

Ideation Phase – Literature Survey

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Literature Review

Inventory management is considered as major concerns of every organization. In inventory holding, many steps are taken by managers that result a cost involved in this row. This cost may not be constant in nature during time horizon in which perishable stock is held. To investigate on such a case, **Taygi (2014)** proposes an optimization of inventory model where items deteriorate in stock conditions.

In this paper, based on a real-world case study for a municipal district in Tehran, a multi-objective mathematical model is developed for the location-distribution problem. The proposed model considers the role of demand in an urban area, which might be affected by neighbor wards. Integrating decision making process for a disaster helps to improve a better relief operation during response phase of disaster management cycle. In the proposed approach, **Esmaeili (2014)** says, a proactive damage estimation method is used to estimate demands for the district based on worst-case scenario of earthquake in Tehran

This paper deals with the application of six most potential preference ranking methods for selecting the best FMS for a given manufacturing organization. Chatterjee and Chakraborty (2014) say, it is observed that although the performances of these six methods are almost similar, ORESTE method slightly outperforms the others.

It is particularly applicable to those situations where the decision maker is unable to provide crisp evaluation data and attribute weight. Ulrich and Pearson (1998) introduce approaches for the integration of the Quality Function Deployment method as well as feedback with system components for computer aided product development. The integration is based on information models representing product, process and factory information.

Pastore and Martin (2012) study was to examine students' perceptions of designing and developing mobile based instructions by interviewing and surveying of graduate students. Results of the survey and qualitative data analysis indicated that usability was a key issue on the mobile device. Users enjoyed quick access, good organization, user control, single column layouts, and large links/buttons. These findings contribute to the literature base on the design and development of mobile based instruction.

Taking on the perspective of a student's experience of pedagogy foregrounds issues of uncertainty and ambiguity, highlighting the social interactions between fellow students, and the role of communication and individual effort in learning to think in a more designerly way.

A design literature discusses the role of the studio and its related pedagogy in the development of design thinking. Scholars in a variety of design disciplines pose a number of factors that potentially affect this development process, but a full understanding of these factors as experienced from a critical pedagogy or student perspective is lacking. In this study, Gray (2013) explains the experiences of six first-year design students were examined as they evolved in their conceptions of design.

Agnelo and Fernandes (2012) aims to analyze, through a case study called Researching the Value of Project Management, the relations of the constructs of this conceptual model and to show how they interfere with the organizational values, possibly in programs conducted by a government agency, from the perspective of the senior management directly involved.

The term emerging technology (ET) has been frequently used by IT professionals and academics. However, little research has shed light on this term and specified its characteristics and what it means.

Halaweh M (2013) aims to define and conceptualize the characteristics of ET. These characteristics are uncertainty, network effect, unseen social and ethical concerns, cost, limitation to particular countries, and a lack of investigation and research.

Today's industry projects and extensive literature suggest the importance of customer integration for companies' innovation success. In this exploratory study, Strub and et al (2013), build on established customer role concepts to study the status quo of customer integration in industry, as well as reservations against the roles and negative experiences from customer integration projects. The study reveals a gap between reservations and actual negative experiences in losing know-how, as well as a positive effect of experience in customer integration on perceived benefits for the company.

Antonelli and et al (2013) aims to identify Information Technology benefits in individual work. With technologies fully implemented, greater satisfaction was observed for all constructs of the survey, with statistically significant differences. When comparing age, it was found that younger users were more satisfied with the benefits of technology. Concerning the number of employees, small business users were less satisfied with Information Technology.

Didonet and Díaz, (2012) explains, the supply chain management studies have verified that integration and collaboration in the supply chain can provide important benefits to the companies involved. Among these benefits are added value, the creation of efficiencies and client, which are represented by the reduction in inventories, improvements in service delivery and quality and shorter product development cycles.

Zabala (2012) investigates whether decisions considered as common in new product development literature are also valid in a region characterized by traditional industries. The author aims to link the theoretical and empirical fields in the context of new product development and product innovation management.

Leber (2014) reports the results of a survey on the use of innovation management techniques with the potential to improve effectiveness of new product development, and customer satisfaction. Failure mode and effects analysis was found as the most applied IMT in Slovene firms with the highest perceived utility potential to reduce development costs and improve customer satisfaction.

Nezhad (2013) employed the decision on belief (DOB) approach for fault detection in univariate process control. The concept of DOB and its application in decision making problems were introduced, and then methodology of modeling fault detection in statistical process control by DOB approach was discussed.

Dou (2014) paper is committed to design a logistics industry development policy model based on system dynamic to simulate the policy measures which promote region economic and logistics efficiency. The interaction between logistic industry development policy and economy needs to be investigated and the influence degree of logistic efficiency affected by industry policy needs to be identified too.

- Cheng (2013) proposes a multi-objective production planning optimization model based on the point of view of the integration of production planning and control, in order to achieve optimization and control of enterprise manufacturing management.
- Babazadeh(2012) studies a multi-period, multi echelon and multi-product integrated forward-reverse logistics network under uncertainty. First, an efficient complex mixed-integer linear programming (MILP) model and then stochastic counterpart of the proposed MILP model.
- Internal rate of return (IROR) method as a decision making tool receives widespread use and acceptance in economic analysis. Ahmad and Khaldoun (2011) research aims at presenting a realistic approach for resolving the multiple rate of return (MROR) problem. The key advantage of the proposed approach is that it reflects real life opportunities and its decisions are consistent with worth methods as well as with other approaches.

- Mandahawi and et al (2012) presents a process improvement study applied at a local paper manufacturing company based on customized Lean Six Sigma methodologies. The DMAIC (Define, Measure, Analyze, Improve, and Control) project management methodology and various lean tools are utilized to streamline processes and enhance productivity.
- Heskett(2009) examines the influence of major economic theories in shaping views of what constitutes value as created by design system. Its focus on markets and prices as set by market forces are believed to solve all problems if left free from government interference. The implosion of this system and its emphasis on unrestricted individualism is a crisis of theory as well as practice.
- This paper, Kim and Kang (2008), identifies the critical factors of cross-functional cooperation for design teams in new product development. The empirical research available defines eleven critical success factors for the achievement of effective cross-functional teamwork with design teams in NPD and provides evidence of the positive relationships of these factors with cooperative work performance.
- Vendanand Sakthidhasan (2010) addresses the application of lean manufacturing concepts to the continuous production sector with a focus on the motor manufacturing industry. The goal of this research is to investigate how lean manufacturing tools can be adapted from the discrete to the continuous manufacturing environment.

Lan Teng, Zhenji Zhang, et al, “Integrated Inventory-Transportation Problem in Vendor-Managed Inventory System”, 2019.

The paper presents a two-echelon inventory-transportation problem in Vendor Managed Inventory (VMI) system. We consider a distribution system composed with single supplier, single distribution center and multiple retailers. Single kind of products are required to deliver from the manufacturer through distribution center to the retailers within soft time window. A mixed algorithm is designed to solve the problem with simulated annealing and ant colony with local search. The solution of upper and lower echelon model are substituted into each other based on the mixed algorithm step by step to get the optimization solutions.

