

Ireland's Food and Drinks Sector: The Effect of Brexit on SME Adoption and Use of Social Media Marketing (2643)

Keywords: Social media marketing, Technology adoption and usage, SMEs, Ireland's food and drinks industry, Brexit

Abstract

This paper examines whether SMEs within Ireland's food and drinks sector adopting and using social media marketing (SMM) and do they see Brexit as a factor. The research avails of qualitative and quantitative methods and applies the Unified Theory of Acceptance and Use of Technology (UTAUT2) model to a random sample of SMEs within this sector. Online surveys are analysed using partial least squares structural equations modelling (PLS-SEM) software SMART-PLS.

This paper includes the seven explanatory variables from UTAUT: performance expectancy, effort expectancy, social influence, facilitating conditions, with the addition of two constructs from UTAUT2: hedonic motivation and habit. Data from usable questionnaires were collected from SMEs in Ireland

The main conclusion from this research explores the impact Brexit has on SMEs. Will SMEs increase their time or marketing budgets on SMM as Britain leaves the European Union? Further, to what extent will Brexit affects SMEs in Ireland's food and drinks industry plans for growth in 2017?

1.0 Introduction

For Irish SMEs within the food and drinks sector, the most pressing concern associated with Brexit is precariousness in export levels and currency volatility. The UK is the main destination for Irish agri-food and drink exports in 2015, accounting for 41% of all exports. Exports are a key area of growth for Irish SMEs, but are also the most vulnerable sector to external shocks. Any decline in sterling against the euro makes Irish exports to the UK more expensive. This decline in sterling may lead to a major weakening in the competitiveness of Irish goods, services, resulting in a slower pace of export growth (Bordbia, 2016; Fielding, 2016; McHugh, 2016).

The food and drinks industry in Ireland contributes €26 billion to the national economy and indigenous Irish companies constitute half of the exports. The food and drinks industry is one of Ireland's most essential indigenous manufacturing sectors, accounting for employment of around 150,000 people. It encompasses over 600 food and drinks firms throughout the country, which export 85% of our food and seafood production to more than 160 countries worldwide (FDII, 2016, Bordbia, 2016, Teagasc, 2016).

Ireland's cost base has improved significantly, making Irish firms more competitive internationally. Digital marketing offers Irish food and drink firms access to an online forum that would have been previous unavailable because it was too costly. Other benefits include being able to promote products, having a connection with people all around the world; creating, sharing and disseminating content; gaining and searching information on unlimited number of subjects; and staying up to date. SMEs experience limitations and acceptance barriers in adopting a new technology, although digital marketing has changed the way people conduct business. SMEs avail of Social Media Marketing (SMM) because of the market opportunities it promises; although, adopting SMM is not without its challenges. (Council, 2015, Dahnil et al., 2014, Öztamur and Karakadılar, 2014, Dwivedi et al., 2011). This paper examines the role of social media within SMEs operating in Ireland's food and drink sector.

Many theories are associated with the adoption and usage of technology, Technology Acceptance Model (Davis, 1989), UTAUT (Venkatesh et al., 2003), UTAUT2 (Venkatesh et al., 2012), Theory of Planned Behaviour (TPB) (Ajzen, 1985). The main contribution to literature for this research will be the application of the UTAUT to this sector, also the modification of the UTAUT model with constructs from UTAUT2; habit, and hedonic motivation.

Based on this, two research questions were developed:

- Do employees in SMEs in the food and drinks industry adopt and use social media?
- Will employees in SMEs in the food and drinks sector increase their usage of Social Media Marketing due to Brexit?

2.0 Literature Review

2.1 Social Media Marketing of SMEs in the Irish Food and Drinks Industry

It has been widely documented that SMEs have limitation and acceptance barriers when adopting a new technology, however, with the revolution of the internet in particular, social media it has changed the way people conduct business today (Dahnil et al., 2014; Durkin et al., 2013). A recent survey by Amárach Research (2016) found 60% of Irish SMEs believe social media has contributed to their business growth. Social media is revolutionising the business landscape, reevaluating how businesses communicate across their different channels with a relatively quick and low cost method of connecting with their customers. Social media as a technology empowers customers to communicate instantly on the web, with a potentially global reach.

2.2 Technology Adoption and Usage Models

UTAUT has four key constructs (i.e performance expectancy, effort expectancy, social influence and facilitating conditions) that influence behavioural intention to use a technology and /or technology use. UTAUT is applied to an organisational context. The key moderators for this model include: gender, age, experience, and voluntariness of use. The UTAUT2 embraces the same four main concepts as UTAUT: performance expectancy, effort expectancy, social influence, and facilitating conditions, which are direct factors of usage intention and behaviour. UTAUT2 adds new constructs (hedonic motivation, price value, and habit) in order to apply the UTAUT in a consumer context.

The major difference between UTAUT and UTAUT2 is the contest variables. UTAUT2 adds new constructs (hedonic motivation, price value, and habit) in order to apply the UTAUT in a consumer context (Lian, 2015, Venkatesh et al., 2012). Based on the extended UTAUT which has been developed for an organisational contexts and tested in longitudinal field studies of employee technology acceptance (Arnaboldi and Coget, 2016; Fischer and Reuber, 2011; Rapp et al., 2013).

2.3 Brexit

The ESRI and the Department of Finance published a study late last year on the impact of Brexit; it has been widely documented in the media the effects Irish businesses will face when Britain leaves the EU. The main impact lies with hit to Irish growth and jobs, increase costs related to trade between Ireland and the UK. disruption in trade to Britain (ESRI and DOF, 2015, Taylor, 2017).

3.0 Methodology

The primary research method was an online survey with the SME owners/managers in order to understand their adoption and usage of SMM. Companies were selected based on their registration with Bord Bia. To be eligible for selection, each company had fewer than 50 employees and an annual turnover and/or balance sheet total of less than €10 million (Enterprise, 2007).

The sectors from the foods and drinks industry surveyed were: bakery, beverages, confectionery, and dairy. Companies were contacted by phone to identify the person who was tasked with managing the business digital marketing efforts and permission was sought to email the survey to this individual. The participants' responses were measured on a five-point Likert scale, ranging from 1 (i.e., strongly disagree) to 5 (i.e., strongly agree), except for the use behaviour which was measured on a five-point scale range from 1 (i.e., never) to 5 (i.e., many times) (See Appendix Table 2).

A total of 30 companies were contacted and 14 completed the survey resulting in a response rate of 47%. Out of the 14 companies 10 of those companies used social media, and 4 did not use social media. For this pilot study survey questions were adapted (Ali, Nair, & Hussain, 2016).

To answer the two research questions, constructs from the UTAUT model will be assessed using SMARTPLS answering the research question; do employees in SMEs in the food and drinks industry adopt and use social media. Quantitative methods in the form of a survey are used to answer the research question: Will employees in SMEs in the food and drinks sector increase their usage of Social Media Marketing due to Brexit?

3.1 UTAUT - Performance Expectancy

Performance expectancy relates to the level to which an employee trusts that using the system will improve their job performance (Venkatesh et al., 2003). This paper examines whether the employees in the food and drinks sector believe using SMM will assist in attaining organisational goals and targets.

H1 Performance expectancy significantly effects employee's intention to use SMM

3.2 UTAUT - Effort Expectancy

Effort expectancy relates to the level of ease associated with the use of social media (Venkatesh et al., 2003). Hence, whether the SMM technology provide advantages to SMEs employees in performing certain activities and whether the level of ease linked with the employee's use of the SMM technology.

H2 Effort expectancy significantly effects employee's intention to use SMM

3.3 UTAUT- Social Influence

Social influence relates to the level to which an employee perceives others trust he or she to use the new system (Venkatesh et al., 2003).

H3 Social influence significantly effects employee's intentions to use SMM

3.4 UTAUT- Facilitating Conditions

Facilitating conditions relate to the level to which an employee trusts organisational and technical infrastructure to maintain the use of the technology. That is, whether there are

aspects in an environment that make a specific task easy to accomplish (Venkatesh et al., 2003, Thompson and Higgins, 1991).

H4 Facilitating conditions significantly effects employees' intention to use SMM

3.5 UTAUT- Hedonic Motivation

Hedonic motivation relates to the degree to which the employee finds pleasure from using a technology (Brown and Venkatesh, 2005, van der Heijden, 2004). This paper reviews an employees' level of pleasure in using SMM technology.

H5 Hedonic Motivation significantly effects employee's intention to use SMM

3.6 UTAUT- Habit

Habit has been defined as the level to which people tend to perform behaviours automatically because of learning. People's general opinions regarding technology were the strongest determinants of system - specific perceived ease of use, particularly after substantial direct experience with the specific technology (Limayem et al., 2007, Venkatesh, 2000).

H6 Habit significantly effects employee's usage of SMM

3.7 Brexit

H7 Allowing for the impact of Brexit, will you increase your time on Social Media Marketing

78% of responded answered No, will 23% answered yes. A combination of 66% indicated that they would spend 0-10 hours more a week on social media.

H8 Allowing for the impact of Brexit, will you increase your marketing budget for Social Media Marketing

78% stated that they would not increase their budget on social media, while 23% declared that they would.

4. RESULTS

A total of 14 SMEs answered the online survey. Respondents were over-represented by women (82%), young professionals (73%). Of the businesses that used social media 10 out of the 14 used social media. Those who answered No, stated the reasons not use social media marketing were: "*Employees do not have the time to work on social media marketing*", "*Cost of using paid advertising on social media marketing is to expensive*", and "*Social Media is not necessary for my business*" as the reasons for not adopting and using social media marketing. One responded mentioned that they "*Do not have the social media marketing skills*", and they "*Do not like using social media*".

4.1 SMART-PLS Results

The UTAUT constructs assessed included Facilitating Conditions, Social Influence, Performancy expectancy, Hedonic Motivation, Habit, and Effort Expectancy. Price Value was omitted from this research as it was

The reliability of construct measurement was evaluated by examining the composite reliability (CR), and internal consistency reliability (ICR) with Cronbach's alpha for each itemised construct. The composite reliability values of .938 for Facilitating Conditions (FC),

1.00 for Social Influence (SI) and, .794 for Performance Expectancy (PE), 1.00 for Hedonic Motivation (HM), .99 for habit and .88 for habit. ns all exceeded the 0.70 minimum value.

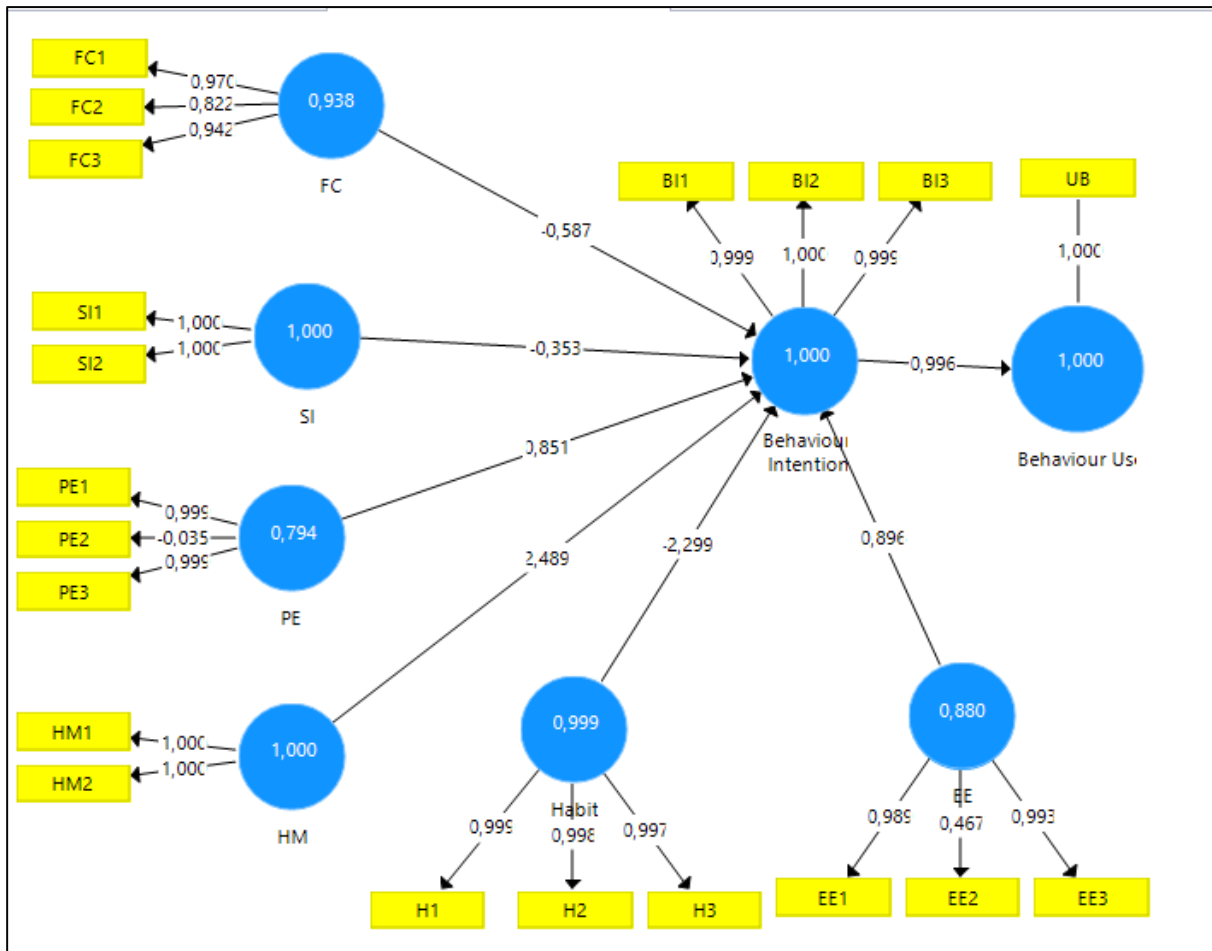


Table 1: Presents the model Total effects, Outer Weights/Loadings and Composite Reliability Test.

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Behaviour Intention	1.000	1.000	1.000	0.999
Behaviour Use	1.000	1.000	1.000	1.000
EE	0.796	0.995	0.880	0.728
FC	0.901	0.941	0.938	0.835
HM	0.999	0.999	1.000	0.999
Habit	0.998	0.998	0.999	0.996
PE	0.584	0.998	0.794	0.666
SI	0.999	0.999	1.000	0.999

Table 2: Construct Reliability and Validity

	Behaviour Intention	Behaviour Use	EE	FC	HM	Habit	PE	SI
Behaviour Intention	1.000							
Behaviour Use	0.996	1.000						
EE	0.978	0.988	1.000					
FC	0.951	0.966	0.983	1.000				
HM	0.991	0.994	0.984	0.977	1.000			
Habit	0.994	0.997	0.989	0.973	0.998	1.000		
PE	1.000	0.997	0.977	0.950	0.990	0.993	1.000	
SI	0.988	0.994	0.982	0.979	0.998	0.995	0.988	1.000

Table 3: Latent Variable Correlations

4.0 FINDINGS

The online survey was composed of close-ended questions. Although PLS-SEM is not sensitive to data normality, it is still recommended to examine the data to detect outliers and assess its distribution (Joseph F. Hair et al., 2013). Partial least squares(PLS) was used to test our model because there is quite a number of interactions terms and PLS is capable of testing these effects (Chin et al., 2003).

Reviewing the figures in Table 1, 2 and 3 the responded tended to associate high social influence, hedonic motivation, habit and facilitating conditions. Considering the performance expectancy (PE) result of .79 which closely exceeds the .70 minimum requirements for validation, we can see that one of the indicators PE2 is at .035. This indicator assessed *“Social media provides many disadvantages for my business”* a combination of 90% disagreed with this statement. Under Table 2 we can see that PE cross tested under Cronbach’s Alpha produces .584, however with rho_A the result is .998, and AVE the results is .666. However given that all constructs were previously validated by (Venkatesh et al., 2003) and subsequent studies, and that composite reliability is considered a more suitable criterion of reliability in the context of PLS-SEM than Cronbach’s alpha (Joseph F. Hair et al., 2013). Further research on the construct PE is required and further test with the PLS software.

After analysing the result of one of the indicators from Effort Expectancy of .467 we can see that this indicator did not pass the minimum .70 requirement. On evaluation of this indicator, we can see that this question *“It is easy for me to become skill full using social media marketing”* 80% agreed with this statement. Further research on the construct EE is required

Assessing the research question relating to Brexit, the results show that it has had no effect for SMEs in the food and drinks industry. The majority of businesses (78%) will not increase their time on social media or increase their marketing budget. This is the case even though 56% stated that Brexit will have a significant bearing on Irish businesses as compared to the IMF/EU bailout in 2010. Also, half of the businesses stated that Brexit will have an impact on their business (30% - has had a large impact, 20% has had a medium impact). When asked will you be increasing your time on social media due to the impact of BREXIT, the results where overwhelming at No (78%), however 23% stated they would increase their time on social media, and the number of hours increase would be between 0-10 hours more a week.

Conclusion and Limitations

This pilot paper provided a small sample to the different sectors of the food and drinks industry. Screening of companies that use social media will need to be provided for further research, as for this research 37% of respondents that answered the survey did not use social media for their business, so questions relating to the UTAUT model were not answered.

Further research on the performance expectancy and effort expectancy construct is required. Given the unknown extent of the impact businesses will face with BREXIT, it will be useful to test this sample when Britain leaves the UK. Until the Britain has signed an agreement with the EU on its departure from the EU, the scale of impact businesses in Ireland face will not be known.

More analysis is also required and an increase in sample is needed to truly test the model, as with a small sample, level of indicators is limited by the software.

Recommendations that future research is needed to included additional constructs in the area of employee engagement with social media. As businesses that do not use social media cited that employees do not have the time, skills or budget to work with social media.

Appendix

1.0 Survey used Adapted (Ali et al., 2016)

Performance expectancy (PE)
I find SMM useful in my work
Using SMM enables me to accomplish my tasks better
Using SMM increases my productivity
Using SMM increases my business profile
Using SMM provides many benefits for my business
Using SMM provides many disadvantages for my business
Effort expectancy (EF)
My interaction with SMM is clear and understandable
It is easy for me to become skilful using SMM
I find SMM easy to use
Learning to operate SMM is easy for me
Social Influence (SI)
People who influence my behaviour think that i should use SMM
People who are important to me think that I should use SMM
Colleagues in my industry have been helpful in the use of SMM
In general, the industry has supported the use of SMM
Facilitating Conditions (FC)
I have the resources necessary to use SMM
I have the knowledge necessary to use SMM
SMM is compatible with all other applications I use
A specific person is available for assistance with SMM difficulties
Hedonic Motivation (HM)
Using SMM is fun for me
Using SMM is entertaining for me
Price Value (PV)
SMM is a good value for the time I put into it
SMM provides a good value
Habit (H)
The use of SMM has become a habit for me
I am used to using SMM
I must use SMM
Intention to use (BI)
I intend to use SMM in the next few years
I would recommend my colleagues to use SMM in the next few years
I would say positive things about using SMM
Use Behaviour (UB)
Frequency of usage per week
BREXIT
What is the impact of Brexit on your business
How do you think the potential impact of Brexit on Irish businesses will compare to other crisis.i.e. banking crisis in 2008/09 or the IMF/EU bailout for Ireland in 2010?

How do you expect Brexit will impact your business turnover for 2017 as compared to 2016?
As a result of Brexit, have you changed your growth plans for 2017?
What other changes have you made to your growth plans for 2017?
Allowing for the impact of Brexit, will you increase your time on Social Media Marketing
If answer is YES for the above question(39), how much more time will you spend on social media marketing
Allowing for the impact of Brexit, will you increase your marketing budget for Social Media Marketing

References

- AJZEN, I. 1985. "From intentions to actions: A theory of planned behavior." Action-control: From cognition to behavior. *Springer*, 11-39.
- ALI, F., NAIR, P. K. & HUSSAIN, K. 2016. An assessment of students' acceptance and usage of computer supported collaborative classrooms in hospitality and tourism schools. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 18, 51-60.
- BORDBIA. 2016. *Factsheet on the Irish Agriculture and Food & Drink Sector* [Online]. Bord Bia: Bord Bia. Available: <http://www.bordbia.ie/industry/buyers/industryinfo/agri/pages/default.aspx> [Accessed 16th December 2016].
- BROWN, S. A. & VENKATESH, V. 2005. MODEL OF ADOPTION OF TECHNOLOGY IN HOUSEHOLDS: A BASELINE MODEL TEST AND EXTENSION INCORPORATING HOUSEHOLD LIFE CYCLE. *MIS Quarterly*, 29, 399-426.
- CHIN, W. W., MARCOLIN, B. L. & NEWSTED, P. R. 2003. A Partial Least Squares Latent Variable Modeling Approach for Measuring Interaction Effects: Results from a Monte Carlo Simulation Study and an Electronic-Mail Emotion/Adoption Study. *Information Systems Research*, 14, 189-217.
- COUNCIL, N. C. 2015. Costs of Doing Business in Ireland 2015.
- DAHNIL, M. I., MARZUKI, K. M., LANGGAT, J. & FABEL, N. F. 2014. Factors Influencing SMEs Adoption of Social Media Marketing. *Procedia - Social and Behavioral Sciences*, 148, 119-126.
- DAVIS, F. D. 1989. Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13, 319-340.
- DWIVEDI, Y. K., RANA, N. P., CHEN, H. & WILLIAMS, M. D. 2011. A Meta-analysis of the Unified Theory of Acceptance and Use of Technology (UTAUT). In: NÜTTGENS, M., GADATSCH, A., KAUTZ, K., SCHIRMER, I. & BLINN, N. (eds.) *Governance and Sustainability in Information Systems. Managing the Transfer and Diffusion of IT: IFIP WG 8.6 International Working Conference, Hamburg, Germany, September 22-24, 2011. Proceedings*. Berlin, Heidelberg: Springer Berlin Heidelberg.
- ENTERPRISE, I. 2007. *SME Definition* [Online]. Enterprise Ireland. Available: <http://www.enterprise-ireland.com/en/about-us/our-clients/sme-definition.html> [Accessed 28th May 2015].
- ESRI & DOF 2015. Scoping the Possible Economic Implications of Brexit on Ireland Ireland.
- FDII. 2016. *Food and Drinks Industry Ireland - Sector Profile* [Online]. Available: http://www.fdi.ie/Sectors/FDII/FDII.nsf/vPages/Food_Industry_in_Ireland~sector-profile?OpenDocument [Accessed 16th December 2016].
- JOSEPH F. HAIR, J., HULT, G. T. M., RINGLE, C. & SARSTEDT, M. 2013. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, SAGE.
- LIAN, J.-W. 2015. Critical factors for cloud based e-invoice service adoption in Taiwan: An empirical study. *International Journal of Information Management*, 35, 98-109.
- LIMAYEM, M., HIRT, S. G. & CHEUNG, C. M. K. 2007. How Habit Limits the Predictive Power of Intention: The Case of Information Systems Continuance. *MIS Quarterly*, 31, 705-737.
- ÖZTAMUR, D. & KARAKADILAR, İ. S. 2014. Exploring the Role of Social Media for SMEs: As a New Marketing Strategy Tool for the Firm Performance Perspective. *Procedia - Social and Behavioral Sciences*, 150, 511-520.
- TAYLOR, C. 2017. The five biggest Irish threats from a hard Brexit. *Irish Times*.

- TEAGASC. 2016. *Agriculture in Ireland* [Online]. Available: <https://www.teagasc.ie/rural-economy/rural-economy/agri-food-business/agriculture-in-ireland/> [Accessed 16th December 2016].
- THOMPSON, R. L. & HIGGINS, C. A. 1991. Personal Computing: Toward a Conceptual Model of Utilization. *MIS Quarterly*, 15, 125-143.
- VAN DER HEIJDEN, H. 2004. USER ACCEPTANCE OF HEDONIC INFORMATION SYSTEMS. *MIS Quarterly*, 28, 695-704.
- VENKATESH, V. 2000. Determinants of Perceived Ease of Use: Integrating Control, Intrinsic Motivation, and Emotion into the Technology Acceptance Model. *Information Systems Research*, 11, 342.
- VENKATESH, V., L. THONG, J. Y. & XU, X. 2012. CONSUMER ACCEPTANCE AND USE OF INFORMATION TECHNOLOGY: EXTENDING THE UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY. *MIS Quarterly*, 36, 157-178.
- VENKATESH, V., MORRIS, M. G., DAVIS, G. B. & DAVIS, F. D. 2003. USER ACCEPTANCE OF INFORMATION TECHNOLOGY: TOWARD A UNIFIED VIEW. *MIS Quarterly*, 27, 425-478.