Chapter 2
Improving IT Market Development through IT Solutions for Prosumers

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ABSTRACT

With the IT markets rapidly changing, organisations are looking at alternative ways of improving their economic status through using the prosumer to improve IT solutions. This whole concept of using the prosumer involves organisations coming away from the traditional way of thinking about the producers and consumers as individual entities. IT companies frequently face product development challenges from industrial or societal innovations pressure. Organisations are responding to these trends within the IT sector by developing new products and improving existing products. This chapter looks at what key factors are associated with prosumers’ and how organisations can harness this power through personalisation. Personalisation through prosumers’ can improve the software development cycles and innovations through incorporating individual expert skills.

INTRODUCTION

This chapter reviews a selection of approaches that have been developed by prosumers specialists to improve the integration between the production for use and production for exchange. Prosumer environments are characterised by user participation resonating in-between the service creation and the provision process. Prosumers constitute an important market power in the future as demands for the IT market evolves, and take shapes for the next generation of technologies. Prosumers can determine whether investments in IT market can have a direct impact on organisations from the finance to manufacturing. The IT market relies on innovative and investments. Furthermore, the market’s reaction to announcements of innovative and non-innovative IT investments is independent of industry classification. Individuals participating in this society can provide the industry opportunities for them to get involved in the service development stage. The IT market is aware of the evolving needs of the prosumer, and by accommodating, they personalised views they can quickly develop new products and services.

The IT market does this by allowing prosumers to influence the design and integration process (service concept), we can later apply such methods like user-centricity, personalisation, and user...
modelling into the whole process. Specifically through study of this chapter the reader should be able to:

- Recognise the Service Concept.
- Differentiate user needs.
- Identify how human psychological characteristics may influence the Prosumer.
- Produce Prosumer specification to improve IT market development.

**USER CHARACTERISTICS BELONGING TO THE SERVICE CONCEPT (SC)**

The SC is the most important part within the process of designing a new service or redesigning an existing one. Within service concept process every little detail belonging to component of the new or existing service must be considered, this would normally include everything from the initial idea and design phases to the finalised product. With the rapid development within the IT industry, these processes are ongoing; every time existing technologies change the SC process must be revisited and re-evaluated. It is these processes that are important within the service organisation.

The service organisation plays an important part within the whole SC process because it allows individuals to interact with different departments and the workforce, and can influence the direction of the organisation depending on what trends are happening within the IT industry market.

As indicated by Goldstein, Johnston, Duffy & Rao (2002), the SC and also the service organisation can vary depending on how complex and technical the decisions are belonging to the needs of the individuals and also the organisation, either at the initial design to the point of delivery.

This is where understanding the user characteristics is important to the organisation; by grasping the personality traits of the end user throughout the process of service organisation and service concept can ensure products, services, and new services be tailored and personalised to the evolving consumer market. This approach is all about moving forward and pushing the boundaries further; by favouring new products, adapting and adopting them, and sharing their opinions with others.

According to (Polese, Russo & Garrubbo 2009; Stickdorn & Zehrer 2009; Anger & Kittl 2011) there are other user characteristics that can influence the prosumer within the SC, these tend to be: The cognitive process that underlies the user’s actions; the differences between the users and expert skills; the user’s behavioural patterns or preferences;

- **Cognitive Process:** In an ever rapid changing industry, the prosumer will try to collaborate with other peers on pushing technology further through developing innovative solutions to solving industry-wide problems.
- **User skills vs. Expert skills:** The prosumer will often possess advanced technical skills sometimes equalling ICT professional, which organisations needs to harness their expertise and knowledge. The prosumer will increasingly demand access to tools and environments for the development of their own solutions to manage their increasing appetite for timely data and information.
- **Behavioural Patterns:** A better understanding of how and when intelligence can substantially improve the interaction (design practice; intelligent interfaces that does not lead user’s expectation astray; control transparency and predictability).

One particular technique that can assist in User characteristics is that of a technique called Quality Function Development (QFD), which is used to ensure that every decision is made based