Examining attitudes towards M-commerce applications… What does it mean for retailers?

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ABSTRACT

This paper provides an empirical perspective into the outcomes of positive customer attitudes towards m-commerce applications. Through undertaking a longitudinal study over a period of 12 months, the effects of positive customer attitudes towards fashion retailers' m-commerce applications are established. Previous research outlines some of the determinants of mobile app retention; this study subsequently provides retail brands an understanding on the return on investment with regard to m-commerce applications. The results illustrate that over time, positive attitude towards the m-commerce application results in increased purchase intention through the app, positive attitudes and loyalty towards the brand.

KEYWORDS

Mobile Apps, Retailer's Apps, Customer Loyalty, Brand Perceptions

INTRODUCTION

The growth of smartphone devices and the subsequent adoption of mobile applications (also known as 'app' or 'apps') have changed the way in which consumers interact with a brand (Kim et al, 2015). According to recent figures, 61% of UK and 71% of US consumers' total digital minutes are spent on mobile, with 82% of UK and 87% of US consumers' total mobile minutes spent on mobile applications (ComScore, 2017). The proliferation of mobile technologies has seen the rapid growth of mobile applications. Nelson (2016) reports that social networking sites, along with Goggle apps and Apple music make up the leading nine apps adopted by consumers. Amazon's mobile app takes the tenth place and is the only retail mobile application to make the top ten (Nelson, 2016), yet fashion retailers are adopting mobile applications as a service delivery and

distribution channel at an exhilarating rate and attempt to compete for screen space on a consumer's smartphone (Magrath and McCormick, 2012).

Previous research has examined the determinants of mobile app adoption (Munoz-Leiva et al, 2017; Gupta and Arora, 2017; Kim et al, 2014; Venkatesh et al, 2012) predominantly through utilising and extending the technology acceptance model (TAM). However, despite the growing interest in mobile apps and their potential impact as an m-commerce service delivery channel, limited academic research has explored the outcome effects of positive perceptions towards such apps (Wang et al, 2015).

This research addresses such a gap in knowledge and aims to examine the effect of customer attitudes towards the usage of an m-commerce fashion app on attitudes towards the brand, loyalty towards the brand and purchase intentions. We conduct such analysis through a longitudinal study with adopters of fashion m-commerce applications. Through assessing outcome behaviours following the usage of the m-commerce app after one month and then again after twelve months, we are able to analyse any change in customers' attitudes towards their usage of the m-commerce app on purchase intentions, attitude towards the brand and loyalty towards the brand over a twelve-month period.

CONCEPTUAL BACKGROUND

Mobile devices have introduced both convenience and easiness to contemporary consumers (Ozturk et al, 2016). Part of what makes a smartphone an integral part of a consumer's everyday life is the ability to use mobile applications, particularly on the go (Kim et al, 2013).

Yang (2013) established that the most important criteria for predicting mobile app acceptance and attitude towards apps were perceived usefulness, ease of use, perceived ubiquity, expressiveness, enjoyment, behavioural control, social influences, technology self-efficacy, innovativeness, trust, social risk, communication intensity, user's experiences, content relevancy, perceptions of price, and cultural values. Thus, each of these variables are capable of influencing customer attitudes towards the adoption and use of mobile apps. While the focus of research on mobile applications has been on adoption of such technology, it is

important to further explore the outcome behaviours of such usage and adoption (Wang, 2015).

Attitudes towards the brand

Previous research within the technological domain has asserted the influence of consumer attitudes towards a website influencing attitudes towards the brand (Song and Zinkhan, 2008). Bellman et al (2011) suggest that one reason for the increase in the popularity of branded mobile apps as a marketing device is their high level of consumer engagement and the presumable positive impact it has on consumer attitudes towards the brand, although not empirically examined. Song and Zinkhan (2008) suggest that consumer interactivity with technology (namely websites) has a positive impact on attitudes towards the brand. In addition, Bellman (2011) and Kim et al (2015) assert that interaction with branded mobile apps should have a positive effect on attitudes towards the brand. Furthermore, the extant literature has identified perceived ubiquity as one of the most important aspects of mobile services (Balasubramanian et al, 2002), the 'always on' immediacy, portability and search-ability of mobile services has been outlined as an important factor in influencing customer usage of mobile applications (Kim et al, 2015). Thus, such constant availability of services even on the go (Wang et al, 2015) that shapes a customer's attitude towards the value of a fashion retailer's m-commerce mobile application could have an influence on a consumer's attitude towards the brand. Previous research asserts that continued usage of a mobile application is an indication of positive attitudes and satisfaction towards the app (Hsiao et al, 2016). However, there is a lack of empirical research examining the outcome attitudes and behaviours following initial adoption of an m-commerce mobile application in comparison to continued retention of the app. Thus, we hypothesise:

> *H1 After retaining the M-commerce app over a sustained period of time, customer attitudes towards the app will have a greater positive influence on customer attitudes towards the brand.*

Loyalty towards the brand

Moreover, creating and maintaining loyalty helps firms to develop long-term mutually beneficial relationships with customers (Pan et al, 2012), such loyal customers exhibit attachment and commitment towards the brand and are less attracted to competing brands offerings (So et al, 2013). Evanschitzky et al (2010) assert that loyal customers are often willing to

pay more, have higher purchase intentions and resist brand switching. On this note, it is essential that brands have loyal customers and explore uses of technology to strengthen customer loyalty (Kandampully et al, 2015). Thus, organisations seek strategies to encourage and enhance customers' active engagement and to serve as brand ambassadors (James, 2013). Shankar et al (2010) suggest that retailers could view the wider concept of mobile marketing as an opportunity to enhance customer loyalty as it allows retailers to engage and interact with customers, while Kim and Adler (2011) conceptualise the potential of mobile apps to increase customer loyalty through further customer engagement with the brand and brand commitment. Such commitment to retain a mobile app on one's mobile device could be the first stage of loyalty towards the brand (Ozturk et al, 2016). Further engagement with the mobile app on a repeated basis may develop loyalty towards the brand (Kim et al, 2015).

Despite the initial acceptance being essential for the dissemination of an innovation, such acceptance does not assure continued usage/retention or loyalty to the brand (Hong et al, 2006). Thus we hypothesise:

> *H2 After retaining the M-commerce app over a sustained period of time, customer attitudes towards the app will have a greater positive influence on customer loyalty towards the brand.*

Purchase intentions

Despite the growing interest in m-commerce applications, few studies have specifically examined the financial effect of m-commerce applications (Kim et al, 2015; Bellman, 2011). Some studies have explored mobile purchase and mobile purchase adoption (see Gao et al, 2015). In addition, Kim et al (2015) illustrate that branded app adoption has a positive effect on in-store purchase intentions and becomes elevated when customers become more active on the app and utilise more features. However, to our knowledge there is no empirical research that investigates purchase intentions through a retailer's *m-commerce application*. Purchase intention refers to a customer's likelihood to purchase a product. Therefore, it does not necessarily mean *actual purchase* or *promise* to purchase. However, it is important to recognise a customer's purchase intention, as illustrated by the theory of planned behaviour (Ajzen, 1985), a customer's behaviour can often be predicted by his or her intentions. Thus, purchase intentions become the likelihood of buying (Wu et al, 2013). Previous research within the technological domain asserts that a customer's attitudes towards a technological system (such as a website or

in-store computer) can influence purchase intentions (Agag and El-Masry, 2017). Thus we hypothesise:

> *H3 After retaining the M-commerce app over a sustained period of time, customer attitudes towards the app will have a greater positive influence on customer purchase intentions through the application.*
> *H4 After retaining the M-commerce app over a sustained period of time, customer attitudes towards the brand will have a greater positive influence on customer purchase intentions through the application.*
>
> *H5 After retaining the M-commerce app over a sustained period of time, customer loyalty towards the brand will have a greater positive influence on customer purchase intentions through the application.*

Following our conceptual development, figure 1 outlines a pictorial representation of our hypothesised relationships.
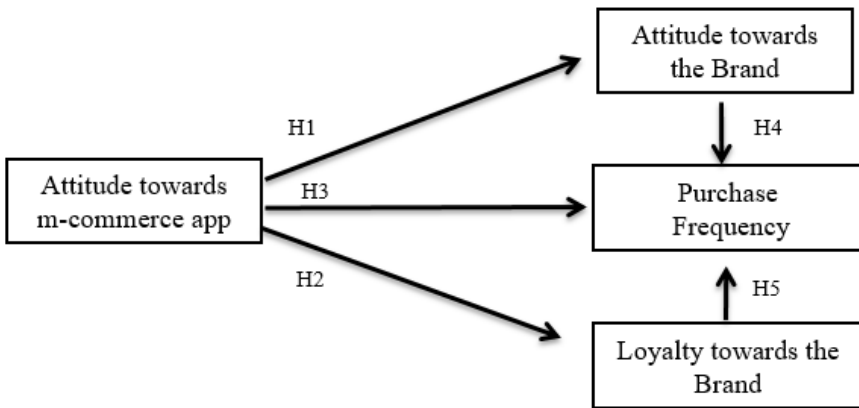
METHODOLOGY

This research has proposed a conceptual model to be empirically tested which will aid in shedding light on the influence of customer attitudes towards an m-commerce fashion app on attitudes towards the brand, loyalty towards the brand and purchase intentions. We conduct such

analysis through a longitudinal study with adopters of fashion m-commerce applications. Through assessing outcome behaviours following the usage of the m-commerce app after one month and then again after twelve months, we are able to analyse any change in customers' attitudes towards the m-commerce app on purchase intentions, attitude towards the brand and loyalty towards the brand over a twelve-month period.

Data were collected twice from the same respondents. For Time 1, data were collected from 689 consumers (366 females, Mean age = 28 years; 323 males, Mean age = 26 years). Thereafter for Time 2, a total of 474 consumers participated in the second survey questionnaire 11 months later (69% of the original sample) (271 females, Mean age = 29 years; 203 males; Mean age = 28). The respondents were recruited with the assistance of a market research company. In order to conduct direct comparisons between Time 1 and Time 2 we only included those in our sample that had completed both questionnaires, thus our working sample consisted of 474 consumers. Other than restricting the study to fashion clothing m-commerce apps, respondents were not restricted to specific brands. In order to analyse the data, we will use Structural Equation Modelling (SEM) using AMOS Graphics and Multi-group analysis. The benefit of structural equation modelling is that the hypothesised model can be tested simultaneously in an analysis of the whole model of variables.

RESULTS AND DISCUSSION

We find that following the retention of an m-commerce mobile application for a sustained period of time (e.g. 12 months), customers have more positive attitudes towards the app and subsequently positive attitudes towards the brand, increased loyalty and higher purchase intentions and use the app more regularly than following retention of the app for only one month. Thus, as time passes and following continued usage, customers develop more favourable attitudes and behaviours towards m-commerce applications. Therefore, the findings assert the importance of mobile app retention on influencing important attitudinal and behavioural outcomes. Importantly, we find that positively perceived m-commerce applications not only serve as a channel of service delivery and distribution as previously outlined but as a strategy for developing positive attitudes towards the brand and encouraging customer commitment and untimely loyalty towards the brand.

Bellman et al (2011) conceptualised that the increase in the popularity of branded mobile apps as a marketing device is due to their high level of consumer engagement and the presumable positive impact it has on consumer attitudes towards the brand. Drawing from the study's results, we find that customers attitudes towards the app *over time* has an effect on a customer's perceptions towards the brand. Thus, in line Song and Zinkhan (2008), research on desktop websites asserts consumer interactivity with technology has a positive impact on the brand, we have extended this to m-commerce applications. Mobile applications have been outlined as a useful channel for distribution of products, service delivery and communications, however, to our knowledge this research is the first to illustrate the impact of mobile app technology on customer's attitudes towards the brand. Thus, positive attitudes towards the m-commerce application lead to positive perceptions towards the brand.

Moreover, following Kim and Adler's (2011) conceptualisation, the results assert that customers' positive attitudes towards an m-commerce application has a positive effect on loyalty towards the brand, over time, the effect becomes stronger. Thus, through the positive perceptions and retention of an m-commerce application, brands can benefit from customer's becoming loyal to the brand. Therefore, in line with Ozturk et al (2016), the commitment to retain a mobile application does indicate loyalty towards the brand. Previous research (Evanschitzky et al, 2012) suggests that customer commitment is crucial to developing loyalty. Therefore, m-commerce mobile applications provide brands a 'tool' to encourage customer commitment and in turn loyalty towards the brand.

Despite the interest in m-commerce applications, few studies specifically examined the financial outcomes of such technology. Kim et al (2015) suggest that a branded mobile app has a positive effect on in-store purchase intentions. Extending upon this, in contrast, this research finds that after initial adoption of an m-commerce app for one month, customer attitudes towards the app have no effect on purchase intentions through the m-commerce application. However, following retention of the m-commerce application for 12 months, positive attitudes towards the m-commerce application increases intentions to purchase through the app. Thus, while the Theory of Planed Behaviour (TPB) asserts that consumer attitudes influence purchase intentions, drawing on the above discussion, we find that customer attitudes towards the app only influence purchase intention following a sustained period of app retention. Furthermore, in line with previous research (Bagozzi et al, 1979) the results outline

relationships, which become stronger following sustained retention of the m-commerce app, between positive perceptions of the brand as well as loyalty towards the brand on purchase intentions.

CONCLUSIONS AND IMPLICATIONS FOR THEORY AND PRACTICE

Our research asserts the importance of mobile app retention. Previous research has outlined the variables capable of influencing app retention. This research highlights to managers the importance of a positively perceived, high quality m-commerce application in influencing customers' attitudes and loyalty towards the brand, as well as purchase intentions. Thus, we illustrate the return on investing in an m-commerce application. While positive results are not immediate, consumers become more loyal, have positive attitudes towards the brand and increase purchase intention over time.

Following the results, while benefiting from the channel as a new form of service delivery and distribution, brands can utilise m-commerce applications as a strategy for developing customer loyalty. Numerous brands employ varying strategies to encourage customer loyalty (Evanschitzky et al, 2012) with large financial commitment. Over time, brands benefit from more exposure due to an increase in customer use. Positive attitudes towards the mobile application not only increases customer loyalty, such loyalty positively increases customers' purchase intentions through the application, which becomes stronger over time.

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