is proposed that extends the Goal-Question-Metric technique and automates the monitoring of quality goals via a multi-agent system by using competitive bidding agent behavior for proactive vs. cooperative voting for reactive measures. The preliminary results show promise for systematically harmonizing (conflicting) quality attributes, goals, metrics, and countermeasures and for automating aspects of software quality management.