Capturing Consumer Preference in System Requirements Through Business Strategy

Constantinos Giannoulis, Department of Computer and Systems Sciences, Stockholm University, Stockholm, Kista, Sweden

Eric-Oluf Svee, Department of Computer and Systems Sciences, Stockholm University, Stockholm, Kista, Sweden

Jelena Zdravkovic, Department of Computer and Systems Sciences, Stockholm University, Stockholm, Kista, Sweden

ABSTRACT

A core concern within Business-IT alignment is coordinating strategic initiatives and plans with Information Systems (IS). Substantial work has been done on linking strategy to requirements for IS development, but it has usually been focused on the core value exchanges offered by the business, and thus overlook other aspects that influence the implementation of strategy. One of these, consumer preferences, has been proven to influence the successful provisioning of the business’s customer value proposition, and this study aims to establish a conceptual link between both strategy and consumer preferences to system requirements. The core contention is that reflecting consumer preferences through business strategy in system requirements allows for the development of aligned systems, and therefore systems that better support a consumer orientation. The contribution of this paper is an approach to establish such alignment, with this being accomplished through the proposal of a consumer preference meta-model mapped to a business strategy meta-model further linked to a system requirements technique. The validity of this proposal is demonstrated through a case study carried out within an institution of higher education in Sweden.

Keywords: Balanced Scorecards, Business Strategy, Consumer Preference, i*, Meta-Model, Strategy Maps

INTRODUCTION

Value proposition describes how a business delivers unique value for a distinct set of uses or a distinct segment of customers enabled by their strategy (Porter, 2008). A unique offering is generally framed around an economic value exchange expressed quantitatively, as an amount in goods, money, services or rights, considered as a suitable equivalent for something else: a fair price or return for an investment (McCarthy, 1982). In contra poise are qualitative measures, which detail how a good or a service is delivered to, or perceived by, the consumer. These include non-economic values (Afuah & Tucci, 2003), internal values (Ilayperuma

DOI: 10.4018/ijismd.2013100101
Kotler (1991) considered consumer preferences as playing a key role in business; as the key motivator behind, and the primary driver within, economic value exchanges, these induce the consumer to seek solutions to fulfill their needs. For a business to deliver on its value proposition by successfully providing those fulfilling goods or services which consumers desire in the method and manner which they prefer, it is necessary for it to create a supporting infrastructure, a key component of which are often information systems. More recently, evolving these ideas, Kotler, Kartajaya, and Setiawan (2010) have stated that the next phase of marketing will be values driven, an evolutionary step from the original product-centric and the latter consumer-oriented types. They claim that collaborative consumers, savvy in the tools of the Internet that rapidly evolved in the past decade, and living in the age of globalization as part of a creative society, are driving companies to design their propositions around values.

Book selling, which is highly dynamic and price-sensitive, can illustrate the significant impact consumer preferences can have on the IT systems created by businesses to deliver their value proposition to customers. Borders was the largest bookseller in the United States, but they missed the shift of their business from physical locations to e-sales, going so far as to completely outsource their online store to Amazon. Shopping online instead of in bookstores became appealing to consumers for reasons such as convenience, while the core value exchange remained money for books. However, a brick-and-mortar competitor Barnes & Noble did not overlook this shift in consumer preferences and extended its traditional business into the online world while preserving its bookstores. The final outcome was that Borders recently went out of business (Merced de la & Bosman, 2011). Moreover, Apple’s late move into e-book selling necessitated that it either improve convenience or choose other values to attract consumers, thus to better compete with Amazon and Barnes & Noble. As a consequence, Apple recently put forward the idea of providing books to consumers directly from the authors via its online platform, aiming to attract consumers based on how acquiring books directly from the authors is perceived, thus aiming at values different than simple convenience (Neumayr & Monaghan, 2012).

In both cases, targeting particular consumer preferences suggested that the business (re) designed their systems to support the provision of these values. Amazon set up its entire business around this shift in consumer preferences towards greater convenience, and soon dominated online book selling. Entirely new capabilities have been developed to purchase and deliver e-books, something for which Amazon’s original infrastructure for processing and shipping physical goods would not have been designed. This shift has lead Amazon to the top of online sales of both physical and e-books. Similarly, to better support their e-publishing idea, Apple had to not only leverage the wide popularity of their authoring tools among book authors to create features that would allow them to publish and sell to their readers directly via Apple’s online platform, but they also undertook the myriad changes to their existing products and introduced new ones. All of these necessitated changes to the underlying architecture of Apple’s online delivery platform. While in both instances the core value exchange remained money for books, the preferences making this exchange appealing changed greatly among consumers.

These examples highlight the variability of consumer preferences and show how they directly influence the success of the value proposition via the attendant value exchange. Such success depends on an enterprise’s capability to utilize its IT systems to efficiently marshal its resources and aid effectively on presenting, and delivering upon, its value proposition to consumers. Conversely, overlooking, not supporting, and/or not maintaining consumer preferences can lead to catastrophic consequences, such as in the example of Borders. These examples also illustrate how consumer preferences impact
An Emotional Scene Retrieval Framework for Lifelog Videos Using Ensemble Clustering
www.igi-global.com/article/an-emotional-scene-retrieval-framework-for-lifelog-videos-using-ensemble-clustering/126612?camid=4v1a