

Chapter 18

Service Platform Development: Comparison of Two E-Services Platforms

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ABSTRACT

Platform concepts have been around for about a decade now. While their focus was on the manufacturing industry in the beginnings, interest has shifted to services – and Internet-based services in particular. This paper provides an overview of popular product platform concepts, a new view upon services in the light of the Internet, and links platforms to Internet-based services. Two companies with a tremendous platform potential, Google and EBay, are introduced and analyzed with respect to their usage of the product platform concept. After a brief discussion of the results, two product offerings of both Google and EBay are compared to give a practical example.

INTRODUCTION

In 1997, the theory of product platforms was mentioned in academic literature for the first time. The Internet boom had not really started yet, neither the concentration on services. Hence, Meyer, and Lehnerd (1997) focused on the industry sector in their work. Now, a decade later, it becomes more and more obvious that services rule the economies of developed countries (Bureau of Economic

Analysis, 2003, 2004). Notable parts of the services industry are related to Internet businesses (as seen in the ratio of information in the services sector) (Bureau of Economic Analysis, 2004). This development brings up the question whether platforms are a suitable strategy for Internet services companies as well. Of the numerous companies out there, two can be seen as potential examples of platform utilization: EBay and Google. Both offer a vast range of products that might have

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certain aspects in common. Yet, the two firms are not too similar. On the one hand, there is EBay with its transaction and real-time expertise. On the other hand, Google thrives on its search engine capabilities, its advertising experience and a reputation for free products (Google, Inc., n. d.). This paper is going to provide a view on e-services, different perceptions of product platforms, their respective components and peculiarities. Then, Google's and EBay's product platforms will be introduced and explained. Finally, two applications of the platforms mentioned Google Checkout and PayPal Express Checkout, will be compared and systematically linked to their mother company's product platforms. This paper builds upon the initial model developed by Lin and Daim (2009).

LITERATURE REVIEW

Simpson (2005) reports that many companies choose platform-based product development to optimize their manufacturing capacities to address varying market segments. This is, as stated in the citation, particularly true for the manufacturing industry. For example, in the 1990s, automotive companies using a platform approach experienced an increase in their market share of more than 5% whereas firms not using platforms lost over 2% (Cusumano & Nobeoka, 1998). A look into the literature reveals that there is not one accepted standard or definition of what a product platform is supposed to be. Rather, there are several approaches that are similar in general, but differ in details. Here, the two concepts of McGrath and Meyer will be analyzed. Yet, the platform concept was a result of earlier scholastic achievements. For example, Edvardsson and Olsson (1996) proposed their own model for New Services Development. One of their three key elements of new services (Service System, Service Process, and Service Concept) can be seen as a prototype of a service platform, namely the Service System. It contains all the resources out of which services are going

to be created. However, those resources were not primarily intended to be reused. Rather, the focus is on creating products only once, not in several iterations. Bitran and Pedrosa (1998) go one step further. Within their New Services Development concept of an "Architectural Knowledge", a collection of subsystems which eventually form a service, the components should offer reproducibility in order to use them again. Naturally, the platform idea also derives from the extensive research that has been done for service development *processes* (de Brentani & Ragot, 1996; Smith et al., 2007) provide a good summary of process approaches). Gershenson et al. (2003) give interesting insights about concepts dealing with a product platform's requirement modularity.

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Nevertheless, this work's focus is on services. Hence, it has to be examined as well. Already in the 1970's Hill (1977) defined a service as "a change in the condition of a person, or a good belonging to some economic entity, brought about as the result of the activity of some other economic entity, with the approval of the first person or economic entity." However, this definition is hard to apply to today's online services. Does the result of a search request change the condition of a person or of one of his or her goods? This is only true in a very general sense of the term condition. Chesbrough and Spohrer (2006) discuss several aspects that are "common across many different types of services". Those include a "nature of knowledge created and exchanged" and "the exploitation of ICT [information and communication technologies] and transparency." One of impacts to society brought by technological change is that product development is inter-dependable to culture and social structure. Everything is linked and connected each other as the service connects everyone. Due to the remarkable advance of information and communication technologies, global labor market becomes available and more and

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