

**A STUDY ON CASH SUPPLY CHAIN MANAGEMENT IN
BANKING SECTOR, SRI LANKA**

Jasenth Liyana Prashan Manjula

(199168B)

Thesis/Dissertation submitted in partial fulfillment of the requirements for the degree
Master of Business Administration in Supply Chain Management

Department of Transport and Logistics Management

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DECLARATION OF ORIGINALITY

I declare that this is my own work and this thesis/dissertation does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.



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STATEMENT OF THE SUPERVISOR

The candidate has carried out research for the MBA in Supply Chain Management in the Department of Transport and Logistics Management of University of Moratuwa under my supervision.

P.T.R.S. Sugathadasa...

Supervisor: Dr. P.T.R.S. Sugathadasa

August 31, 2021

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ABSTRACT

A study on cash supply chain management in banking sector, Sri Lanka

In contrast to the global situation, Sri Lankan cash supply chain does not use SCM applications significantly. In general, currency moves through the supply chain in a very similar way as of the retail product flow. Being service providers, banks seek optimum service delivery in regard to cash supply chain to achieve customer satisfaction. Globally, researchers have studied the cash supply chain using both manufacturing and service supply chain concepts. Globally, IT systems and scientific models are being used for cash order management, automatic cash order processing for ATM replenishments, cash inventory management, forecasting cash demand, cash monitoring tools and for optimal CIT route planning. In global practices, it is evident that ecological factor has been embedded in the decision-making process to minimize environmental impact as a part of the sustainable cash supply chain.

Currently most of the banks in Sri Lanka may have not achieved the maximum operational effectiveness of cash supply chain as satisfied percentage in overall satisfaction shown by the branch managers of banks in Sri Lanka varies between 47% and 72%. Further, no statistically significant evidence to claim that more than 50% bank managers are satisfied on prevailing cash supply chain under 95% level of confidence highlighting that there are gaps that need to be addressed strategically as a country in optimizing the money supply chain using globally improved supply chain management strategies.

The study found that high satisfaction of private bank on Information Technology systems to communicate with upstream, information systems related to Asset and Liability Management function, information security, and business continuity compared to the state bank is statistically significant at a level of 95% confidence.

Banks which have outsourced services or have a central cash processing unit show more satisfactory level compared to the banks that handle cash distribution administration in a decentralized manner. However, there was no significant difference with regard to the overall satisfactory of cash supply chain between government banks and private banks under 95% level of confidence.

The cost involved through the supply chain might not be optimal as there are gaps related to cash distribution administration, security, transportation, information systems and cash inventory management which are basic functions of cash supply chain.

The Covid 19 pandemic has led many banks to rethink about the business continuity arrangements based on the strategies that have been currently implemented. In view of the strategic development of the cash supply chain in Sri Lanka, AHP mathematical model revealed that Physical Security, Service Point Capacity, Insurance, Information Systems, Distribution and Cash Inventory are the key functional areas that need to be focused.

Key words: Service Supply Chain Management, Cash Supply, Banks, AHP

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LIST OF ACRONYMS

AHP	Analytic hierarchy process
ALM	Asset and Liability Management
AML	Anti Money Laundering
ATM	Automated Teller Machines
BTA	Bank Transaction Account
CBSL	Central Bank of Sri Lanka
CDD	Customer Due Diligence
CIT	Cash In Transit
CRM	Customer Relationship Management
EOD	End Of the Day
ISMS	Information Security Management Systems
LCB	Licensed Commercial Banks
LSB	Licensed Special Banks
MCDM	Multi-Criteria Decision-Making
MMDA	Money Market Deposit Account
NDA	Non-Disclosure Agreement
PCI-DSS	Payment Card Industry Data Security Standard
SCM	Supply Chain Management
SLA	Service Level Agreement