
THE INSURANCE SERVICE SUPPLY CHAIN

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ABSTRACT

Insurance industry has been exposed to a massive transformation in the last few years. These changes were a result of policy decisions and regulatory interventions. But technological advances have also played a major role in these changes that have enveloped the insurance ecosystem across the globe. This study has attempted to explore the application of supply chain concepts in the insurance business to understand the need for such an approach and the impact of such a strategy. The research problem being investigated here is whether there is a need to look at the insurance business model with a supply chain lens considering the huge number of intermediaries involved in delivering the service. As competencies get distributed among a wide number of stakeholders, it is imperative that the insurance company manage this dependency well to make its business model operationally robust. The research design is of an exploratory nature. This study argues the need for exploring and evaluating the insurance service supply chain and highlights the benefits for the sector as a whole. The findings are however prescriptive in nature and more research studies are needed to propose a conceptual model to explain the significance of blending supply chain philosophy in insurance business and how this approach can contribute to the national well being.

Key Words: Well being, persistency ratio, service supply chain, artificial intelligence, automation, regulation

INTRODUCTION

The insurance sector has been witnessing a lot of changes in the last few years. In 2015, many changes were made to the existing insurance laws. Guidelines governing insurers upon listing were released. IRDA also issued guidelines for corporate governance with the sole

intent of engendering a transparent and policyholder friendly environment. Insurers have to take efforts to enhance their operational efficiency and reduce premium value for customers. IRDA has also made provisions for sale of simple insurance products through common services centers (CSCs) and point of sale centers. Efforts have been made to widen the product range too. CSCs are empowered to function as insurance brokers to sell services.

Drastic changes in global demographic profile have impacted the insurance sector. Increase in consumerism has raised expectations of consumers. Prior to 1993, 98% of total insurance was mandatory. People were buying insurance cover out of compulsion. This led to the appointment of Malhotra Committee in 1993. The Committee recommended opening up of the insurance sector for foreign players to improve customer service, widen the insurance net and increase the coverage.

The insurance sector is not a target driven industry. It is a value based social vocation where there is a fine sense of balance between meeting the demands of the business and fulfilling social obligations of protecting the society from unforeseen risks. The financial intermediaries have played a crucial role in development of insurance sector and they will continue to play a greater role in the future as well. These intermediaries have to merge money with motive – they have to earn their commissions as well as do good to the society.

The industry needs to propagate the message that sales and service are two sides of the same coin. The greater the quality of service rendered by insurers and intermediaries, greater is the reward in terms of continuous patronage of customers.

The Indian market cannot be considered to be financially literate. The poor people cannot afford insurance – even micro insurance hasn't been able to come to their aid. The middle class often tend to treat insurance as a tax saving tool (though there is a gradual change in this perception in the last few years) and for the rich people, insurance is one more opportunity to build wealth.

The time is ripe for driving insurance awareness as part of financial literacy and financial inclusion. This will lead to the orderly growth of the insurance sector in India. There is a need for innovative thinking to reach out to the newer segments of the population. Insurers have to make policyholders aware of the nuances of coverage at the point of sale. They must fulfill the promise of claims payment as per the insurance contract. Further, insurers must ensure a steady flow of business revenue by balancing between assets and liabilities. Additionally

there has to be a continuous balance between regulation and development. Consumers have to be educated about the claims handling process. Information asymmetry between consumers and insurers in this area only leads to disillusionment of consumers when their expectations are not matched by the service rendered.

This research effort argues the need for supply chain concepts to be institutionalized in insurance organisations due to the rampant outsourcing of critical tasks and growing number of intermediaries. When we bring the insurance sector under the purview of service supply chain, delivering quality service and arriving at suitable service quality metrics will become more tractable. The performance of the insurance supply chain will lead to improvement in customer services and contribute to the growth of the industry as a whole.

INTERMEDIARIES IN INSURANCE SECTOR

Subsequent to the technological invasion in the insurance sector, the number of intermediaries (financial as well as others) has swelled. Apart from the ubiquitous insurance agent, we have brokers, surveyors, loss assessors, third party administrators, web aggregators, insurance repositories, insurance marketing firms, CSCs, point of sales centers, Insurtech firms, software solutions providers, companies that have core competence in cloud computing, artificial intelligence, big data analytics, block chain. Web aggregators compile and provide information about insurance policies of various companies on a web-site. They enable purchase by directing the customer to the insurer or the insurer to the customer. Insurance repositories are companies licensed by IRDA for maintaining data of insurance policies in electronic form on behalf of insurers. Thus, the core competency of the insurance company has got scattered into distributed centers of excellence. Greater the outsourcing of critical activities, greater is the dependence on them for rendering service to customers. The industry has to strengthen its risk taking abilities and provide long term funds for infrastructure development – it needs the active and able support of all the intermediaries.

INTRODUCING THE SERVICE SUPPLY CHAIN CONCEPT

The insurance sector delivers services to policyholders to protect them from unforeseen risks. India is the 15th largest insurance market in the world in terms of premium volume. However, the insurance penetration is about 3.5% as compared to a global average of 6.5%.

Two decades back, the insurance sector relied on agents for selling and distributing the policies. Insurance was then viewed as a tool to save tax. The situation is grossly different today. Insurance is not merely considered as a protection tool or a tax saving instrument. Insurance has also become an investment option today in India's financial system. Today insurance sector is being swept by massive advances in technology like artificial intelligence, automation and block chain. Private insurers in India are increasingly deploying digital marketing techniques to disseminate awareness about various policies and sell policies online.

The public sector insurance organizations should now expand their digital footprint and strive to increase awareness about the benefits of insurance. Greater awareness will lead to greater penetration of the market in India. There needs to be a seamless integration of marketing efforts and efforts to create awareness about the benefits of insurance schemes. Unless this happens, aspirations of insurance sector to cover a wider net of India's population will continue to be a pipe dream. Rather than chasing a mirage, the Indian insurance sector should come to terms with the reality that the service that they are delivering falls within the framework of a "service supply chain".

It is the service supply chain that plays a vital role in ensuring that service quality of the highest standards is delivered to the policyholder customers.

DEFINITION OF SERVICE SUPPLY CHAIN

Service supply chain (SSC) is defined as an integrated management of service information, service processes, service capacity, service performance and service funds from the earliest suppliers to the ultimate customers (Ellram et al, 2004). A service supply chain has to operate as a value network of customer/ supplier partnerships and information flows interacting together to deliver services demonstrating greater responsiveness and coordination.

Service supply chain management is a tool that is used for forecasting, planning, implementing and controlling the processes of the supply chain to satisfy customer needs in an efficient manner. This involves coordinating, integrating and controlling the product, information and finance flows both within the organization and among the partners (Boon-itt & Pongpanarat, 2011).

Scholars who studied health care services defined service supply chain accordingly. Service supply chain is defined as a network of suppliers, service providers, consumers and other supporting units that perform the function of transaction of resources required to produce service followed by transformation of these resources into supporting and core services and finally delivery of these services to customers (Baltacioglu et al, 2007).

Service supply chain is service flow formed in the process of service outsourcing. Service supply chain management is the integrated management of information flow, service flow, cash flow, service process and service performance from the earliest service suppliers to the ultimate end customers in service delivery process. The service processes must be well integrated with the delivery processes (Ellram et al, 2004) (Tian, 2003) (Shen & Wang, 2005) (Yan, Sun & Wang, 2005) with after sale service acting as a key differentiator to improve bottom line (Poole, 2003) (Hu & Ning, 2003) (de Waart & Kemper, 2004).

Service supply chain is a product-service system that represents a set of common marketable products and services to meet the needs of users (Spring & Araujo, 2009). Structure of a service supply chain is bi-directional and service supply chains are characterized by customer-supplier duality (Sampson, 2000). The essence of service supply chain is to enhance customer value by integrating resources (Jin, 2006) (Fu et al, 2008)

RESEARCH ON SERVICE SUPPLY CHAINS

The research on service supply chains has gained momentum since 2004 when Lisa Ellram published a seminal paper on the subject. Though services were identified as a distinct function way back in 1972 when Levitt published his research, it was in 1976 with Earl Sasser's paper on service operations that people started taking note of it. However, in later part, service operations research was mostly subsumed by service marketing professionals. Service operations and service marketing are inextricably linked so much that it became difficult to delineate the border lines.

From 1985 onwards, the dominance of service marketing in literature is quite evident. Parasuraman, Zeithaml et al released their seminal research on the SERVQUAL model which

introduced different dimensions of service quality like Reliability, Responsiveness, Assurance, Empathy and Tangibles.

The growth of services sector and increased outsourcing of services coupled with the influence of advanced technologies has fuelled great interest in service supply chains as a research area.

Thus, the research on services has fallen into the domains

- Service Marketing
- Service Supply Chain
- Service Operations
- Service Science

In 2006, IBM introduced service science as a separate discipline and has taken efforts to socialize the concept with academia.

The development process of service supply chain can be divided into three stages: (Zhang & Chen, 2015)

1. Groping stage: This covers the period from 2000 to 2003. Studies on service supply chain during this period are limited. Learnings from product supply chains were not sufficiently translated to service supply chains.
2. Developing stage: This covers the period from 2004 to 2008. IBM proposed the concept of service science in 2004. During this phase, service supply chains attracted the attention of both academia and practitioners.
3. Deepening stage: This covers the period from 2009 to 2014. This phase is marked by development of different theoretical frameworks of service supply chain and application of these frameworks to benefit the industry.

Service organisations are under intense pressure to improve their operational efficiency and control costs without dilution of service quality standards. Customer expectations, a dynamic market and technological breakthroughs generate additional challenges for services. Adoption

of supply chain practices can enable service providers to strike the right balance between their capabilities and customer expectations (Boon-itt & Pongpanarat, 2011).

In a service business, the perceived value of the offering to the customer is determined by the service rendered rather than the product offered (Basu & Wright, 2008). Services cannot be inventoried as production and consumption happens simultaneously. The time sensitive nature of services can lead to deterioration in service quality if capacity is not managed well (Vencataya et al, 2016).

Operations excellence is often built in a progressive manner (Ferdows & De Meyer, 1990). The sand cone model of operational excellence states that there is a sequence in which operational capabilities should evolve. The starting point (i.e. the base of the sand cone) is about achieving excellence in quality. Then gradually excellence should be built in dependability, flexibility and cost.

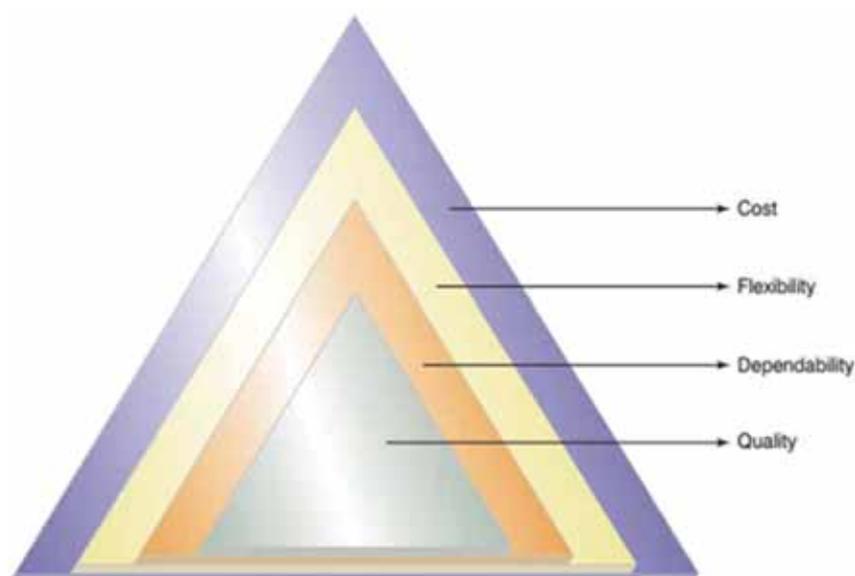


Figure 1: The “Sandcone” model of operations excellence (Ferdows and De Meyer, 1990)

Service supply chains are unique because performance measurement needs to be multi-dimensional (Yasin & Gomes, 2010; Cho et al, 2012). Competence in services management is rapidly becoming a competitive advantage for organizations. Service suppliers are getting integrated into operations. So, supply networks have to improve their performance by better monitoring and control of their processes. The performance systems must be built around the processes in the service supply chain.

The key members in a service supply chain are service providers, service integrator and customers (Zhang, 2009). Service integrators play the role of coordinators between service providers and customers. They possess the ability of breaking down the service request to identify the required competencies and accordingly allocate resources for delivering the service to the customer. Important practices need to be managed well so that service supply chain can deliver an optimal performance (Ellram et al, 2004).

The main aim of service supply chain coordination is to facilitate sharing of resources so that decision making can be integrated and performance of the supply chain can be improved (Zhang et al, 2015). Service supply chain management has a greater bearing on corporate performance and only service supply chain can pull the operations to meet the diversified demands of customers and this is done through service integration (Sengupta, Heiser & Cook, 2006).

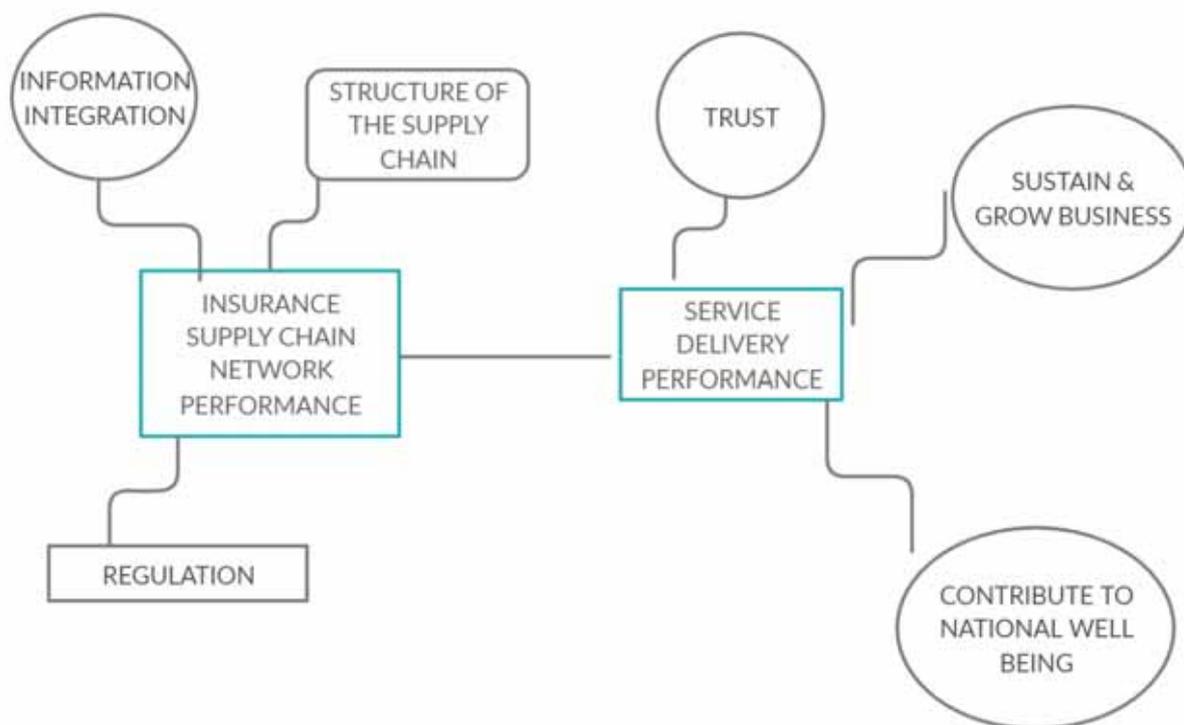


Figure 2: Source: Author

A well-defined structure of the insurance service supply chain will complement regulatory control and information integration across the network to influence the performance of the supply chain. This indicates the engagement and empowerment of network members. This eventually leads to a positive swing in the service delivery. The delivery leads to trust among the policyholders and enables the growth of insurance business. Eventually these efforts contribute to the national well being leading to GDP growth, increased awareness and greater penetration of insurance in the country.

BENEFITS OF INSURANCE SERVICE SUPPLY CHAIN

Insurance industry is now faced with the daunting prospect of having to adapt to technology and absorb it with agility. Insurtech firms have the technological acumen but lack knowledge about the industry. Policies are being sold online. Digital marketing is proving to be a cheaper method for promoting insurance products. Thus, the insurer now has to depend on a host of external entities to meet the demands of customers and grow revenue.

Insurers have also been concerned about dipping persistency ratios. Persistency ratio is an indication of the policies that have lapsed due to absence of renewal. If an insurer has sold 100 policies in a year and only 80 policies were renewed then the persistency ratio is 80%.

It will be beneficial for the insurance sector to embrace the supply chain philosophy. This will lead to the following changes:

1. Evolution of a structure of the insurance service supply chain comprising insurance companies, customers, government, regulator and all the intermediaries.
2. Focus on greater information integration among the members of the network.
3. Promotion of greater trust among the network.
4. Enhance service delivery standards.
5. Improve customer satisfaction and engagement.
6. Enable improvement in persistency ratio
7. Sustain and grow the business.

8. Contribute to the overall well being of the nation.

WAY FORWARD

Today service organisations provide services that are enabled by technology but they often have to grapple with performance and productivity issues. Availability of technology is not a panacea for all problems – how the technology is being deployed is more important. There is always a trade-off that needs to be maintained between operational efficiency and quality of service rendered. Technology has made it possible to share information swiftly – however a supply chain mindset is needed to optimize the performance of the service. While service performance is typically associated with better quality of service delivered to the customer, the service supply chain performance focuses on the value that a service provider derives. Thus we can say that service performance looks at satisfaction of customers while service supply chain performance looks at satisfaction of service providers.

Service supply chains are not linear chains but complex networks. The IIHP attributes of services (Intangibility, Inseparability, Heterogeneity & Perishability) add to the complexity of services but they also provide great opportunities for learning the intricacies of service delivery. A supply chain mindset will enable a service organisation to provide better service to customers on a sustainable basis.

Insurance organisations must remember that each and every actor in the supply network plays an important role in ensuring that services are rendered to the satisfaction of customers. The service supply chain model will enable optimization of business performance.

Trust is becoming an integral aspect of financial services across the globe and the insurance sector cannot remain oblivious to this. There is an increased sense of responsibility among consumers to follow the principles of caveat emptor and stay vigilant to protect themselves from rampant mis-selling. Consumers must take informed risks and make informed decisions. To that extent, there is a need to set up 24 x 7 query centers with the sole intention of imparting financial literacy to those seeking it. The consumer education has to be interactive to be more effective.

Using the service supply chain model will boost the prospects of the insurance industry as a whole. This is an area of research that is fecund for conducting further empirical research.

REFERENCES

- Akkermans, H., & Dellaert, N. (2005). The rediscovery of industrial dynamics: the contribution of system dynamics to supply chain management in a dynamic and fragmented world. *System Dynamics Review*, 21(3), 173-186.
- Aly Pinder Jr, Sumair Dutta : Optimizing the service supply chain - managing the network to link the customer to satisfaction.
- Barnard, J. H. (2006). *A multi-view framework for defining the services supply chain using object oriented methodology* (Doctoral dissertation, University of Central Florida Orlando, Florida).
- Breidbach, C. F., Reefke, H., & Wood, L. C. (2015). Investigating the formation of service supply chains. *The Service Industries Journal*, 35(1-2), 5-23.
- Choi, T. M. (Ed.). (2016). *Service Supply Chain Systems: A Systems Engineering Approach*. CRC Press.
- Ellram, L. M., Tate, W. L., & Billington, C. (2004). Understanding and managing the services supply chain. *Journal of Supply Chain Management*, 40(3), 17-32.
- Baltacioglu, T., Ada, E., Kaplan, M. D., Yurt And, O., & Cem Kaplan, Y. (2007). A new framework for service supply chains. *The Service Industries Journal*, 27(2), 105-124.
- Tan, Y., Zhang, Y., & Khodaverdi, R. (2016). Service performance evaluation using data envelopment analysis and balance scorecard approach: an application to automotive industry. *Annals of Operations Research*, 1-22.
- Mc Guinn, C. (2009). The future of customer service. *Irish Marketing Review*, 20(1), 57.
- Akkermans, H. and Vos, B. (2003) Amplification in Service Supply Chains: An Exploratory Case Study from the Telecom Industry. *Production and Operations Management*, 12, 204-223.

- de Waart, D. and Kemper, S. (2004) 5 Steps to Service Supply Chain Excellence. *Supply Chain Management Review*, 1, 30-35.
- Ellram, L.M., Tate, W.L. and Billington, C. (2004) Understanding and Managing the Service Supply Chain. *Journal of Supply Chain Management*, 40, 17-32.
- Fu, Q.F. and Lin, C.W. (2008) Study on the Systematic Structure of Securites Service Supply Chain in China. *International Economics and Trade Research*, 11, 45-49.
- Ferdows, K., & De Meyer, A. (1990). Lasting improvements in manufacturing performance: in search of a new theory. *Journal of Operations management*, 9(2), 168-184.
- Giannakis, M. (2011). Management of service supply chains with a service-oriented reference model: the case of management consulting. *Supply Chain Management: An International Journal*, 16(5), 346-361.
- Goldhar, J., & Berg, D. (2010). Blurring the boundary: convergence of factory and service processes. *Journal of Manufacturing Technology Management*, 21(3), 341-354.
- Hu, Z.H. and Ning, X.X. (2003) Service Chain Concept, Model and Application. *Commercial Research*, 7, 111-114.
- Huuskonen, A. (2014). Managing Strategic Service Networks: Contingency View of Integration in the Context of Component Services.

- Jin, L.Y. (2006) Service Supply Chain Management, Customer Satisfaction and Business Performance. *Chinese Journal of Management Science*, 14, 100-106.
- Kathawala, Y., & Abdou, K. (2003). Supply chain evaluation in the service industry: a framework development compared to manufacturing. *Managerial Auditing Journal*, 18(2), 140-149.
- Karmarkar, U. S. (1996). Integrative research in marketing and operations management. *Journal of marketing Research*, 33(2), 125-133.
- Mohan, K., & Zailani, S. (2011). Service Supply Chain: How Does It Effects to the Logistics Service Effectiveness? *Supply Chain Management–Pathways for Research and Practice*, 15.
- Poole, K. (2003) Seizing the Potential of the Service Supply Chain. *Supply Chain Management Review*, 7, 54-61.
- Sampson, S. E., & Froehle, C. M. (2006). Foundations and implications of a proposed unified services theory. *Production and operations management*, 15(2), 329-343.
- Sampson, S.E. (2000) Customer-Supplier Duality and Bidirectional Supply Chains in Service Organizations. *International Journal of Service Industry Management*, 11, 348-364.
- Sampson, S. E., & Spring, M. (2012). Service supply chains: Introducing the special topic forum. *Journal of Supply Chain Management*, 48(4), 3-7.
- Schmenner, R. W. (2004). Service businesses and productivity. *Decision Sciences*, 35(3), 333-347.
- Sengupta, K., Heiser, D.R. and Cook, L.S. (2006) Manufacturing and Service Supply Chain Performance: A Comparative Analysis. *Journal of Supply Chain Management*, 42, 4-15.

- Shahin, A. (2009). SSCM: service supply chain management. *International Journal of Logistics Systems and Management*, 6(1), 60-75.
- Swinehart, K. D., & Smith, A. E. (2005). Internal supply chain performance measurement: A health care continuous improvement implementation. *International Journal of Health Care Quality Assurance*, 18(7), 533-542.
- Sigala, M. (2014). Customer involvement in sustainable supply chain management: A research framework and implications in tourism. *Cornell Hospitality Quarterly*, 55(1), 76-88.
- Shen, C.L. and Wang, B. (2005) Decision-making Approaches on Choice of Logistics Service Supplier. *Journal of Nanjing Forestry University (Humanities and Social Sciences Edition)*, 5, 72-75.
- Slack, N. (2005). Operations strategy: will it ever realize its potential?. *Gestão & Produção*, 12(3), 323-332.
- Spring, M., & Araujo, L. (2009). Service, services and products: rethinking operations strategy. *International Journal of Operations & Production Management*, 29(5), 444-467.
- Tian, Y. (2003) Research on Supplier Selection in Building Logistics Service Supply Chain. *Systems Engineering- Theory & Practice*, 23, 49-54.
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of marketing*, 68(1), 1-17.
- Vencataya, L., Seebaluck, A. K., & Doorga, D. (2016). Assessing the Impact of Supply Chain Management on Competitive Advantage and Operational Performance: A Case of Four Star Hotels of Mauritius. *International Review of Management and Marketing*, 6(4S).
- Walley, P., Silvester, K., Steyn, R., & Conway, J. B. (2006). Managing Variation in Demand: Lessons from the UK National Health Service/PRACTITIONER

APPLICATION. *Journal of Healthcare Management*, 51(5), 309.

- Wright, J. N., & Basu, R. (2008). Project management and Six Sigma: obtaining a fit. *International journal of six sigma and competitive advantage*, 4(1), 81-94.
- Yan, X.X., Sun, L.Y. and Wang, K.C. (2005) Research on Performance Evaluation and Characteristics in Logistics Service Supply Chain. *China Mechanical Engineering*, 16, 969-975.
- Zailani, S. H. M., & Kumar, K. M. (2011). Service supply chain (SSC): proposed SSC practices measurement items for empirical testing. *Journal of System and Management Sciences Vol, 1(5)*, 11-18.
- Zhang, R.Q. and Chen, H.Q. (2015) A Review of Service Supply Chain and Future Prospects. *Journal of Service Science and Management*, 8, 485-495.
