Configuring Consumer-Demand Driven Supply Networks – in Made-to-Fit Fashion Sector

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Abstract: The purpose of this paper is to present a concept for configuring dynamic and ready-to-implement supply network structures and support the coordination of the dynamic supply network throughout the complete process of order fulfillment. This concept is based on a (real) business model from the fashion industry where order, logistics and production management processes are entirely consumer-driven. Only after the consumer has configured and customized his made-to-fit fashion product and placed his order, the actual constellation of partners in the supply network is determined and business processes initiated. This paper underlines the methodology to be adapted by organizations striving to achieve mass customization in fashion sector. Issues related to partner selection, representation of products and management of coordination amongst partners are presented briefly in this paper.

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1. Introduction

In the present economy, the customer demands are highly characterized by mass customization in all aspects of production and distribution. The era of mass customization has been adequately supported by the emerging scientific breakthroughs in the fields of electronics, informatics, biotechnologies and material research. Automation, innovation, flexible re-organization have been the main instruments of the European Textile/Clothing industry in preserving its leading edge in the global market place (Euratex 2002). The stress is on providing high value personalized textile products to the customer and this requires companies to work with smaller batches, facilitate greater flexibility and quick response to customer demands.

The focus of mass customization is not only to provide personalized products to the customer but also support the customer through the various phases of customer lifecycle. Hence, business partners need to support the customer in acquisition phase and the intimacy phase. During the acquisition phase, a relationship of interest is initiated with the customer which might lead to conversion into a customer order. The next phase of customer retention and loyalty constitutes the intimacy phase and is more profitable for the business organizations. Companies incur different costs during each phase of the customer lifecycle. Hence, companies in zeal to reduce the cost of acquiring and retaining customer try to concentrate more on the intimacy phase which is much cheaper for business partners. It is a well-known fact that it takes up to five times more resources and money to acquire a new customer than to get an existing customer to make a new purchase (Figure 1).

![Figure 1: The Customer Acquisition and Intimacy Cost (Payne 2002)](image)

Therefore, only those companies that can guarantee the right service at the right time and place at acceptable cost and quality to its final consumer will stay in the market. To achieve these goals, the companies need to organize the business into a network structure and cooperate in a win-win environment, where different partners provide complementary competencies into the network. A clear business strategy supported by appropriate network structures and extensive use of information and communication technologies will be indispensable to provide services in the mass customization segment. The need for networked structure arises when work has to be shared...
amongst several organizations. Several partially overlapping objectives drive the formation of inter-organizational networks: (1) risk reduction, (2) economies of scale and/or scope, (3) technology exchanges, (4) co-opting or blocking competition, (5) overcoming government mandated trade or investment barriers, (6) facilitating international expansion and opening new (global) markets, (7) linking complementary contributions of the partners in a value system (vertical quasi-integration) and (8) achieving of synergies (Ring, 1992; Riemer, 2001).

Critical for the success of any such inter-firm collaboration is the process of selection of partners who form the network. Such a selection process is basically centered on various quantitative and qualitative selection criteria. It is widely assumed that firms establish joint ventures only when the perceived additional benefits from joint venturing outweigh expected extra costs (Geringer, 1991). These additional benefits will accrue only through the selection and retention of a partner that can provide skills, competencies, capabilities, and knowledge that assist the focal firm in accomplishing its strategic objectives (Hamel, 1991). The choice of the right partner can yield important competitive benefits whereas the failure to establish compatible objectives or to communicate effectively can lead to insurmountable difficulties.

In order to enable different partners to coordinate in a dynamic environment, it is of prime importance to ensure that they use common terminology, processes and procedures to represent products, orders and to do business. Therefore, some key issues related to product representation, order data creation, selection of feasible partners for order fulfillment and communication of orders to selected partners need to be developed to enable such a collaborative business network to function.

As identified earlier, reference processes form an important foundation for any supply chain network operating in a dynamic, single-item based flow of products. These processes are also crucial for the requirement analysis of the designated workflow management system and other systems crucial to intra-network order processing. The focus is to develop reference processes, which can depict the activities across various partners and also model the flow of information and material for the supply network. This further standardizes the business process and customer and order data interface across all the business partners.

This paper is organized as follows. First an overview of the European fashion industry and its key trends are identified. These findings are further strengthened by the results of the Supply Chain survey carried out by MyFashion.eu consortium. The results of the survey are presented in Section 3. The next sections explains the MyFashion.eu perspective on various aspects to mass customization business including the added value for the customer, design of MyFashion.eu business network, process of selection of partners to participate and fulfill customer orders. Finally the MyFashion.eu business model and the key scenarios developed are presented which provides the reader with an overview of the order fulfillment process in different scenarios. This paper is further enriched by the technical architecture of MyFashion.eu pertaining to software development and implementation with various pilot users. Finally, the paper concludes with the status of the current implementation and the various constraints hindering the successful implementation of the MyFashion.eu business model.
2. Overview of the European Fashion Industry

Automation, innovation, flexible re-organization have been the main instruments of the European Textile/Clothing industry in preserving its leading edge in the global market place. The liberalization of industrial nations' markets through the complete removal of import quotas by 2005 will further increase the pressure on the industry to differentiate itself and compete through the quality, functionality, environmental friendliness and consumer appeal of its products and the flexibility and quick response of its services, rather than on price only.

Euratex (2002) identified a three-tier market development for developed, emerging and developing countries. In developed countries, the consumer demand is likely to grow with more growth in value than in volumes. Further, the consumers will demand more prompt response from producers and distributors, as market segmentation will increase. There would be a rising demand for high value functional, healthy, environmental friendly and personalized textile products requiring from companies the ability to work with smaller batches, greater flexibility and quick response (mass customization and industrial made to fit).

To satisfy the dynamic customer demand, only the company that can guarantee the right service at the right time and place at acceptable cost and quality to its final consumer will stay in the market. At the same time, the rising complexity and acceleration of business makes it necessary for the majority of small to medium size companies in this sector to develop and efficiently manage cooperation and networking structures across company boundaries, that include subcontracting, outsourcing of non-core tasks or concurrent engineering. A clear enterprise strategy supported by appropriate structures and extensive use of information and communication technologies will be indispensable.

To apprehend a first hand information about the current status of the fashion industry, MyFashion.eu consortium carried out a survey amongst various business partners. The survey was carried out using an online questionnaire and personal and telephonic interviews. The key findings of the survey are included below.

3. Supply Chain Survey for MyFashion.eu

The focus of the supply chain survey was to establish the state of the art as it relates to collaboration in supply chains. Further, the various participants were evaluated in terms of their awareness and current status in pursuit of MTF strategy. Nearly 69% (20 / 29) of the participants are aware of the MTF strategy and understand that MTF will have a major impact on the nature of the business being done today. Amongst these 69%, 70% (14/20) are presently pursuing a strategy to embrace MTF segment of the fashion industry (Figure 2).
Surprisingly the IT support needed to seamlessly collaborate amongst these partners in order to cater to MTF services is still missing. 86% of the participants experience a cavity of ICT solutions to support the MTF services across different business partners. Almost 93% of the participants want to leverage the ICT and especially Internet for facilitating and supporting the collaboration amongst partners.

4. MyFashion.eu

The vision of MyFashion.eu is to establish an innovative business model that aims at providing integrated and extended fashion products, which will add value to the consumer. Added value results from the opportunity that the consumer can design and customize products, as well as to combine different products into a new highly customized product. One of the innovations of MyFashion.eu is to provide consumers not only with single fashion products, e.g. as in traditional shops, but to enable consumers to combine different products – and services – in order to obtain a new, extended, and customized product. As such, the product range of MyFashion.eu will be based on product ranges of many different suppliers and will be able to offer consumers varying degrees of product customization.

MyFashion.eu addresses these challenges of logistics and order management in dynamic value constellations and aims at providing adequate information technology modules and mechanisms to dynamically configure and manage supply networks which are assembled in response to customer orders. MyFashion.eu builds on the concept of an entirely consumer-driven production. This means, the actual constellation of partners in the supply network is determined only after the customer order has been placed. In order to deal with the situation of a one-piece-flow in dynamic supply networks that are customized for every order, MyFashion.eu employs a workflow model and intelligent agent-based approach for the dynamic configuration and management of these supply networks.

MyFashion.eu addresses consumers as well as suppliers. On the one hand, MyFashion.eu will provide consumers with novel and more user-friendly solutions, enabling a more efficient interaction with suppliers while strengthening the consumer’s position at the same time. Suppliers, on the other hand, will be provided with systems and tools that support them in the management and inter-operation of dynamic supply and value networks.
The system conception and architecture of MyFashion.eu employs new emerging standards and advanced technologies in distributed and cooperative information management driven by agent-based, workflow management technologies. In addition, MyFashion.eu will as well as provide interfaces to innovative and state-of-the-art applications technologies for product representation and configuration (Figure 3).

To summarize, the main objectives of MyFashion.eu project is “To Enable Customized, Made-to-Fit and Integrated Apparel Products in the World Market”. This would provide the customer with the utmost flexibility to design his / her own dress and will enable the retailers to fulfill the customer demands in a highly customized environment. Developing and maintaining such an environment characterized by order driven flow of single items, a dynamic configuration of the supply network is one of the other key goals.

4.1. Added Customer Value

Mass customization in fashion industry provides unparalleled flexibility to customers to design their own fashion products. MyFashion.eu aims to further enrich this flexibility by providing the customers with integrated – mass customized products from a single customer interface. Customers can hence not only customize their fashion products but also choose different products and brands from a single customer interface. This provides unprecedented additional value to the customers – who have the complete freedom to select a single product or integrated products and get them all mass customized.
MyFashion.eu business model further aims to provide the customer with a homogenous shopping experience across various customer touchpoints (including Contact Center, Sales Outlet, Field Sales and E-Commerce applications). The customer–centric business processes and data models need to support all these touchpoints consistently, by providing a single and consistent view of customers as well as a single and consistent view of business partners. A single and consistent view of customers is achieved by using the same customer information across all the business processes. This consistent “customer experience” can be accomplished in the same manner as single and consistent customer information (Figure 4).

![Figure 4: Single View of Customers and Business Entities across all Touchpoints](image)

The most intimate and crucial process initiated by the customer is the Order Creation process which is further supported by the Point of Sales (ranging from a retailer to a website). To synchronize the order fulfillment process across various partners in a dynamic supply chain, it becomes essential to formalize and standardize the various business process and information datasets. In MyFashion.eu one of the crucial datasets, which plays a key role in successful order fulfillment, is the product specification information dataset. A product is fully represented by the following:

- Basic product description – suit / shirt / shoes / accessories
- Style options
- Fabric options
- Measurements data
- Customer personal preferences

Hence, a description of the complete product includes the basic product, the styling options desired by the customer, the fabric selected for the product, measurements according to which the product will be manufactured and finally the customer personal preferences (Figure 5). MyFashion.eu explored the possibilities of standardizing the complete product representation using a common format.
A customer order can consist of more than one product. In this case, the product specification for each product consists of all the five components. One additional component is the delivery data where the customer specifies the date and place of delivery of the final product (Figure 6).

The individual processes are described in details to facilitate a more comprehensive description of the order creation process. It is important to realize that this is the most important process since it defines the customer requirements very precisely. Hence, considerable efforts / expertise are required to execute this process. For the new customers, this process takes longer and hence attributes to higher acquisition costs.
4.2. MyFashion.eu Network Design

Establishing and maintaining a successful brand in executive clothes requires both high quality standards as well as service reliability. To meet these demands at acceptable costs, long-term stability in terms of quality and timeliness is required. The long-term stability can be achieved through mutually agreed business contracts among prospective partners. On the one hand, high fluctuation of partners within the network causes costs through the selection process while on the other hand, the efficient operation of such a network requires trust which can only be built over time (Rabelo, 2003). Therefore, based on the broad description of different types of organizational forms, a type of virtual organization seems to be the most suitable alternative. But to finally classify Myfashion.eu, the business model has to be characterized in terms of product complexity and variability.

The number of variants of every single product being offered to the customer is quite high. This has been established by analyzing the various options feasible for individual product being offered to the customer. Also the integrated products offered in the MyFashion.eu domain gain complexity when the customer demands highly customized products – often requiring assimilation of diverse competencies from various manufacturers and suppliers. This suggests, that the products being offered in MyFashion.eu business sector are having high complexity as well as variability.

Further evaluating the Myfashion.eu business reveals that most of the customer orders for the fashion products are short-term orders. Emphasizing the efficient sharing of resources and the coordination by market mechanisms allows choosing the virtual organization as the type most appropriate to Myfashion.eu. Centralized coordination is required to network-related tasks only while the individual firm stays independent. The amount of trust required for this kind of cooperation is on the lower side (once general agreement various business partners have been established), so little problems are to be expected in this dimension. As said earlier, branding of products and services and with that network identity becomes critical within Myfashion.eu. The typical characteristics of the MyFashion.eu business model include:

- Long-term arrangement / contract between the partners of the network
- Short-term order fulfillment process
- Centralized coordination
- Weak brand, but strong network identity
- Highly formalized processes

Based on the characteristics of the MyFashion.eu business model and various organizational frameworks, it appears that MyFashion.eu can be best organized as a virtual organization following the broker network approach (Figure 7). One of the business partners assumes the centralized role of order coordination while other partners process the tasks allocated to them. In order to allocate tasks to individual partners, the coordinator needs to first establish the task requirements and identify the competencies required to fulfill the order. Then, the coordinator matches the competency requirement with the competencies of individual business partner participating in the MyFashion.eu domain. This provides the coordinator with a list of feasible partners who are able to fulfill the order. Similar approach has been applied by Bremer (Bremer, 1999) and Molina (Molina, 2002).
The above-mentioned process of analysis and fragmentation of customer orders into individual product is carried out using a hierarchical process developed in MyFashion.eu. This process specifies the order analysis and fragmentation approach to specify the order requirement respectively and determines the competencies required for each partner and a list of feasible partners who can fulfill the order.

### 4.3. Product Analysis and Fragmentation

A hierarchical process has been followed to perform the product fragmentation. The customer order is analyzed for different requirements corresponding to style, fabric, measurements, delivery options and personal preferences. This fragmentation of the customer order into the individual product requirements helps the retailer to earmark the partners who can fulfill the order for individual product. Figure 8 shows the hierarchical process being followed (details are available in Deliverable D07 – Concept Generating Organizational Framework for Dynamic Supply Networks).

Based on the customer order, the retailer can perform a comparison of product requirements and the flexibility offered by the individual manufacturer and supplier. In order to carry out such an exercise, the retailer needs to have access to the product options offered individually by these partners. Hence, one of the critical inputs required by the retailer is the product definition. Individual manufacturers and suppliers define their products and fabrics and represent them uniquely to the retailer. This product definition will include all the style options feasible for the individual product along with their measurement requirements. Any special requirement from the manufacturer end towards taking the measurement will also be specified in this product definition document. Similarly, the fabric supplier needs to create a catalogue (either as fabric samples in a bonded catalogue or as a soft-image or coded text) of available fabrics. The technical issues related to the implementation of a product definition and its distributions amongst retailers have still to be explored. The ability to present the product characteristics to the retailers and the customer therefore becomes one of the key competencies required to do the business.
Figure 8: Hierarchical Process for Order Fragmentation

This is the information which has to be made available to the retailer before hand by the manufacturer. This will facilitate the filtering of relevant partners as the order data is being input by the retailer. This will define the manufacturer's capability and flexibility and will determine the kind of orders they can process.

The second row of data represents the feasible list of manufacturers / suppliers selected who are able to process the order being input. Now, the retailer is responsible for sending the order inquiry to these selected members.
Further, the partners should specify the requirements in terms of measurement, fabric supported, flexibility to order fabric from different suppliers / customer, delivery options and information related to other filtration parameters used in the hierarchical process. Therefore, the partners are expected to provide their capability / constraints / requirements regarding the following issues:

- Offered products
- Supported style options
- Fabric available / options
- Available accessories
- Definition of personal preferences and their interpretations
- Feasible delivery options
- Measurement standards and procedures
- Special measurement requirements
- Tolerance / correction factor applicable for ensuring coherence between retailers and other partners’ measurement system.

These are the basic competencies which the manufacturers and suppliers will provide to the retailer. And based on this input, the retailer will be able to select partners to fulfill a specific customer order. The proposed hierarchical process provides support to the coordinator to achieve the following goals:

- Customer orders are split into individual product specifications and each product specification includes all details about style, material, measurement, personal preferences, delivery, etc.
- Establish the competency required to fulfill the customer order. Based on the order contents specified by the customer, the coordinator can identify the competency required to fulfill the order.
- Filter the list of feasible partners who have the competency to fulfill this order. Finally, this process generates a list of feasible partners who can fulfill the customer order and have the required competency. This is a dynamic matchmaking between the customer requirements and the competencies of individual partners.

**4.4. MyFashion.eu Business Scenarios**

For depicting the flow of information and flow of materials, in a one-piece flow of products, two reference scenarios have been developed for MyFashion.eu business environment. These scenarios depict the various business processes that are initiated by different business entities to support and fulfill the customer order. The scenarios incorporate the diverse requirements of the different pilot users participating in MyFashion.eu project. Further, the two scenarios proposed, are generic and either of them can be applied to any such dynamic supply network processing single piece orders. Further, a generic MyFashion.eu Business Architecture has been developed encapsulating the specific requirements of various pilots of MyFashion.eu consortium. UML based Business Modeling approach of Eriksson and Penker has been adapted to develop various business models. The generic business architecture has been proposed for retailer, manufacturer and supplier individually. The different goals, visions and processes of retailer, manufacturer and supplier are identified. Sufficiently detailed reference business architecture has been developed that allows one to derive use cases and specifications for business functions.
In general any customer order is first processed through a set of business processes like order fragmentation, identification of feasible partners, preparing and executing product inquiry, analyzing quotations, allocation and communication of orders to selected partners (Figure 9).

![Figure 9: Order Inquiry Quotation](image)

Scenario 1 caters to the specific requirements of pilots users Silva & Sistello (S&S) and InCaMa. In scenario 1, the process of order inquiry is very simple. The purpose of carrying out order inquiry with the selected manufacturers and suppliers is to confirm the price, delivery schedule and feasibility of product. Therefore the supply chain in 1st scenario is more static, where the retailers like S&S interact only with InCama for shirts (fabric supplier is Albini) and S&S for suits (fabric supplier is Cerruti) (Figure 10). Specific assumptions for this scenario include:

- There are many manufacturer’s available to a retailer. The retailer interacts only with the manufacturer(s). The manufacturer further interacts with their supplier(s). Therefore the retailer is coordinating only with the manufacturer and further down the supply chain, the manufacturer coordinates with the supplier.
- The retailer does not send a quotation inquiry to all the manufacturers. Based on the order’s specification, the retailer is able to choose a unique manufacturer who designed the items and therefore has the exclusivity to fulfill the order.
- The retailer conducts an order inquiry with the manufacturer, only to confirm the availability of fabric and the production resources. Regarding the prices and terms and conditions, it is assumed that the retailer has a prior agreement with the manufacturers.
- The manufacturer does not accept fabric from third party suppliers or from the customer directly. The fabric has to be chosen from what is being offered by the manufacturer and suppliers of the manufacturers.
- The retailer is aware of the style/product range/fabric range available and being offered by the manufacturer and thereby informs the customer accordingly. The customer chooses the products/style options/fabric combinations within a range of possibilities offered by the manufacturers and the suppliers.
- The retailer is entrusted with the responsibility of checking fit, measurements and to capture the soft information related to preferences and expectations.
- The order reference is generated by the retailer and is adapted by the manufacturer and his suppliers.

![Figure 10: Scenario 1](image)

Compared to scenario 1, in 2nd scenario, retailers like Possen.com, interact with multiple manufacturers and suppliers (Figure 11). Hence the purpose of the order inquiry is not only to check who all can manufacture these products but also who can do it most efficiently. Here, the retailer can evaluate various manufacturers and suppliers based on various criteria's including price, delivery schedule etc. before allocating the order to partners. Scenario 2 has its own sets of assumptions.

![Figure 11: Scenario 2](image)

In the scenario 2, the process of order inquiry becomes more competitive by addressing the inquiry to more number of manufacturers and suppliers. That implies, that there is more than one manufacturer who can process the order and deliver it to the customer. Hence, in view of this competition, process related to order inquiry,
getting quotations and evaluating them and finally selecting a manufacturer and supplier becomes quite important. Scenario 1 is a simplified version of scenario 2: when we have just one manufacturer able to manufacture the product with his suppliers, then we are no more talking about bidding / quotations / selection of manufacturer and supplier, but we agree instantly with the sole manufacturer and supplier.

The order inquiry in 2nd scenario can be carried out in different phases. The assembled information structure can be communicated to different partners who have the capability to fulfill the order and with whom the retailer does business. The communication of product inquiry can be carried out in different hierarchies and these three hierarchies are depicted in Figure 12.

1. Retailer contacts the manufacturers only.
2. Retailer contacts both the manufacturers and suppliers.
3. Retailer contacts the customer and then approaches the manufacturers.

![Figure 12: Communication of Product Inquiry](image)

In Case 1, the individual manufacturer(s) maintain sufficient stock for fabric and if needed, contact their own suppliers in order to procure the fabric for the order. Hence, the retailer coordinates only with the manufacturer and the manufacturer further coordinates with the supplier if required.

However, in the next case, the retailer is responsible for both the supplier and the manufacturer and hence, coordinates with both of them individually in order to process the customer order. The manufacturer is not responsible for procuring the fabric from any supplier in this case. Rather, the retailer coordinates with the supplier and gets the fabric delivered to the manufacturer. Finally, in the third case, when the customer is providing the fabric, the retailer coordinates again with both the manufacturer and customer to fulfill the order. Keeping in lieu with the coordinating partners, different order datasets has to be communicated to the manufacturer and the fabric supplier by the retailer or the relevant coordinating member (Figure 13).
4.5. *MyFashion.eu Overall Architecture*

Retailers, their customers, manufacturers and the 1st tier fabric suppliers of MyFashion.eu supply network are the actors that interact with the MyFashion.eu system. The main entry point into MyFashion.eu is provided by the *MyFashion.eu Portal* element, responsible for the construction of the required man-machine interfaces for all the actors that interact with the system, and for the aggregation of the set of services that implement the functionality specific to MyFashion.eu. The MyFashion.eu Portal comprises the following elements (Figure 14):

- The *POS Networked Services*;

- The *MyFashion.eu Supply Chain Management Services* (SCM Services), assembled in two different elements:
  - The *Smart Coordinator Module*
  - The *Messaging Service*

- The *MyFashion.eu Co-ordination Infrastructure*, implemented as a Distributed Workflow Management System (DWFMS). This also comprises the specific issues related with the integration with the legacy enterprise information systems.

The component that plays a crucial role in MyFashion.eu architecture is the Business Function. A Business Function (BF) is a functional operation that provides the means (in the form of software code) to support the execution of the task in the context of any workflow activity. The functionality embedded in the BF is specific to the domain that is modeled by the workflow process, and is not part and parcel of the workflow modeling, enactment and control environment. Development of these functional elements is done independently of the development of the DWFMS.
Figure 14 – MyFashion.eu overall architecture.

The POS Networked Services module interacts with the DWFMS in the following ways:

- The POS Networked Services module transfers to the DWFMS information regarding an already negotiated customer order. The reception of a customer order in the Workflow Habitat will create the necessary conditions that will trigger the instantiation of the respective order fulfillment process.

- The POS Networked Services module obtains from the DWFMS module (at request) information regarding the status of a previously launched workflow instance (more exactly, an instance of the order fulfillment process).

The POS Networked Services module retrieves information from the DWFMS module using a request-response protocol, on top of the SOAP protocol. A WEB service is specified and implemented by the workflow habitat, through which request-response invocations will be accomplished.

The Smart Coordinator module interacts with the DWFMS in the following ways:

- The Smart Coordinator module receives from the DWFMS module information regarding the status of any workflow process instance managed by the DWFMS. After the analysis of this information the Smart Coordinator module will have the means to show the status of customer orders.

- The Smart Coordinator module receives from the DWFMS more concrete information regarding the execution of any workflow process, namely, the completion status of each activity in the workflow process instance, the expected
and real time periods in the execution of the activities and the selected workflow participant.

The Smart Co-ordinator module gives to the Supply Network (SN) manager a global, integrated, user-friendly and decision-making environment, through which it is possible to collect, to analyse and to organise the information about the multiple SNs and their individual chains and heterogeneous enterprises. This module deals with the SN life cycle, i.e. the services involved in the SN creation, configuration, operation and dissolution.

According to the specific needs of each partner in the MyFashion.eu network, the deployment of the workflow habitat contemplates the following situations:

- A company in the supply network has its own workflow habitat. This means that workflow management functionalities are completely available inside the company.

- A company in the supply network does not have the possibility (or requirements) to maintain the required infrastructure that supports the workflow management system. In this situation, functionality implemented by the workflow habitat is provided by the same component but in the context of an Application Service Provider in the Internet (in fact, this is the MyFashion.eu Portal). Worker Habitats do however need to be deployed in the computers that will be used by the final users (the workflow participant) inside their companies.

5. Current Status and Conclusions

MyFashion.eu consortium strives to achieve the mission identified as “to provide an innovative business model to support dynamic supply chain management in the Made–To–Fit fashion industry and to provide the relevant ICT framework to enable single piece flow supervision and coordination along the supply network”. To this end, the consortium engaged in the establishment of an innovative business model for a MTF supply network concept. Further, the members defined an ICT framework for enabling the dynamic single piece flow supervision and coordination. To report, there are two main achievements of MyFashion.eu project till date namely:

1. Definition of the business model to be implemented and
2. Development of the MyFashion.eu system architecture.

Presently the project consortium is in the process of software development of the first prototype to be demonstrated. The business modeling for the 1st prototype has been finalized. The first prototype is restricted to the order fulfillment process and does not include the customer order inquiry process. The focus is on getting a customer order fulfilled by allocation of order to pre-selected partners and monitoring the order status throughout its lifecycle. Thus, the first prototype is a subset of scenario 1 and is in development phase. The aim is to provide an integrated service for accessing the supply network and provides means for distributed end-customer order management. This will be facilitated by the integration of business processes across various participating business members and hence requires active cooperation from all the supply network partners.
For a successful implementation of the MyFashion.eu business model in the fashion sector, various business entities need to come together and support the network. The most crucial aspect of embracing MyFashion.eu business model is that various business entities need to reorient their business processes and provide other members access to their in-house information. Some of the business process like, order inquiry, requires real time information from all the participating members. Therefore, in order to facilitate these processes, business entities must support them by providing the information in as real time environment as desired or feasible.

Previous experience of various pilot users namely Possen and Odermark in MyFashion.eu consortium have suggested that having online access to real time information from the relevant business partners. Issues related to security of data during transactions and fear of revealing the data to the competitors, prevents business partners to openly share data. The lure of mass customization segment has prompted some of these partners to provide more frequent updates to their information access. But it is still foreseen as the major hurdle in successfully implementing the MyFashion.eu business model. Further, the integration of new ICT tools supporting mass customization with the existing legacy systems poses problem to achieve a completely synchronized and online supply network.

Inspite of these hurdles, MyFashion.eu consortium aims to fulfill the desired goal of enabling integrated mass customized fashion products for the customers by providing innovative ICT solutions for all the business partners.
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