Towards an Understanding of Behavioural Intention to Use Online Journalism

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Abstract

Online journalism as a new medium has challenged the meaning of the production capacity, policy, independency, difference of time and place, and in particular, the interaction between journalists and their audiences. The purpose of this study is to identify the factors that determine the intention to adopt online journalism by journalists in Iran, using a research model based on the Decomposed Theory of Planned Behaviour (DTPB). DTPB is one of the models developed by Taylor and Todd (1995a) to recognise particular salient beliefs by examining three factors, namely; attitude, subjective norm and perceived behavioural control that can influence the intention to use technology.

Keywords: Decomposed Theory of Planned Behaviour, Online Journalism, Iran.
Introduction

During the past two decades of the twentieth century, ICT has influenced different aspects of people's life especially in the area of communication media, which could possibly change the function of the media. In this regard, running the traditional monopoly to the centralisation of the information power in a media-like newspaper is one of the most sensible features in the age of information.

The use of ICT in the field of journalism has brought about changes in news in various aspects. In other words, it is dependent upon the capability in gathering news by multimedia structure, immediacy (or redefining of time and space), as well as the interactive nature of the Internet and the World Wide Web which make ICT incomparable and a powerful setting for democracy. In addition, it has also solved issues related to censorship, propaganda, high production cost and lack of space for news. In short, the advantages of online journalism give it a testimony to remain in use in the future.

Basically, the integration of the Internet and print journalism has brought fundamental changes to the newspaper industry, and it can be stated that the Internet has modified the way people communicate and exchange information in their daily lives. Among these people, according to Negropante (1995), the journalists are seen as "professional communicators" because they play vital roles in an act of communication.

Nonetheless, research in this field has shown that professional communicators have important roles in online communication or communication via the Internet, and they are the only legitimate communicators of online news because online news should be obtained from legal and official resources using the correct format of traditional media such as newspapers.
(Yoqiong, 2005). Apart from this, the non-restrictive nature of the cyber space gives plenty of opportunities to journalists to carry out their work without any limitations and with justice during the communication process.

So, knowing the influencing factors and the behavioural intention towards online journalism is of importance nowadays. This simply means, recognising the journalists’ standpoints could help in identifying several effective ways to encourage professional journalists to use online journalism as a means to disseminate information. Therefore, the purpose of this study is to determine the influencing factors of online journalism by investigating the different parameters including attitude, the effect of reference groups and behavioural control using the Decomposed Theory of Planned Behaviour.

**Related Theory**

*Decomposed Theory of Planned Behaviour (DTPB)*

Many models have been proposed and used to predict factors which have influence on one’s behaviour to adopt new technology. Some of them include the Diffusion of Innovation Theory (e.g., Agarwal & Prasad, 1997; Rogers, 1995), the Theory of Reasoned Action-TRA (e.g., Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), the Theory of Planned Behaviour-TPB (e.g., Ajzen, 1991; Mathieson, 1991), the Theory of Technology Acceptance Model-TAM (e.g. Davis, 1989) and the Decomposed Theory of Planned Behaviour-DTPB (Taylor & Todd, 1995a). In this study, the Decomposed Theory of Planned Behavioural (DTPB) will be examined in order to recognise the influential factors in behavioural intention.

The Decomposed Theory of Planned Behaviour (DTPB) is one of the models developed by Taylor and Todd (1995a) in order to recognise particular salient beliefs that may influence
information technology usage. DTPB examines three factors, namely; attitude, subjective norm and perceived behavioural control that can affect the intention to use technology.

The model also explains subjective norm and perceived behavioural control in detailed by decomposing them into more particular dimensions (Lin, 2010). In addition, Taylor and Todd (1995) believed that their model was invented in order to have better anticipation in contrast to the traditional Theory of Planned Behaviour (Ajzen, 1991) and the Theory of Acceptance Model (Davis, 1989). Based on a comparison between their proposed model and Theory of Planned Behaviour (TPB), they have also argued that "there is value added as a result of the decomposition, in terms of increased explanatory power and better understanding of the antecedent of behaviour" (Taylor & Todd, 1995, p.169).

Furthermore, they identified that Theory of Acceptance Model (TAM) would be the best and the most preferred model if the sole goal is the prediction of usage. "However, the decomposed TPB provides fuller understanding of usage behaviour and intention, and may provide more effective guidance to researchers interested in the study of system implementation" (Taylor & Todd, 1995, p. 170).

**Attitude**

The term “Attitude” was defined by Fishbein and Ajzen in 1975. A clear explanation of the definition of attitude will be "an individual's positive or negative feeling about performing the target behaviour" (Ndubisi, 2006, p.253). Scholars in the field of Technology Acceptance Model (Davis, 1989; Davis, Bagozzi&Warshaw, 1989; Venkatesh& Davis, 2000) have been examining how users accept and use new technology through the influence of two main factors which are perceived usefulness (PU) and perceived ease of use (PEU), as the "key
belief” for using technology (Liu, Liao, Pratt, 2008). Davis (1989) defined PU as “the degree to which a person believes that the use of a specific system would increase his or her job performance” (p. 320). Further, he defined PEU as “the degree to which a person believes that the use of a certain system would be effortless” (p. 320).

Subjective norm

Subjective normative has earned an important role in the prior step of intention performance where users do not have enough direct experience as they prefer to rely on referents (other reactions) in order to form their intention (e.g., Bhatti, 2007; Hartwick&Barki, 1994; Fishbein&Ajzen, 1975). Chua (1980) mentioned that referents would be from the groups of family, friends and colleagues who have positive effects on the process of technology acceptance.

Perceived Behavioural Control

Perceived behavioural control is an extra construct added to the TPB model. It is used for situations where individuals do not have control over their behaviour (Taylor & Todd, 1994. TPB envelops two components; the first one is "facilitating conditions", that refers to the easy access to resources that a user needs (such as time or money), and the second one is "self-efficacy", that is "an individual’s self-confidence in his or her ability to perform the behaviour" (Taylor & Todd, 1994, p.1).

Ndubisi (2004) in his study added three other components to the existing TPB components. The first one is prior experience that will have an important influence on users’ decision to adopt new technology. Prior experience refers to the knowledge which is obtained from past behaviour that will help to form intention (Ndubisi, 2004). According to Beckers& Schmidt
successful computer experiences will help people to cooperate and play effectively in a computer-dominated society.

The second component is computer anxiety that is defined as "an individual’s apprehension or even fear when she/he is faced with the possibility of using computer" (Ndubisi, 2006, p. 254). Research has indicated that computer anxiety influences the way individuals observe a specific software package and so does their use of that software (Venkatesh & Davis, 2000). Finally, the last component is computer training. It means "personal computing training" that has a positive effect on technology acceptance (Ndubisi, 2006). Capability and efficiency of training have been proven as important factors in increasing perceived control via its effect on raising the predictability of work.

Hypothesis Statement

Based on the purpose of this study and the related theories, eleven hypotheses were formed:

H1: Perceived usefulness (PU) will positively affect the attitude toward online journalism
H2: Perceived ease of use (PEU) will positively affect the attitude toward online journalism
H3: Colleagues will positively affect subjective norm towards online journalism
H4: Self-efficacy will positively affect perceived behavioural control
H5: Access to technological facilities will positively affect perceived behavioural control
H6: Computer anxiety will negatively affect perceived behavioural control
H7: Prior computer experience will positively affect perceived behavioural
H8: Training will positively affect perceived behavioural control
H9: The attitude towards using online journalism will positively affect behavioural intention
H10: Subjective norm will positively affect behavioural intention
H11: Perceived behavioural control will positively affect behavioural intention

**Research design**

The sample population (N) in this study comprised journalists who worked for the national and international daily newspapers in Iran. The purposive non-probabilistic sampling method was employed as it was considered the best approach in selecting the data for this research. The purposive non-probabilistic sampling method is commonly used when a researcher intends to get the opinions of the target population, particularly those of the subgroups within the population who are more readily accessible (Doherty, 1994). Thus, the sample size (n) included professional journalists (chief editor, deputy editor, technical editor, copy editor, economy section editor, politic section editor, social section editor, national section editor, culture and art section editor, sport section editor, international section editor, event and movie section editor) who were working for the national and international daily newspapers in Iran during the duration of the research.

The reasons for choosing professional journalists were that, apart from possessing specific expertise, they also had access to more equipment and facilities to engage in online journalism as compared to newspaper journalists. Furthermore, acceptance of online journalism from the editors, not only will provide an environment with better facilities and proper training for journalists, but also encourages journalists to participate and compete in the online environment more than before.

According to the Ministry of culture and Islamic guidance (2009), 55 out of 125 national and international newspapers were published. (Some of which were newly registered while others were banned, especially after the presidential election in 2009). A total of 660 professional
journalists were working for these newspapers during the research; thus, the sample size in this study consisted of 660 respondents. A total of 660 questionnaires were distributed, but only 547 were considered appropriate for analyzing. Thus, the response rate is at 83 per cent.

Questionnaire survey was employed as the instrument for data collection in this study. The questionnaire was divided into thirteen parts, labelled alphabetically from A till M. Part A contains questions designed to capture the demographic profile such as gender, age group, educational achievement, and monthly income by the respondents. For each statement in Part B to Part M, respondents were required to indicate their agreement or disagreement along a five-point Likert scale ranging from “strongly agree” to “strongly disagree”. Data gathered were coded and entered into the computer for analysis. They were analysed using the Statistical Package for Social Sciences (SPSS), version 17.0 for Windows. Multiple linear regressions, and Baron and Kenney (1986) model were used to test all hypotheses.

Results

Reliability analysis and descriptive statistics

In order to ensure the reliability of the survey questionnaire, an internal consistency reliability test was also conducted on the items of the survey questionnaire. One of the most commonly used indicators of internal consistency is Cronbach’s Alpha co-efficient, the purpose of which is to access the stability of responses to related items. In general, the results of the test on the twelve variables in the actual test met the requirement of 0.70 Cronbach’s Alpha value for the reliability test in social science studies (ranged from 0.73 to 0.80). The result of the reliability coefficient of variables is given in the first table.
Table 1: Reliability Coefficient of variables and descriptive results

<table>
<thead>
<tr>
<th>Items</th>
<th>Number of Items</th>
<th>Mean</th>
<th>SD</th>
<th>Coefficient a (N=547)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived usefulness</td>
<td>12</td>
<td>43.05</td>
<td>8.70</td>
<td>0.89</td>
</tr>
<tr>
<td>Perceived ease of use</td>
<td>10</td>
<td>33.33</td>
<td>6.91</td>
<td>0.80</td>
</tr>
<tr>
<td>Colleagues’ influence</td>
<td>6</td>
<td>20.37</td>
<td>5.91</td>
<td>0.91</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>9</td>
<td>30.64</td>
<td>7.43</td>
<td>0.88</td>
</tr>
<tr>
<td>Facilities condition</td>
<td>7</td>
<td>24.69</td>
<td>6.01</td>
<td>0.90</td>
</tr>
<tr>
<td>Computer anxiety</td>
<td>7</td>
<td>21.83</td>
<td>4.69</td>
<td>0.71</td>
</tr>
<tr>
<td>Prior experience</td>
<td>7</td>
<td>23.77</td>
<td>6.33</td>
<td>0.85</td>
</tr>
<tr>
<td>Training</td>
<td>6</td>
<td>20.33</td>
<td>4.89</td>
<td>0.82</td>
</tr>
<tr>
<td>Attitude</td>
<td>6</td>
<td>22.80</td>
<td>5.61</td>
<td>0.93</td>
</tr>
<tr>
<td>Subjective norm</td>
<td>6</td>
<td>21.16</td>
<td>5.32</td>
<td>0.91</td>
</tr>
<tr>
<td>Perceived behavioral control</td>
<td>5</td>
<td>17.87</td>
<td>4.83</td>
<td>0.91</td>
</tr>
<tr>
<td>Behavioral intention</td>
<td>8</td>
<td>31.36</td>
<td>5.54</td>
<td>0.83</td>
</tr>
</tbody>
</table>

**Relationship tests**

Multiple regressions are used to identify the relationship between several independent or predictor variables and a dependent variable. Table 2 presents the results of the regression analysis used in this study. Before the multiple regressions were carried out, Pearson correlation was used to measure the strength between the independent variables. The results showed that all independent variables were positively correlated to the perceived behavioural control.

The results in Table 2 show that the coefficient of determinant $R^2$ is 0.579 which further indicates that this model is significant - whereby 57.9 per cent of the variance in the attitude to use online journalism is explained by independent variables (PU, PEU). The Beta value of PU (B=0.527), and PEU (B=0.286) are positive and significant on respondents' attitude. Multiple regression analysis shows two independent variables (PU, PEU) are contributing significantly towards attitude. Therefore, the findings approved the research by Taylor and Todd (1995) and Ngai et al., (2007).
It is observable from table 2 that independent variable (Colleagues' influence) is contributing significantly to subjective norm. The coefficient of determinant $R^2$ is 0.327, indicating that this model is significant - whereby 32.7 per cent of the variance in the subjective norm to use online journalism is explained by independent variables (Colleagues' influence). The Beta value of Colleagues' influence ($B=0.572$) is positive and significant on respondents' subjective norm. The findings also supported research by Nor and Pearson (2006) which showed that reference groups such as family members, peers and colleagues had a significant positive effect on subjective norms.

Furthermore, multiple regression analysis shows five independent variables (self efficacy, facility condition, computer anxiety, prior experience, and training) contribute significantly towards perceived behavioural control. The coefficient of determinant $R^2$ is 0.744 indicating that this model is significant - whereby 74.4 per cent of the variance in the perceived behavioural control is explained by independent variables (self-efficacy, facility condition, computer anxiety, prior experience and training).

The Beta value of self-efficacy ($B=0.393$), computer anxiety ($B=0.122$), prior experience ($B=0.263$) and training ($B=0.391$) are positive and significant on respondents' perceived behavioural control - whereby facility condition ($B=-0.139$) is negative and significant on respondents' perceived behavioural control. The finding also approved research by Taylor and Todd (1995).

However, the findings did not support research by Ndubisi, (2004) who claimed that self-efficacy is not the strongest predictor of intention. Table 2 shows that facility condition does not have a predictive power over the perceived behavioural control. In addition, the result on
self-efficacy supported the study done by Hartshorne and Ajjan (2008) which suggested that self-efficacy had a significant effect on the perceived behavioural control.

Attitude, subjective norms, and perceived behavioural control are contributing significantly towards intention to use online journalism. The coefficient of determinant $R^2$ is 0.702 indicates that this model is significant whereby 70.2 per cent of the variance in the intention to use online journalism is explained by independent variables (attitude, subjective norm and perceived behavioural control). The Beta value of attitude ($B=0.280$), subjective norm ($B=0.108$), and perceived behavioural control ($B=0.510$) are positive and significant on respondents' attitude.

Further, the results show that there is high significant relationship between perceived behavioural control ($t=12.567; p< 01$), attitude ($6.742; p<01$) and intention to use online journalism while subjective norm is not as effective as the other two factors. The results supported academic researches by Ndubisi, (2004) and Hartshorne and Ajjan (2008) indicating that perceived behavioural control and attitude are the best predictors for behavioural intention.

Table 2: Regression results – Direct relationships

<table>
<thead>
<tr>
<th>DV</th>
<th>Regression</th>
<th>$R^2$</th>
<th>F</th>
<th>Sig</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>Perceived usefulness</td>
<td>0.579</td>
<td>374.07</td>
<td>0.000</td>
<td>0.527</td>
</tr>
<tr>
<td></td>
<td>Perceived ease of use</td>
<td></td>
<td></td>
<td>0.000</td>
<td>0.286</td>
</tr>
<tr>
<td>Subjective norm</td>
<td>Colleagues' influence</td>
<td>0.327</td>
<td>264.42</td>
<td>0.000</td>
<td>0.572</td>
</tr>
<tr>
<td>Perceived behavioral control</td>
<td>Self-efficacy</td>
<td></td>
<td></td>
<td>0.000</td>
<td>0.393</td>
</tr>
<tr>
<td></td>
<td>Facilities condition</td>
<td>0.744</td>
<td>314.73</td>
<td>0.000</td>
<td>0.122</td>
</tr>
<tr>
<td></td>
<td>Computer anxiety</td>
<td></td>
<td></td>
<td>0.005</td>
<td>-0.139</td>
</tr>
<tr>
<td></td>
<td>Computing experience</td>
<td></td>
<td></td>
<td>0.000</td>
<td>0.263</td>
</tr>
<tr>
<td></td>
<td>Training</td>
<td></td>
<td></td>
<td>0.000</td>
<td>0.391</td>
</tr>
</tbody>
</table>
Behavioral intention | Attitude | Subjective norm | Perceived behavioral control
--- | --- | --- | ---
 | 0.702 | 0.005 | 0.000
 | 425.39 | 0.108 | 0.510

Notes: ** p<0.01

**Mediation effects**

Baron and Kenney (1986) were evaluated for the mediation effect of attitude, subjective norm, and perceived behavioural control on the relationship between independent variables and adoption intention. Table 3 shows the mediation effects on attitude, subjective norm and perceived behavioural control.

Attitude mediates the relationship between PU, PEU and behavioural intention. This is because according to table 2 and 3, all paths coefficients for the entire models are significant thus, provide evidence supporting the claim that attitude mediates the relationship between PU and PEU and intention to use online journalism.

The coefficient of determination (R2) for model 1 regression is 0.578, indicating that 57.8 per cent of the variation in dependent variable (attitude) is explained by the independent variables included in the regression. The coefficient of determination (R2) for model 2 regression is 0.659, indicating that 65.9 per cent of the variation in dependent variable is explained by the independent variables and the mediator (attitude) included in the regression.

For the mediation effect of subjective norm, all paths coefficient for three models based on Baron and Kenney’s (1986) were significant; therefore, providing evidence supporting the claim that subjective norm mediates the relationship between colleagues and intention to use online journalism.
Finally, the mediation effects of perceived behavioural control (PBC) were assessed and the results are abridged in Table 3. The results propose that except for facility condition, perceived behavioural control mediates the relationship between independent variables (computer anxiety and prior experience self-efficacy, training) and intention to use online journalism. Therefore, there is an indirect relationship (through perceived behavioural control) between computing experience, computer anxiety and intention to use online journalism.

**Table 3: mediation effect of attitude**

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Beta Coefficients without attitude</th>
<th>Beta Coefficients with attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived usefulness</td>
<td>0.573**</td>
<td>0.343**</td>
</tr>
<tr>
<td>Perceived ease of use</td>
<td>0.234**</td>
<td>0.109**</td>
</tr>
<tr>
<td></td>
<td>(R^2=0.578)</td>
<td>(R^2=0.659)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Beta Coefficients without (model)</th>
<th>Beta Coefficients with</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colleagues'</td>
<td>0.535**</td>
<td>0.206</td>
</tr>
<tr>
<td></td>
<td>(R^2=0.286)</td>
<td>(R^2=0.509)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Beta Coefficients without</th>
<th>Beta Coefficients with</th>
</tr>
</thead>
<tbody>
<tr>
<td>self-efficacy</td>
<td>0.256**</td>
<td>0.076</td>
</tr>
<tr>
<td>facility condition</td>
<td>0.165</td>
<td>0.109**</td>
</tr>
<tr>
<td>computer anxiety</td>
<td>0.089**</td>
<td>0.153**</td>
</tr>
<tr>
<td>prior experience</td>
<td>0.266**</td>
<td>0.146**</td>
</tr>
<tr>
<td>Training</td>
<td>0.245**</td>
<td>0.067</td>
</tr>
<tr>
<td></td>
<td>(R^2=0.671)</td>
<td>(R^2=0.724)</td>
</tr>
</tbody>
</table>

Notes: ** p<0.01

**Implications and Recommendations**

The implication of these findings is that, the most important variable for users is the perceived behavioural control. It determines the influence of self-efficacy, prior computer experience, access to technological facilities, training and computer anxiety on perceived
behavioural control among journalists. Therefore, these are some factors which can help the managers or sponsors of newspapers to encourage journalists to work for an online newspaper.

It is recommended that managers or sponsors of newspapers be more precise to users’ inquiries and try to provide acceptable facilities to them. For instance, required equipment should be easily available, especially for the new users. As for the journalists, the cost of online journalism is their biggest concern as it creates barriers in their decision to adopt online journalism. In fact, it is undeniable that cost is indeed the greatest barrier to the success of online journalism. Therefore, responsible managers and sponsors should ensure that issues related to operational cost such as installation fee and internet access are cleverly resolved.

The results of the study show that journalists required training courses due their worries in using the system. Thus, editors and sponsors should organise training courses based on users’ inquiries as these would provide them with the much needed exposure. This is important as lack of experience to handle new technologies used in online journalism could cause journalists to avoid adoption despite realising its importance and benefits. Therefore, the responsible organisations should carefully plan and conduct quality training courses for all employees in order to develop the capabilities of the workplace and reap the enormous benefits of online journalism.

PU and PEU are also two factors that can influence the journalists’ attitude towards using online journalism. For instance, journalists should find online journalism useful once they realise its availability, and for this reason, it is also necessary to incorporate information on
current affairs, announcements, and so forth into all kinds of information resources. The results of the study also showed colleagues’ influence on the journalists’ perceptions. As a result, responsible managers and sponsors should try to provide a conducive environment to encourage participation and healthy competitions among journalists. This would help them to be more involved in online journalism.

**Conclusion of the Study**

This research has helped in understanding the positive relationships between attitude, colleagues influence, perceived behavioural control and intention to use online journalism. It confirmed the ideas proposed by the Decomposed Theory of Planned Behavior (DTPB) that system usage depends on three factors consisting of attitude, subjective norm and perceived behavioural control which can influence the intention to use technology (Taylor & Todd, 1995a).

This research suggested that attitude has an important direct influence on the intention to adopt online journalism. In addition, ease of use is another factor that encourages journalists to use online journalism, and if they perceived the usefulness of online journalism, then they might be encouraged to be more involved in it.

The current study also revealed that the best predictor for intention to use online journalism is perceived behavioural control. Further, the results indicated that there is a significant relationship between perceived behavioural control and intention to use online journalism.
Independent Variables

Mediation Variables

Dependent Variable

Figure 1: Conceptual Framework of the Study
References


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