

Acceptance of Mobile Apps Among Bottom of Pyramid Customers of Urban Areas

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Abstract

India houses the world's leading and most rapidly increasing digital bases, with 560 million internet subscribers, next to China. The emergence of low-cost smartphones and falling internet rates make mobile apps more accessible to people in the lower-income groups. These apps are not only downloaded for entertainment and information, but they also appear to be increasing the income base. The thriving mobile app economy has unlocked opportunities for thousands of low-income customers for income enhancement. Many studies have been conducted to determine the acceptance of mobile phones amongst the bottom of pyramid customers, but acceptance of mobile applications is still in its infancy stage. The paper attempted to understand the acceptance of mobile-based applications among the bottom of pyramid customers in urban areas using the technology acceptance model. Primary data were collected from 296 urban bottom of pyramid customers. Following this analysis, the researchers observed that if the bottom of pyramid customers perceived the mobile application's usefulness for themselves, it resulted in a significant positive effect on attitude towards usage, which will lead to acceptance. The study also presented breakthrough managerial implications for practitioners working on BOP.

Keywords : bottom of the pyramid, mobile applications, technology acceptance model

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India houses the world's leading and most rapidly increasing digital bases, with 560 million internet subscribers, after China. Indian cellular data customers consume 8.3 gigabits (GB) of data monthly on average, compared with 5.5 GB for cellular data customers in China and somewhere in the range of 8.0 to 8.5 GB in South Korea (Kaka et al., 2019). Indians had 1.15 billion mobile phone subscriptions in 2021, and in the first quarter of 2022, the total combined Apple App Store and Google Play app downloads amounted to an estimated 36.8 billion (Ceci, 2022). Availability of low-priced smartphones and dropping internet rates help the penetration of mobile apps in lower strata of income groups (Handa & Ahuja, 2021), where these applications not only have been downloaded for entertainment and information, but also to increase the income base. Digitization efforts made by the government also fuelled the penetration and development of mobile applications for different segments. The thriving mobile app economy has unlocked opportunities for thousands of low-income customers for income enhancement through mobile apps.

With the help of mobile applications, the Indian government has also tried to reach citizens in deprived segments and bring the bottom layer of the pyramid under the coverage of digital benefits (Raj & Aithal, 2018). The government has launched mobile applications in various fields: health, farming, banking, education,

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employment, etc. This has also boosted private players to untap the potential of the poor with the help of new tools, especially mobile applications.

Many studies in the past explored the rural BOP and investigated different issues about the segment, but urban BOP is still in its nascent stage of development and research (Hammond et al., 2007). Emerging economies such as India, China, Indonesia, and Brazil will represent 82% of the world population by the year 2050, and urban slums will house most of them (Duarte et al., 2019). The issue is likewise similar in India. Trends indicate that 800 million poor people would live in urban areas (Chopra et al., 2022), which includes impoverished people with substantial incomes due to the high cost of urban living. As a result, urban BOP has higher brand awareness and employment than their rural counterparts; whereas, rural BOP is heterogeneous, more distant, desperately poor, and largely illiterate (Mathur et al., 2018). Compared to rural BOP, urban BOP is more viable and sustainable (Sharma et al., 2019); and we chose to evaluate their mobile app acceptance.

App providers, developers, and customers in BOP can all benefit from mobile apps. Even though the BOP sector has limited income and resources (Venugopal & Viswanathan, 2017), they prefer products that meet their higher-order requirements, particularly those related to education and employment (Subrahmanyam & Tomas Gomez - Arias, 2008). In a city setting, low-income people are exposed to middle-class consumption habits and technologically enabled services and imitate them (Tavera-Mesías et al., 2022). As a result, there is a high likelihood of acceptance. This study is unique in its contribution to the theory since it is meant to explain the acceptance of mobile applications in urban areas by adopting the TAM model. It was motivated by a research gap that was observed. As a result, the research topic addressed in this work is:

✎ **Research Question :** What factors affect the intention to adopt mobile applications for the BOP segment in urban areas?

Research has been conducted in mobile applications focussing on the urban bottom of the pyramid. Omnipresent technology and improved digital capabilities have radically increased the pace of adoption. The study makes multifarious contributions to the urban bottom of pyramid literature and towards a more nuanced understanding of the acceptance of mobile applications.

Literature Review and Hypotheses Development

The concept of the bottom of the pyramid was first introduced to the world by Prahalad and Hart (2002). Their paper, "Fortune at the Bottom of Pyramid," highlighted BOP as low-income markets representing enormous opportunities for MNCs. Initially, many researchers concentrated on and proposed strategies related to BOP without any segmentation. Gradually the concept of urban BOP was researched and targeted in the urban areas in the emerging markets that house a growing proportion of the world's impoverished consumers (Ireland, 2008). It was further segmented into BOP markets as conflict zones, and deep rural and urban slums (Anderson et al., 2010).

The rapid penetration of the Internet and mobile phones in India (Abdin, 2020) has opened doors for many businesses in different segments. While the upper strata of society quickly adapted to technology and related changes, the hindrance was observed in the lower strata, namely the bottom of pyramid markets.

Research has been conducted to find acceptance of mobile phones amongst the bottom of pyramid customers. Various theories and models have been attempted to elucidate how customers adopt technology, including the diffusion of innovation theory (Robertson, 1967; Rogers et al., 2014), the theory of reasoned action, and the technology acceptance model (Davis, 1989). Amongst the models, the technology acceptance model has been widely used by researchers to study the acceptance of technology related to innovations like telemedicine technology (Hu et al., 1999), e-learning (Roca et al., 2006), e-shopping acceptance (Ha & Stoel, 2009), YouTube (Lee & Lehto, 2013), mobile banking acceptance (Muñoz-Leiva et al., 2017; Nagdev & Rajesh, 2018), and mobile

wallets (Reddy & Rao, 2019). Researchers have also used the technology acceptance model to see specific technology-based acceptance among the bottom of pyramid markets which includes financial service acceptance (Wentzel et al., 2013), mobile banking acceptance (Purohit & Arora, 2021; Tambotoh et al., 2015), value-added services and customer care services (Khuntia et al., 2021), mobile commerce acceptance (Pipitwanichakarn & Wongtada, 2019), which are specifically related to economic value creation, and social value creation (Tabeck & Singh, 2019).

The customers of urban BOP have unique characteristics and needs (Srivastava, 2019). Regardless of the growth of mobile application adoption, there is a scarcity of research on the acceptance of mobile applications amongst the bottom of pyramid consumers in developing countries.

Technology acceptance depends upon multiple factors (Baishya & Samalia, 2020). Many researchers have adopted TAM to validate the factors responsible for the acceptance of mobile applications amongst urban areas' bottom of pyramid customers. TAM has many advantages over TRA & TPB; TAM is a statistically reliable model and produces quality output for technology acceptance (Edmunds et al., 2012). The technology acceptance model has been adopted for the present study. As argued, an independent approach is required to understand the acceptance of technology, as there is a scarcity of literature to add to the knowledge.

Perceived Usefulness

In this study, perceived usefulness (Davis, 1989; Rao & Troshani, 2007) is defined as the ease with which mobile applications can be integrated into daily activities, such as time-saving while executing any job-related task. Hence, perceived usefulness can positively and significantly contribute to the acceptance of mobile-based applications. The following is the first hypothesis that will be evaluated in this study:

➤ **H1:** Perceived usefulness (PU) positively influences attitude towards the usage of mobile applications.

Ease of Use

Karahanna et al. (1999), citing Davis (1989), defined ease of use as the ease with which one can communicate with technology. This refers to how readily and fast mobile apps can be used by users in the current study context. Many studies have explained that perceived ease of use positively impacts attitude towards the usage of mobile applications (Aloudat et al., 2014). Accordingly, the second hypothesis has been proposed:

➤ **H2:** Ease of use (EOU) positively influences attitude towards usage of mobile applications.

Facilitating Conditions

Facilitating conditions means users have the necessary resources and knowledge to use mobile applications, including internet accessibility (Alwahaishi & Snásel, 2013). If users have interrupted internet (Zhou, 2011), it will affect their ease of use and perceived usefulness while using mobile applications. Hence hypotheses 3 & 4 have been set about this issue.

➤ **H3:** Facilitating conditions (FC) positively influence the ease of use of mobile applications.

➤ **H4:** Ease of use (EOU) positively influences the perceived usefulness (PU) of mobile applications.

Job Relevance

Venkatesh and Davis (2000) defined job relevance as an individual's perception regarding the degree to which the

target system applies to their job. Users of mobile apps have varying expectations of the outcomes they expect from the apps they use (Kim, 2008). If people cannot relate improvements in their job performance to specific people, adoption will be minimal, and perceived usefulness will suffer (Knoesen & Seymour, 2019). If the users find the app relevant to their job, their perceived usefulness and motivation to use it also increase (Elshafey et al., 2020). Thus, it is logical to hypothesize that :

✎ **H5 :** Job relevance (JR) positively influences the perceived usefulness (PU) of mobile applications.

Attitude Towards Usage

Attitude towards usage is described as a user's evaluative judgment of target behavior on some dimension or a consumer's liking or disliking of (Rahman et al., 2018) mobile apps. The attitude towards usage has been influenced by knowledge, customer segment, or norms (Jebarajakirthy & Lobo, 2015). The main purpose of current research is to measure attitudes towards usage.

✎ **H6 :** Attitude towards usage (ATU) positively influences the behavioral intention of mobile applications.

Methodology

The population used in the study are the bottom of pyramid consumers using any mobile-based technology application, and the geographical segment was the bottom of the pyramid segment of NCR. The primary data were collected from the users of mobile apps in the BOP segment through one-to-one interaction using a survey method from January – March (2020). A non-probabilistic snowball sampling technique was used to identify the respondents, and respondents were asked to help by referring to people of similar characteristics. The data were collected from 296 respondents.

The measurement items for the questionnaire have been derived from existing literature, and researchers have conducted many studies to validate the TAM constructs (Hsu et al., 2011). The questionnaire consisted of a total of 37 items, out of which nine questions were related to the demographics of respondents. Twenty-eight items (Table 1) were in the form of a statement on which a 5-point Likert scale was used. The participants were asked to give their responses based on the agreement for items 1 to 27 on a Likert scale where values denote (1= *strongly disagree* and 5 = *strongly agree*). The variable, namely EU, PU, ATU, JR, BT, and FC, were considered, and their description is shown in Table 1.

Table 1. Variables and Their Measurement

Construct	Measurement Items	Description
Ease of Use	EU1	I feel that using an app would be easy for me.
	EU2	I feel that my interaction with mobile apps is clear and understandable.
	EU3	I feel it would be easy to become skillful at using mobile apps.
	EU4	I find apps to be flexible to interact with.
	EU5	The use of mobile apps would be easy for me.
	EU6	Learning to operate mobile apps would be easy for me.
	EU7	I feel that my ability to use apps is limited by my lack of experience.
	EU8	It would be easy for me to use mobile apps.
Perceived Usefulness	PU1	Using mobile apps in my work would enable me to accomplish the task more quickly.

	<i>PU2</i>	Using mobile apps would improve my business.
	<i>PU3</i>	Using mobile apps in my business would increase my productivity.
	<i>PU4</i>	Using mobile apps would make it easier to do my work.
	<i>PU5</i>	I find mobile apps useful in my work.
Attitude Towards Usage	<i>ATU1</i>	I think that the use of mobile applications is a good idea.
	<i>ATU2</i>	I think that use of mobile apps is a positive idea.
	<i>ATU3</i>	I like the idea of using mobile applications.
	<i>ATU4</i>	I believe the use of apps is a wise idea.
Job Relevance	<i>JR1</i>	The usage of apps is excessive in my job.
	<i>JR2</i>	I plan to use similar kinds of apps in the future.
	<i>JR3</i>	I recommend to others in my peer group to use mobile apps.
Behavioral Intention	<i>BT1</i>	In my job, the usage of apps is relevant.
	<i>BT2</i>	In my job, the use of apps is important.
	<i>BT3</i>	My work has increased multi-fold after using mobile apps.
	<i>BT4</i>	My income has increased after using mobile apps.
Facilitating Conditions	<i>FC1</i>	I have the necessary resources, that is, internet on my mobile phone, to use the app.
	<i>FC2</i>	I have the necessary knowledge to use a mobile application.
	<i>FC3</i>	The uses of apps are like other mobile systems.
	<i>FC4</i>	A specific person from the company is available for assistance in case of any technical problem.

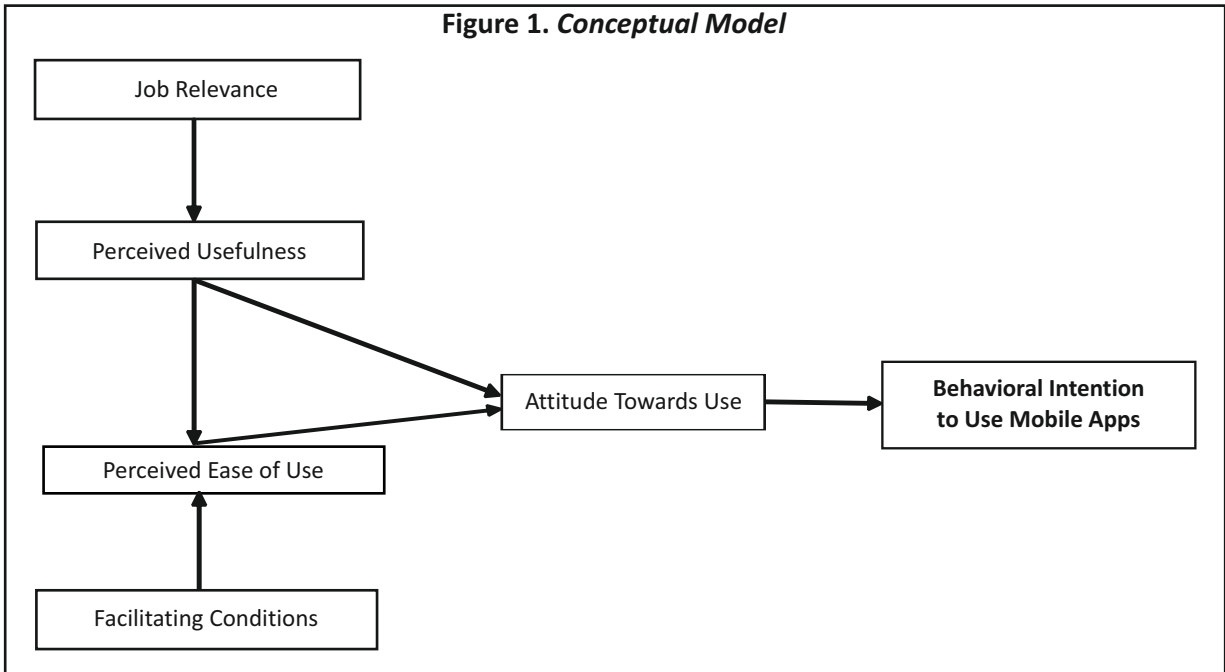
As the official language of India is Hindi, the questionnaire was also translated into Hindi. The questionnaire was vetted by panel experts specializing in digital and bottom-of-pyramid marketing. A pilot was administered to 20 mobile app users from the bottom of the pyramid, and most of them could understand the questions and respond. The current research applied structural equation modeling using AMOS 22.0.

To check the reliability, Cronbach's alpha value was tested for all constructs. The Cronbach's alpha value of more than 0.6 is considered good (Malhotra et al., 2006). The Cronbach's alpha score of the items is 0.948, which reflects a very high inter-correlation among the items.

Furthermore, convergent and discriminant validity of individual constructs was checked, and the same is satisfactory. The Cronbach's alpha value of more than 0.70 for all the measures used in the present work supports the reliability and internal consistency of the scale items.

Conceptual Model

In their efforts to authenticate the acceptance of different technologies at the bottom of the pyramid, researchers have considered many theories and models, such as TAM, extended TAM, and UTUAT. A careful investigation of most of the theories used for the adoption of technology among the bottom of pyramid customers has been done by researchers. Thus, TAM was adopted in the present study as a theoretical base for a conceptual framework. Figure 1 shows three constructs, as Davis (1989) suggested, in the current research. In addition, two other constructs, job relevance and facilitating conditions, are added to the model. The construct, facilitating conditions, has not been widely investigated by researchers in the context of technology adoption because, initially, this factor was developed and examined for the organizational user's technology adoption (Hussain et al., 2019). Past studies have not used FC at the bottom of the pyramid, but the present study emphasizes FC as a vital construct since it includes necessary resources like the internet on the phone and knowledge to use the application.



Analysis and Results

Responses were collected from 296 respondents using mobile applications. Out of 296 respondents, 71.3% were males, while 28.7% were females. Maximum respondents were from the INR 5,000 – 10,000 income group (45.3%), followed by those who were in the INR 10,000 – 15,000 income group (31.4%), and then the INR 15,000 – 20,000 income group (14.5%). Only 8.8% of the respondents were from the INR 3,000 – 5,000 income group category (refer to Table 2).

Table 2. Descriptive Analysis of the Study Sample

Characteristics	Distribution	Frequency	Percentage
Gender	Male	211	71.3
	Female	85	28.7
Age	18 – 25 years	73	24.7
	25 – 35 years	130	43.9
	35 – 45 years	76	25.7
	45 – 55 years	17	5.7
	55 – 65 years	0	0.0
Income Group (in INR)	3,000 – 5,000	26	8.8
	5,000 – 10,000	134	45.3
	10,000 – 15,000	93	31.4
	15,000 – 25,000	43	14.5
Language of Mobile Application	Hindi	234	79.1
	English	60	20.3

Education	Any other	2	0.7
	Can Read	19	6.4
	Can Read & Write	48	16.2
	High School	117	39.5
	12th	88	29.7
Name of Mobile Application adopted	Graduate	24	8.1
	Ola, Uber	158	53.4
	Paytm, Mobiwik	84	28.4
	Urban Clap	33	11.1
	Other	21	7.1

Respondents ranging in age from 25 – 35 years were in the majority (43.9%), followed by the age group of 35 – 45 years with 24.7%. The age group 45 – 55 years had the least number, with 5.7%, while 24.7% of the respondents were from the age bracket of 18 – 25 years. While 79.1% of the respondents used different mobile applications in Hindi, only 60 respondents (20.3%) used them in English. We also found two respondents (0.7%) using mobile applications in any other language.

We also observed that 31.1% of the respondents were from Delhi, 45.3% were from Uttar Pradesh, 10.8% of the respondents said their native state was Haryana, and the rest, 12.85%, responded with others as their native state, including Bihar, Madhya Pradesh, and some southern states.

Most respondents had attained their education till class 10th (39.5%), followed by Class 12 (29.7%). Only 8.1% of the respondents had completed their graduation; 6.4% of the respondents were in the category of can read and operate their apps with the help of someone, while 16.2% of the respondents were in the category of can read and write.

There has been increased insistence on CMV related to data collected through surveys (Okumus et al., 2018); hence, researchers also considered CMV, which threatens the validity of the findings on the linkage results between constructs (Reio, 2010; Williams & Brown, 1994). CMV tends to be even more relevant if data on independent and dependent variables are collected from the same source (Podsakoff et al., 2003). Harman's one-factor test was used to examine the common method variance, and values showed that the first factor explained variance is much lower than 50%; thus, the common method variance is not a concern.

The model was used to inspect the convergent validity and composite reliability by considering the AVE and maximum shared square variance (the values are listed in Table 3). The values of AVE and CR are higher than the threshold value of 0.5 & 0.7, respectively (Hair et al., 2013).

Table 3. Construct Reliability and Validity

	Alpha	CR	AVE	MSV
<i>EU</i>	0.91	0.92	0.79	0.51
<i>PU</i>	0.81	0.83	0.78	0.54
<i>ATU</i>	0.86	0.90	0.75	0.71
<i>JR</i>	0.91	0.92	0.78	0.70
<i>BT</i>	0.93	0.93	0.82	0.72
<i>FC</i>	0.79	0.87	0.77	0.64

Table 4. Discriminant Validity

	<i>EU</i>	<i>PU</i>	<i>ATU</i>	<i>JR</i>	<i>BT</i>	<i>FC</i>
<i>EU</i>	0.815					
<i>PU</i>	0.111	0.889				
<i>ATU</i>	0.471	0.11	0.888			
<i>JR</i>	0.198	0.093	0.378	0.900		
<i>BT</i>	0.328	0.008	0.309	0.157	0.749	
<i>FC</i>	-0.131	0.346	-0.104	0.071	0.070	0.829

Table 5. Full Collinearity VIFs

<i>EU</i>	<i>PU</i>	<i>ATU</i>	<i>JR</i>	<i>BT</i>	<i>FC</i>
1.392	1.191	1.511	1.186	1.194	1.226

Table 4 shows the procedure of discriminant validity, where the square root of AVE values (diagonal values) for each construct is greater than its correlation coefficients with other constructs, suggesting all conditions are met for the discriminant validity (Fornell & Larcker, 1981).

Full collinearity variance inflation factors (VIFs) (Table 5) have been used to determine the collinearity. There are multiple accepted tests for multicollinearity in the literature. Hair et al. (1998) stated that VIFs should be lower than 10. VIFs in the study ranged from 1.226 to 1.194 for all the variables.

Fitness of the Model

The goodness of the fit for the model is checked through multiple indices (refer to Table 6), including chi-square (with a degree of freedom), GFI (goodness of fit indices), CFI (comparative fit index), NFI (normed fit index),

Table 6. Fit Indices for the Proposed Model

Fit Indices	Recommended Value	Hypothesized Structural Value
Absolute Fit Measures		
Chi-square	not significant at $p < 0.05$	1110.611 $Df = 333$ $p = .000$
Relative chi-square	Between 2 to 5 (Wheaton et al.,1977)	3.335
RMSEA	.08 to .10 shows mediocre model (MacCallum et al.,1996)	.089
GFI	1 is a perfect fit. Goal is > 0.9	.804
Incremental Fit Measures		
CFI	$\geq .95$ (Hu & Bentler, 1999)	.904
IFI	$> = .90$ (Bentler,1990)	.904
NFI	$> = .95$ good, $.90$ to $.95$ acceptable, $> .90$ (Bentler,1990)	.869
TLI	$> = .95$ Or $> = .90$ (Marsh et al., 2004)	.891
Parsimonious Fit Measurement		
PNFI	$> = .50$ (Mulaik et al.,1989)	.765

Table 7. Hypotheses Testing

Hypothesis	Path	Regression Weight	Result
H1 : Perceived usefulness (PU) positively influences the attitude towards usage of mobile applications.	$PU \rightarrow ATU$	0.69**	Significant
H2 : Ease of use (EOU) positively influences the attitude towards usage of mobile applications.	$EOU \rightarrow ATU$	0.53**	Significant
H3 : Facilitating conditions (FC) positively influence the ease of use of mobile applications.	$FC \rightarrow EOU$	0.44**	Significant
H4 : Ease of use (EOU) positively influences the perceived usefulness (PU) of mobile applications.	$EOU \rightarrow PU$	0.43**	Significant
H5 : Job relevance (JR) positively influences the perceived usefulness (PU) of mobile applications.	$JR \rightarrow PU$	0.49**	Significant
H6 : Attitude towards usage (ATU) positively influences the behavioural intention of mobile applications.	$ATU \rightarrow BI$	0.81**	Significant

RMSEA (root mean square error of approximation), and TLI (Tucker – Lewis index). The fit indices values of the structural model are $CMIN/DF = 3.35$, $GFI = 0.80$, $AGFI = 0.761$, $NFI = 0.869$, $CFI = 0.904$, and $RMSEA = 0.089$, which indicates the model is loosely/mediate fit (MacCallum et al., 1996).

We proposed six hypotheses, out of which all are tested by structural equation modeling results. The results depicted in Table 7 show that perceived usefulness positively influences the ATU of mobile applications ($\beta = .60$, $p < .001$). It indicates that if the bottom of the pyramid customers will perceive the mobile applications as useful for themselves, it will result in a significant positive effect on attitude towards usage, which will lead to acceptance.

The second variable, ease of use (EU), also has a significant impact on the ATU of mobile applications ($\beta = .53$, $p < .001$), which indicates that mobile applications need to have a simple user interface, which will lead toward attitude toward usage. The study findings regarding all technology acceptance model constructs have been consistent with previous research; one new relationship has been identified through SEM, which is between job relevance and ease of use ($\beta = .67$, $p < .001$).

Four exogenous variables (JR, PU, EOU, and FC) and two endogenous variables (ATU, BI) are tested in the model. Four exogenous variables are observed as significant determinants of the endogenous variables. The endogenous variable, ATU, is found to be significantly determined by two variables, PU ($\beta = .69$) ($p < .001$) and EOU ($\beta = .53$) ($p < .001$), resulting in an R^2 value of 0.81, which indicates that PU and EOU attribute for 81% of the variance in ATU. Likewise, ease of use (EOU) is significantly determined by facilitating conditions (FC) ($\beta = .44$, $p < .001$). BI is significantly determined by attitude towards usage.

Implications

Theoretical Implications

While there have been countless studies on BOP, few have focused on the relatively new and underdeveloped urban BOP area. The present study thus differentiates the existing literature by addressing the urban BOP for the acceptance of mobile apps. As there are very rare and few quantitative studies available, the study attempts to fill the void by providing a quantitative analysis using 296 data points in urban BOP. The study also finds the positive

effect of perceived usefulness on attitude towards usage, which appears to be consistent with earlier research (Pipitwanichakarn & Wongtada, 2019). TAM has a high prediction potential, which remains valid for urban BOP.

Managerial Implications

Several managerial implications have been uncovered and highlighted because of the research. The findings have significant implications for developers and service providers of mobile apps. Knowing that fortune awaits those who reach the bottom of the pyramid, mobile app developers should concentrate on seizing opportunities and fully satisfying the market demands. To run a mobile application, the service provider should consider facilitating conditions since the study shows that the facilitating conditions substantially impact the ease of use of mobile applications. This signifies that the endeavors required to use the application should be lessened to accelerate the pace of adoption. Although the evidence may be prevalent and common, service providers need to make special efforts for the urban bottom of pyramid markets, as this segment is less exposed to modern technology than their other urban counterparts. Therefore, managers collaborating with app developers must pay extra attention to facilitating conditions and easy-to-use features.

Another implication of the current study is for strategy makers. The fact that mobile applications have the potential related to job relevance, and many of the respondents of our study adopted mobile apps due to their job relevance; hence, the policymakers need to design the policies accordingly. The present research has established that attitude towards usage positively influences behavioral intention of utilizing mobile apps. Therefore, strategy makers must generate consciousness about the advantages of using mobile apps in the urban BOP segment.

Conclusion

The study aims to see how well bottom-of-the-pyramid customers accept innovation. We analyzed and studied relevant literature in the field and identified the gaps. Through SEM, a novel association has been discovered between job relevance and ease of use, concluding that BOP customers would like to embrace mobile applications that are relevant to their occupations and are simple to use. The study also observes that ease of use is significantly determined by facilitating conditions, internet speed, and support provided by mobile application providers. These factors also play a significant role in the acceptance of mobile applications. Interestingly, these customers adopted the applications and acted as opinion leaders, spreading the innovation throughout the BOP.

Limitations of the Study and Scope for Further Research

However, it should be noted that the respondents in this study were urban bottom-of-pyramid users. It may be possible that these findings may not hold for other geographical regions, which have less experience with mobile-based applications and are technologically conservative. Studies focusing on other geographical regions may prove revealing in the field of mobile application acceptance. The present research has only considered the acceptance of mobile apps. Further works may be replicated in different technology-related acceptance among the bottom of pyramid customers. The proposed research model did not use any moderate variables; hence, researchers are encouraged to use moderate variables and integrate more variables to boost the predictive power of the model.

Authors' Contribution

Dr. Pooja Sehgal Tabeck conceived the idea and developed qualitative and quantitative design to undertake the

empirical study and extracted the research papers with high reputations, filtered these based on keywords, and generated concepts and codes relevant to the study design. Dr. Anurupa B. Singh verified the analytical methods, and Dr. Pooja Sehgal Tabeck wrote the manuscript.

Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.

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