

**FRAMEWORK TO IMPLEMENT BUSINESS PROCESS
MANAGEMENT PRINCIPLES IN APPAREL
MANUFACTURING**

Tolusha Sajeewanie Dahanayake Yapa

(09/8066)



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Degree of Master of Philosophy

Department of Textile & Clothing Technology

University of Moratuwa
Sri Lanka

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Philosophy

Department of Textile & Clothing Technology

University of Moratuwa
Sri Lanka

February 2013

DECLARATION

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Abstract

The Sri Lankan Apparel Industry at present is in the forefront in adapting current methodologies in relation to process improvement. Many organizations have successfully implemented lean concepts, six sigma methodologies and various other philosophies. However, it appears that the implementation of such tools and techniques have often been done in specific areas without taking a holistic view into consideration. Business Process Management (BPM) is an emerging powerful concept which proposes a holistic approach for business process improvement. This research focuses on guiding the implementation of BPM principles to the Sri Lankan Apparel Industry. It targets on three BPM concepts; process orientation, performance improvement and structured approach. The BPM implementation framework proposed by the study executes in three phases where each phase guides in implementing at least one of those principles. Comprehensive literature review followed by industry surveys assist in developing the proposed framework. The proposed framework offers direction to the Sri Lankan apparel manufacturing organizations in transforming the business from functions to processes. The framework further delivers a set of performance improvement best practices suitable for the Sri Lankan Apparel Industry while presenting a lifecycle to follow, when implementing them. The proposed lifecycle encompasses a set of techniques which can be used in executing each step of the lifecycle. The BPM maturity measuring framework embedded with the BPM implementation framework acts as an assessment tool in evaluating the level of BPM maturity that organizations have achieved after the implementation of BPM initiatives. The validation survey proved the effectiveness of the proposed framework against the existing industry approaches in improving and managing business processes, in terms of accuracy, adaptability and performance. The proposed framework focuses on delivering methodical guidance about how process improvement and management efforts should be done, by taking Business Process Management principles into consideration.

Key words: Business Process Management, Sri Lankan Apparel Industry, Implementation Framework

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LIST OF ABBREVIATIONS

Abbreviation	Description
5S	Five S
ABPMP	Association of Business Process Management Professionals
AQL	Accepted Quality Level
BIQ	Build In Quality
BPI	Business Process Improvement
BPM	Business Process Management
BPMN	Business Process Modeling Notation
BPMS	Business Process Management Suites
BPR	Business Process Reengineering
BW	Balanced Workload
CF	Continuous Flow
CI	Continuous Improvement
CMM	Capability Maturity Model
CPI	Continuous Process Improvement
DMAIC	Define, Measure, Analyze, Improve, Control
EAIRC	Embrapa Agricultural Instrumentation Research Centre
EE	Employee Empowerment
EU	European Union
GDP	Gross Domestic Product
GRN	Goods Receive Note
GSP+	Generalized System of Preferences
GT	Group Technology
ILO	International Labour Organization
IT	Information Technology



JIT	Just-In-Time
KB	Kanban
KPIs	Key Performance Indicators
LOS	Level of Success
LOU	Level of Use
MFA	Multi Fibre Agreement
MIT	Massachusetts Institute of Technology
MOS	MAS Operating System
MP	Mistake Proofing
OTH	Other
PDCA	Plan, Do, Check, Act
PEMM	Process and Enterprise Maturity Model
PFD	Process Flow Design
PO	Process Orientation
POs	Purchase Orders
SCOR	Supply Chain Operations Reference
SEI	Software Engineering Institute
SLAI	Sri Lankan Apparel Industry
STD	Standardization
SUR	Setup Reduction
TPM	Total Productive Maintenance
TPS	Toyota Production System
TQM	Total Quality Management
UF	Usefulness
USA	United States of America
VC	Visual Control
WfMS	Workflow Management Systems
WIP	Work In Progress



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