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The New Model to Enhance the User's Intentions to Use Open Government Data

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Abstract:
Government worldwide engaged in open government data initiative to public the data and related information for the benefit of users. But the success of the open government data depends on the willingness of users the way they utilize the available information. In this regard, the government needs to understand those factors that can impact on the intentions of the users to use open government data and government offering.

Keywords: Expectation, open government, satisfaction, confirmation

1. Introduction

The Government agencies worldwide take initiative to provide open data access and make the related information available to the public (McDermott, 2010). The government have understood the importance of providing relevant information to the public and involve their customers in the decision-making process. The effort of providing information and creating more transparency to help customers and to achieve better governance and regulation through public awareness (Scholl & Luna-Reyes, 2011). According to (Both, W. 2012), Open Government Data (OGD) is the technique of publishing data for use and managed by the public sector. This implies that any published data can be used freely, reuse and redistributed from one person to another. The practicing of OGD initiative becomes easy with the merging of ICT so as to achieve transparency and prompt access to information (Corrêa, Corrêa, Silva, & Da Silva, 2014). Furthermore, the origin of open government data can be located by various initiatives such as freedom of information, data exchange, open source, transparency, public participation and reuse of public information and open access. These all terminologies been used to serve the purpose of providing data access to the public. However, most of the data are not always open to the public with little restriction in some sources of open data other than government data. This implies that open government data play important roles in making data available to the companies, industries and individual's use. Moreover, researchers have stressed that development of Information and Communication Technology (ICT) serves as an enabling platform for non-manipulated raw open government data to ensure the reliability of open data (Matheus, Ribeiro, & Vaz, 2012; Pinho, 2008; Mello & Slomski, 2010).

2. Review of Literature

This section presents the literature review on the underlying variables and establishes a link between expectation, confirmation, perceived performance, and user behavioural intentions. It also discusses how user behavioural intention can lead to user's satisfaction from open government data.

2.1. Satisfaction of User

Satisfaction serves a sense of satisfaction or disappointment that a person receives after comparing the expected level with the actual performance of a product or service. The gap between these helps the customer to make decisions about the future use of the product or service. In the context of business, satisfaction is a factor that decides the repurchase intentions of the customers, and satisfaction is significantly related to the intention to use (Swan & Trawick, 1981). According to the study of Bhattacherjee (2001), intention to use the product is primarily affected by the satisfaction received on last time usage. If the previous experience remains good, there is a high probability that customer will continue the use of the product or service. This study of the view that, the intention to use will be determined by the help of factors such as expectation, confirmation, perceived performance and incentive on usage. These factors will have a significant impact on the users' behavioural intentions that create satisfaction among the user after using open government data.

2.2. Expectation

(Zuider wijk et al., 2015) documented that the online data users expect that open data should be performed better when opened with open data technologies, these expectations from the open data had significant influence over the behavioural intentions of the users to use open data technologies. In a practical way, the findings can serve as guidelines for policy and decision-making to take initiatives that can be favourable in enhancing the performance expectancy. The government can improve the services and technologies that can be helpful for the users of open government data to accomplish their task more quickly, increase the productivity and enhance the job performance (Zuiderwijk et al., 2015).

- Proposition 1: Expectation will have asignificant relationship with user behavioural intention.

2.3. Confirmation

Confirmation is a cognitive belief that represents to what extent a consumers' expectations are met in reality after using product or service. The evaluation process is referred to confirmation of perceived expectations. The outcome of fulfilled expectation come in form of satisfaction, which is the result of a rational process of comparing the initial expectation associated with service and the actual experience or the confirmation of the belief (Ajzen, 1991).

- Proposition 2: Confirmation will have a significant impact on user behavioural intention.

2.4. Perceived Performance

Perceived performance significantly influences on users' behavioural intentions. (Bhatnagar, A., Misra 2000) investigated the indirect impact on perceived performance on behavioural intentions of customers and reported that there is a significant impact of perceived performance on behavioural intention. In contrast to that current study empirically investigated and found that perceived performance has a significant impact on users' behavioural intensions to use open government data. This study argued that users' behavioural intention to use open government data can be determined by perceived performance. In line with above, (Burton, Burton, S., Sheather, S., & Roberts 2003) also mentioned behavioural intention is influenced by customers' perceived performance. This relationship can be supported by ECT theory where perceived performance used as an antecedent of users' behavioural intentions. Thus, based on the ideas of previous studies, the current research empirically examined the proposed relationship and found statistical support for the relationship between perceived performance and users' behavioural intentions. The current study recommended that in order to increase the users' behavioural intention to use open government data, perceived performance should be considered as an important factor.

2.5. User Behavioral Intention

Behavioural intention is significantly related to user's satisfaction of open government data. The findings showed that users' behavioural intention is significantly related to user's satisfaction of open government data. The current study rationalised that then intention to use open government data can lead to users' satisfaction from the open government data, which served as the uniqueness of current study from previous research studies. In the current study, it was positioned that users must have the intention to use open government data which is a depiction of actual behaviour (Ajzen, I. 1991).

Thus, it was postulated that first the intention to use the open government data should be established before assessing the satisfaction of the users. The current study provides empirical support for the idea that users' behavioural intention has a significant influence on satisfaction of the users from government data. In the current study, the intention to use open government data by Malaysian citizens act as a source to know their possibility of using open government data. After intentions, the open government users will actually use the open government data and their experience with data can lead to satisfaction or dissatisfaction.

Thus, it can be recommended that government should emphasise to create intentions to use among the open government data users and provide users with good experience.
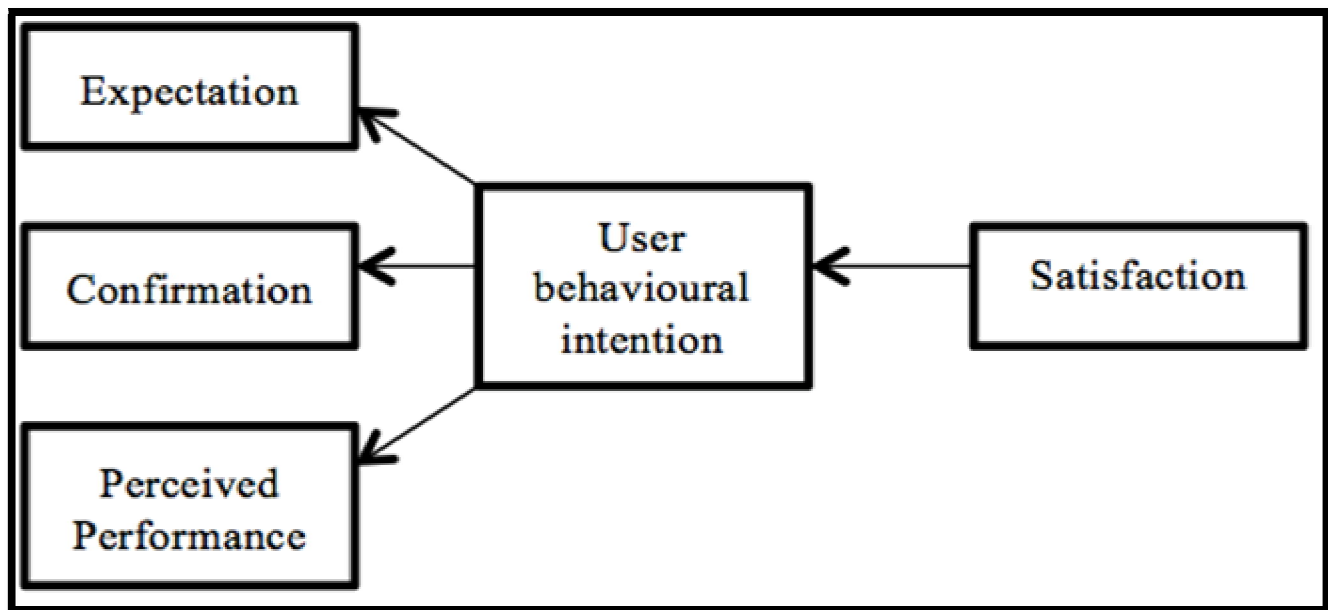
Figure 1: Model for User Satisfaction

2.6. Implications for Practice
        The current framework provides implications for the open government data agencies that can help to increase the number of users of the open government data. This study provides critical factors that can be helpful for open government data agencies. In addition to that, the significant factors such as to match the expectation of the data users, confirmation, perceived performance appear as significant factors that can enhance the user's intention to use open government data. Furthermore, understanding the customers which are users of open government data, is very important to achieve the objectives of open government data.

3. Result

H	Relationship	S.E	T	P	Decision
H!	Confirmation significantly related to user's behavioral intentions	0.080	1.322	0.187	Not Supported
H2	Expectation is significantly related to users behavioural intentions	0.085	2.518	0.012	Supported
H3	Perceived performance significantly related to user's behavioral intentions	0.069	4.542	0.000	Supported
H4	Users behavioural intention mediates the relationship between expectation and Satisfaction	0.047	3.340	0.001	Supported
H5	Users behavioural intention mediates the relationship between confirmation and Satisfaction	0.046	1.362	0.174	Not Supported
H6	Users behavioural intention mediates the relationship between perceived performance an Satisfaction	0.047	3.533	0.000	Supported

Table 1: Result

4. Conclusion
        In an attempt to provide explanation and evidence on the factors that potentially enhance users' satisfaction from open government data. This study establishes empirical evidence to support the proposition that users' behavioural intention mediates the relationship between confirmation, expectation, perceived performance, users' satisfaction. In the previous research, the ECT model has been used to assess the impact of expectation, confirmation and perceived performance on users' satisfaction that leads to behavioural intentions. The key relationships proposed in the current study have been found statistically significant. The theoretical framework of current study has an addition of which added users' behavioural intention mediates an explanation to existing ECT theory.
        In addition to that present study provided critical theoretical and practical implications for academia and industry, especially to open government data providers. To conclude, expectation, confirmation, perceived performance, incentive on usage and perceived risk are significant determinants of users' behavioural intentions directly and users' satisfaction indirectly.

5. Limitations and Future Research Recommendations

The limitation is the current research was conducted to examine the influence of expectation, confirmation, perceived performance, on users' behavioural intention and satisfaction. Further research studies may investigate other factors that can potentially influence the users' behavioural intentions and satisfaction from open government data. An advance model of open government data can reconfirm the insignificant results of mediating effect of users' behavioural intention between expectations and users' satisfaction from open government data by including more factors that can significantly influence users' behavioural intentions and satisfaction from open government data.

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