# DECISION MAKING MODEL FOR THE FRONT-END OF APPAREL INNOVATION

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#### DECLARATION

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#### ABSTRACT

A systematic, well-documented approach is absolutely essential in today's context of apparel innovation to manage and implement the activities of the innovation process in the winning goal of developing fashion-forward innovative apparel products. Decision making at the front-end of the innovation process is the most significant aspect of the success of the entire innovation process. As such, decision making in the front-end by incorporating co-creation of value in the Business to Business (B2B) customer context is vital as this is deemed to be the best way to put the company in a strong position in the market with respect to competitiveness and survival. The existing models for decision making in the front-end have limited clarity on what decisions should be made at different stages, how the decisions should be made and what the specific roles of the B2B customers are, in the process of innovation. Though enormous focus and efforts are evident in developing innovative apparel products by the Sri Lankan apparel industry, no standardized procedures have been laid down for the decision making in the apparel innovation process, as revealed from the discussions with the senior managers of the Sri Lankan apparel industry. Thus, this study aims at filling these gaps in the literature and apparel industry practices by developing a model for decision making in the front-end by incorporating 'co-creation of value in the B2B context' to provide a useful guide for the apparel product innovation process.

Initially, three companies in Sri Lanka, who have heavily concentrated on apparel product innovation for the past ten years were studied to identify the type of innovative product offered and the key decisions involved in the front-end of innovation. The findings indicated that 90-95 percent of innovations are incremental in the practical apparel setting in Sri Lanka. The world reputed international apparel brands are directly involved in the manufacturing process as the apparel products are made available to end consumer through apparel brands. Three innovation initiation approaches are practiced by the apparel brands; innovation 'initiated by company for customer', 'initiated by company with customer', and 'initiated by customer'. The key decision gates vary in the three innovation initiation approaches, eight in the first two approaches and seven in the third approach. The inputs from apparel brands and suppliers are also in different forms and in different intensities. The front-end decision making process is controlled by the core competencies and climate of the company and the operational competencies and relationship characteristics of the external actors.

The results obtained in the case studies for two initiation approaches found within incremental apparel product innovation (innovation 'initiated by company' and 'initiated by B2B customer') were re-examined and verified using two concurrent studies: semi-structured interviews and a questionnaire survey. Three individual components (i. decision making process steps, ii. interactive roles of B2B customers, producers, and suppliers, and iii. factors that influence the front-end decision making process) were included in the Meta decision model as they closely interconnect to each other.

The Modified Delphi technique was employed in the process of model validation to verify the Meta decision making model in terms of the levels of clarity of the content, overall reliability, practicality, and appropriateness for the apparel sector. The opinions of experts involved in the validation Modified Delphi study confirmed that the Meta decision making model provides a deeper understanding of what decisions should be made at different stages, the responsible decision makers for each key decision, and how the decisions should be handled systematically at the front-end of apparel innovation. The Meta decision making model could assist apparel producers to improve the quality of design solutions, avoid ineffective solutions, create the best value for customers, and meet the needs of demanding customers.

Key words - apparel, B2B customer, co-creation, decision making, front-end, innovation

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The subject of my research focused on the activities and decisions at the front-end of apparel product innovation. This called for a great deal of generous support and encouragement from many people in academia, the apparel industry, and my own family. I must acknowledge the advice, assistance, encouragement, and unstinting support given to me by those in my circle while I was learning, researching, and struggling. Now, I take pleasure in conveying my gratitude to them for not only sharing their time and thoughts, wisdom and experiences, but also offering me new perspectives, and sharing my troubles by listening to me when my spirit sagged, and pushing me forward to complete this research successfully.

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# LIST OF ABBREVIATIONS

B2B	Business to Business
B2C	Business to Consumer
CAD	Computer Aided Design
C2C	Consumer to Consumer
C2B	Consumer to Business
CEO	Chief Executive Officer
COO	Chief Operating Officer
DGM	Deputy General Manager
IP	Intellectual Property
NDA	Non-Disclosure Agreement
NPD	New Product Development
PD	Product Development
R&D	Research and Development
RQ	Research Question
TRL	Technology Readiness Level

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