

Ease of Use and Its Effect on User Decision of Adopting New Method of Car Rental Service

Firas Omar¹, Ahmad Nabot²

^{1,2}Software Engineering department, Zarqa University

ABSTRACT

The effective collaboration of multidisciplinary fields of software engineering and business will eventually lead to a better understanding of UX and how to use such in our daily life. This paper spots the light on the how can we improve the user experience of using a internet website to commit and complete a business transaction of booking a vehicle through ease of use.

Keywords: UX, E-business, Trust, Ease of use

I. INTRODUCTION

With daily life burden and the consequences of the nature of daily routine we live, it is crucial now a day to find a light at the end of such tunnel. Booking a vehicle at some times in Jordan might be a big challenge especially that such country is a well know tourism destination. A website that supports such process is highly appreciated especially when it addresses several issues such as ease of use, trust and user experience.

1. The effective evolving of the concept of a 'User-Centred Business' is not something new, however, it is usually expressed as a 'customer focused business', where the business can succeed if it is oriented correctly towards what the end user desire. In such path, there is a possibility of the user adopting the proposed product or service. (al-Azzawi, A., 2014)

This is a shortcut view, and as important as businesses normally employ significant efforts conducting market research to establish the level in which their product will be adopted. On the contrary, in Arabia, it is crucial to adopt a micro view, and explore the way the customer will use the proposed product or service. This might be odd while considering that the product is the *interface* with the business, and if this interaction is not improved, then there will be a possible bottleneck delaying the success of the entire business. (al-Azzawi, A., 2014)

We can relate the above mentioned to many possible reasons, some of which could be taken as historic rules in terms of how technological projects are implemented (al-Azzawi, A., 2014).

Usually, methods adopted encompass Engineering being given a central role, and rightly so. In order to make a project successful, it is a must that technology must work in an effective and successful way. Business owners play a leading role in such success. (al-Azzawi, A., 2014)

As it is well known, if the business fails to deliver the is because if the project does not deliver the business goals, then the results will convey its failure. Therefore, development and analysis teams should follow up with a process towards implementing the Software Requirements Specification (SRS), as it is considered as a clear definition of what the business outcomes and processes are described, sometimes including *use cases*, within a common structure such as the Software Development Life Cycle (SDLC). Once there is agreement between all parties, these specifications are turned into operational details in the form of the Functional Specifications Document (FSD).

The FSD then becomes the blueprint that the engineers and developers use to actually implement the work.

This basic approach has worked well in terms of delivering working systems that really do deliver the business goals - as they were articulated. However, all too often, stakeholders are surprised by a system that ticks *all* the boxes, yet has the users complaining. This is particularly frustrating for business owners, who made every effort to adhere to the highest standards for all aspects of the project. So, what is going wrong?

II. EASE OF USE

According to Nielsen (1993), usability is defined as the measure of the quality the user practices when interacting with something like a traditional software application, web site, or any other device the user can operate in some way. Usability is not something that we can apply on a surface to give it extra shine at the last minute; it is deeply affected by every decision in design and development. In order to achieve additional usability and user satisfaction, we do not consider a single component but deem multiple components that are related to users and the product. Therefore, by focussing on the user, authentic usability can be characterized by the following (Nielsen, 1993):

1. **Learnability:** The system must be easy to master, so users can rapidly start completing work with the system.
2. **Efficiency:** The system must be easy to remember, so when the user has effectively learned the system, a high level of productivity will be achievable.
3. **Memo ability:** The system must be easy to remember, so that the casual user will be able to return to the system after some period of not having used it, with no need to learn everything from the start point.
4. **Errors:** The system must have a low error rate, so that users will be making a smaller number of errors during the use of the system. If they make errors, they can easily recover from them. In addition, terrible error possibilities must not happen.
5. **Satisfaction:** The system must be pleasing to use, so users are individually pleased during the time of usage.

In the case of a product, usability is decided by many factors such as the user's ease of use, user's perception of the quality of the product; the product's intuitiveness for the user; ease of learning and relearning, and the user's appreciation of the usefulness of the product (Barnum, 2002).

In both users' and products' cases, usability must be planned by matching the use to a user, so that increasing the user's satisfaction of the product is the ultimate goal of applying usability. Therefore, useful usability in a computer system means that the application will provide the users with well-structured computing environments. According to Mayhew (1999), to achieve usability efficiently, a number of factors should be integrated:

1. Cognitive, perceptual, and motor capabilities and constraints of people in general.
2. Special and unique characteristics of the planned user population in particular.
3. Exclusive characteristics of the users' physical and social work environment.

4. Exclusive characteristics and requirements of the users' tasks, which will be supported by the product.
5. Exclusive abilities and constraints of the selected software and or hardware and platform for the product.

Usability testing is the method of doing usability evaluation on the product development (Lee and Grice, 2008). Generally, the goal of usability testing is to find as many usability problems as possible during the test, afterwards, altering them before the product is released. Sometimes, the procedure for building usability testing ("usability engineering") starts with identifying a user, analysing tasks, and setting usability specifications (Lee and Grice, 2008). It then passes through developing and testing prototypes and continues through repeated cycles of testing and development. Thus, the key goal of usability testing is to improve the usability of a product, and then, in the end, to increase the satisfaction of users.

III. TRUST

Beatty et al. (2011) defined trust in a broad sense as the confidence an individual has in his/her favourable expectations of what other people will act with or do, based on previous interactions in many cases. Although previous individual or group (of individuals) previous behaviour cannot always guarantee that the subject will behave as expected, increased trust is simply the belief that another party will behave as the subject believes.

Through this trust, people reduce the complicity of understanding others into manageably understandable units, making an unjustifiable belief about the future subjectively justifiable (Dikomaet al., 2010; Flink and Schreiterer, 2010). Without trusting others in this way, people would be met with the incomprehensible complexity of considering every possible possibility of every person around before deciding how to act. Such complexity would be so overpowering that, in many cases, people would choose to stop doing a thing.

Trust is not the only complexity reduction method; rules are also substantial techniques for reducing complexity. However, even with the existence of rules, trust is vital because there is no guarantee that other people will fully stand by them (Bachmann and Inkpen, 2011). Trust does not really enable people to control or even expect others behaviour without error, but it does make it possible for people to create an understandable organization of their interactions with others (Luhmann, 1988; Flink and Schreiterer, 2010). Trust

is a prerequisite of behaviour and is no less than a “basic fact of social life” (Luhmann, 1979, p. 4). However, the relative importance of trust depends on the nature and the complexity of interaction with other people. The greater the necessity to interact with other people and one’s own exposure to their misbehaviour, the greater the need to trust (Rousseau et al., 1998; Salamon and Robinson, 2008; Flink and Schreiterer, 2010). Trust is therefore intrinsically complex, multidimensional (Gillespie and Dietz, 2009), and therefore context-dependent (Flink and Schreiterer, 2010). The early psychological and sociological studies on trust defined it as a belief that other people would achieve their expected favourable commitments (Flink and Schreiterer, 2010). Recent business research has taken a similar stand by defining trust as the expectation that other individuals or companies will behave morally dependably, and will fulfil their expected commitments under conditions of vulnerability and interdependence (Schoorman et al., 2007).

Unsurprisingly, trust has a significant effect on business relationships in general (Salamon and Robinson, 2008). It reduces the need for extensive negotiations, detail-resolution comprehensive legislation and enforced regulation, and fitted organizational control (Schoorman et al., 2007). Trust encourages long-term orientation (Salamon and Robinson, 2008), and increases the acceptance of interdependence and creates commitment (Cannon et al., 2010).

Trust when applied also reduces supposed risk (Cannon et al., 2010) can reduce transaction costs when warranted (Salamon and Robinson, 2008), and is to some extent important in almost any contractual agreement because of possible opportunistic behaviour of the other party. To conclude, trust determines the nature of the social and business order (Salamon and Robinson, 2008; Flink and Schreiterer, 2010) as well as the quality of business relationships. The observation that people need to trust in order to participate in an activity with another person and would rather abstain from any activity with others whom they do not trust (Luhmann, 1988) further supports these observations.

According to Tomlison and Mayer (2009), trust in business “is the salient factor in determining the effectiveness of many relations”. It is also considered to be a key promoter of behaviour in general (Geffen, 2000). Its importance is not only in its role in defusing concerns of adaptable behaviour, but also because by resolving such concerns it reduces the need to invest in promised counter measures (Schoorman et al., 2007).

Similarly, lack of trust creates control-oriented and defensive communication that damages communication effectiveness and distorts crucial information (Schoopetal, 2010). In addition, it might result in an overall discouragement of the will to take risks (Flink and Schreiterer, 2010). These effects of trust, especially the willingness to engage in activities where a person is unprotected to risk without the ability to control the related behaviour of others, and its importance in successful acceptance of new technology (Salamon and Robinson, 2008), make trust a potentially important precondition for e-commerce fact about which internet and credit card industries are apparently well aware.

IV. EXPERIMENT

The design of the website was carefully crafted in order to investigate whether the users will find the idea feasible or not. The site allowed the user to search for any car she/he wishes to rent within any area in Jordan. The results afterwards will be filter as requested. As so as the user finds the desired vehicle, She/ He can immediately book and arrange for a collection of the booked vehicle within short time and few clicks. The statistics shows an enormous expansion of the site among users from all over the world. The figure below explains the percentages of users whom did visit the site within a period of 30 days:



Figure.1 Statistics of website visitors

V. CONCLUSION

From the results above, it is clear that such approach had given us an ideal solution for the proposed problem. The results had proven a significant acceptance of the system and that it supports both ease of use and enjoyability which will lead to a better UX understanding in the future.

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