



## MIT SCALE RESEARCH REPORT

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**For more information, contact**  
MIT Global SCALE Network

**Postal Address:**

Massachusetts Institute of Technology 77  
Massachusetts Avenue, Cambridge, MA 02139 (USA)

**Location:**

Building E40, Room 267  
1 Amherst St.

**Access:**

Tel: +1 617-253-5320  
Fax: +1 617-253-4560

Email: [scale@mit.edu](mailto:scale@mit.edu)  
Website: [scale.mit.edu](http://scale.mit.edu)

**Research Report: ZLC-2007-4**  
**IT Governance issues in apparel supply chains**  
**Ehsan Ehsani**

**For Full Thesis Version Please Contact:**

**Marta Romero**

**ZLOG Director**

Zaragoza Logistics Center (ZLC) Edificio

Náyade 5, C/Bari 55 – PLAZA 50197

Zaragoza, SPAIN

Email: [mromero@zlc.edu.es](mailto:mromero@zlc.edu.es)

Telephone: +34 976 077 605

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## **IT Governance issues in apparel supply chains**

Ehsan Ehsani

### **EXECUTIVE SUMMARY**

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This thesis aims to improve the process of decision-making for buying IT in apparel supply chains. Increasing business pressures on companies in the apparel industry over the last 10 years have caused a movement towards implementing IT initiatives in their supply chains. Seeing that many companies fail to achieve their goals in this respect provides a motivation to study practices that provide high performance regarding IT. The objective of this thesis was to explore, from the decision-making perspective, how and under what circumstances enterprise solution initiatives in the apparel supply chain lead to improved supply chain practices.

In the existing literature, little work has been done regarding the needs of the apparel industry. By focusing on a case company in the apparel sector and several other stakeholders of IT initiatives such as consulting firms and software vendors, this research provides some insights on the challenges in the existing decision-making schemes and the areas for improvement in the existing IT governance systems.

A mid-size apparel maker in Sweden called “Gamma Shirt AB” was chosen as the basis for a short case study, and some interviews with apparel industry experts in the software industry (i2 Technologies) and consulting firms (PWC, Panorama, itValue Consulting) were also conducted.

**Our research revealed that most of the problems in the process of decision-making about IT in the context of apparel supply chains fall into the following areas:**

- **Internal point of view:** It would be better if the IT decision makers in the company not only consider the requirements of the company but also the requirements and interests of the players in the chain.

- **Communication:** Apparel supply chains are typically characterized by a geographically fragmented production network which makes involving different people in decisions.
- **Group thinking:** The decision-making sometimes comes to consensus not because of similar evaluation but because of an initial announcement of an idea by a dominant player in the team, which usually deviates the outcome of the decision.
- **Learning from previous projects:** The information about the decisions usually remains in the minds of the decision-makers or in the minutes of the sessions and is not utilized in an effective manner for the future decisions.

**A Web-based Decision Support Systems was developed along with a Decision Making Matrix to address the existing IT Governance issues:**

- **Extended Map for Supply Chain IT Governance:** a two-dimension matrix that tries to relate different players in the supply chain to different areas of decision-making in IT. The map can be used once by the CIO and senior management of the organization to determine who should be involved in decision-making, and after that, it can be used on a regular basis for normal decisions.
- **A Web-Based Decision Support System for IT Governance:** users from different geographical locations can log onto it and input their evaluations. The DSS, depending on the type of the decision model that has been used, aggregates inputs and generates the final result.

The proposed architecture for a web-based decision support system utilizes a process similar to the Delphi Method but with elimination of feedback. Its function is to make the evaluation, to prepare project documentation, and to deliver a more accurate evaluation. In this case, using information technology itself can solve this IT-related problem

A high-quality IT Governance system should be able to cope with issues such as communication, involvement, and associated misconceptions in the supply chain. Simple tools such as the Extended IT Governance Map direct the company to consider players in the whole supply chain and can be used as a basis to determine which people in the chain should be involved in decision-making and for which systems.