Application of UTAUT Model to Understand the Purchase Intentions in Sayurbox Apps During The COVID-19 Pandemic

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ABSTRACT

The COVID-19 pandemic has an impact not only on people's health but also on their lifestyle and the way they behave. It also has a profound impact on consumers from their product choices to the way they shop. This change in the way of shopping requires business people to adapt. The retail sector, which does most of its business offline, is certainly very disadvantaged by this pandemic. On the other hand for digital businesses, pandemic has its own advantages because of government rules that require people to implement social distancing. Sayurbox is a company that is in these two sectors, namely retail and digital. Sayurbox is a vegetable selling company using a digital application. This study wants to analyze the effect of performance expectancy, effort expectancy and social influence of the Sayurbox application on their purchase intentions. This research was conducted quantitatively with the number of respondents being 100 Sayurbox consumers in Bekasi using Partial Least Square (PLS) analysis. The results of this study prove that performance expectancy and effort expectancy have a positive effect on purchase intentions, while social influence has no effect on consumer purchase intentions in Bekasi.

INTRODUCTION

The COVID-19 pandemic is forcing everyone to change their life behavior from small things such as waking up, working, shopping, and doing other daily activities. This change in behavior also forces the way the world works to change as well, where in the past we had to get up early, come to the office or school, go shopping to the
store, socialize by meeting face to face and all these things can now be done remotely or remotely. Humans always have a desire to live more practical, easier, more efficient. This is what makes us always growing, always trying to create new technology, changing our offline lifestyle to online. (Hanifah & Rahadi, 2020).

This change in human lifestyle has certainly changed the way humans do business, it changes the way they work and shop. For example, people now are more likely to do remote work instead working from the office. People prefer to order food through restaurants rather than shopping for daily necessities at the market and cooking them at home in anticipation of the spread of the virus. Data taken from the Momentum Works report shows that the growth of food delivery applications grew from 91% from 2018 to 2019 and grew by 183% from 2019 to 2020 with Indonesia accounting for the largest percentage in Southeast Asia followed by Thailand and Singapore. The data can be interpreted that there is a change in habits that occur in consumer behavior.

Changes in consumer behavior during the COVID-19 pandemic who prefer to order food through delivery services. Meanwhile, the turnover of market and retail traders weakened. There was a decrease in the average turnover of market traders by 39%, and a decrease in the number of market traders by 29%. Likewise, retail business actors whose turnover fell by 90% followed by supply of goods that fell 50% (Ministry of Trade Press Release. 2020). On the other hand, users of online delivery applications and e-commerce have actually grown.

Sayurbox is one of the startups engaged in the digital and agricultural sectors. The company is trying to digitize agriculture by working with farmers to sell their vegetables on an online app. With the Sayurbox, the supply chain that previously had to pass through several points before reaching the consumer, can now be cut from the farmer and can be directly received by the consumer through the Sayurbox application. So that retailers and market traders are affected by this company.

From the data obtained, Sayurbox should have a large enough potential for consumers. Researchers will adopt the UTAUT (Unified Theory of Acceptance and Use of Technology) Model approach in this study to determine the purchase intention of Sayurbox. The UTAUT model is a refinement of the TAM (Technology Acceptance Model) which is used to measure technology acceptance (Handayani & Sudiana, 2017). Compared to the TAM and TBP models, the UTAUT model has a more integrative and applicable framework when used today. This study proposes the basic variables of the UTAUT model, namely performance expectancy, effort expectancy, and social influence to prove their effect on the purchase intention of the Sayurbox application.

This method of course has often been used in previous studies, but the author tries to conduct research using different subjects. Previous research such as that conducted by Dewi, et al., (2019) has a more specific approach by comparing intentions between male and female consumers. On the other hand, the research of San Martín & Herrero, (2012) examines how the UTAUT model affects rural tourism online ticket purchase intentions. In contrast to the two studies above, this study brings Covid-19 variable to the table, so that it will be very different from the two studies above, first in terms of community behavior in the midst of a pandemic, both economic conditions in the midst of a pandemic will also greatly affect the results of this study.

LITERATURE REVIEW

Performance Expectancy

Performance expectancy measures how much confidence a person has in using a particular system to improve their performance (Venkatesh, et al., 2003). Performance expectancy suggests that the costs and benefits of using technology need to be evaluated (Perea Y Monsuwé et al., 2004). If the benefits of technology are greater
than the costs, the use value is higher and the purchase intention will also be positive (Celik, 2016).

**Effort Expectancy**

Effort expectancy describes how much effort is required by the user to run a system. Unlike the previous model in the UTAUT model, performance expectancy functions as an external motivational factor that represents the results of using technology, while effort expectancy functions as a process that can facilitate the results (Karahanna et al., 2006). Several studies have shown that business behavior in learning technology and using it directly influences purchase intention, especially when someone is in the exploratory period in using the technology (Venkatesh; Viswanath & Davis; Fred D., 2000).

**Social Influence**

Social influence can be defined as a person's views or opinions that can be used to influence the extent to which an individual believes in using a new technology (Venkatesh et al., 2003). Social Influence has a conceptually similar picture and illustrates normative pressure due to the opinions or views of social groups that influence another individual about the technology he uses (Venkatesh et al., 2012). Social influence has an influence on a person's behavior with three events, namely compliance, identification and internalization. Identification and internalization are related to how to change individual beliefs or arguably make an individual change his social status to be higher. While compliance causes an individual to change his intention due to social pressure, so that an individual tends to obey social influence (Venkatesh et al., 2003).

**Purchase Intention**

Purchase intention is part of the process of a consumer to make a purchase decision. If the purchase decision is the final part of the consumer journey where consumers state to choose the brand or product of their choice, before entering this stage, consumers will first evaluate the alternative products that will be their consideration (Kotler and Keller, 2015). Previously in the evaluation stage, consumers will have a preference for the brand they have chosen and have formed a purchase intention from the brand that they really want to buy.

**RESEARCH METHOD**

The analytical method used in this study is Partial Least Square using the SMART PLS research tool with a total of 100 respondents who live in Bekasi City. The questionnaires were distributed online using a Likert scale where (1 = strongly disagree and 5 = strongly agree). Respondents in this study are Sayurbox consumers who have made purchases on the Sayurbox app so that the data processed in this study is primary data. This research is only measured quantitatively by measuring the validity and reliability of the data.

Although there are many variables from the UTAUT model, this study only uses three core variables from the UTAUT model. These variables are performance expectancy, effort expectancy, social influence. The following is a research model that will be carried out by researchers.

![Research Model](image-url)

From the research model above, the following hypothesis is obtained:
H1. The performance expectancy in the use of the Sayurbox app affects the online purchase intention.

H2. The effort expectancy in the use of the Sayurbox app affects the online purchase intention.

H3. The social influence regarding the use of Use of the Sayurbox app affects the online purchase intention.

RESULT AND DISCUSSION
A construct that can be said to be valid if the value is above 0.70, but the construct value from 0.50 to 0.60 can be categorized as valid or acceptable to be tested. After measuring the 3rd time, it can be ascertained that all constructs have a loading factor value > 0.5 which means that they have met the requirements to be said.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Definitions</th>
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<tbody>
<tr>
<td>Purchase Intention</td>
<td>Transactional</td>
<td>the extent to which a certain tendency to buy a product or not</td>
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<td></td>
<td>Referential</td>
<td>the extent to which a person’s tendency to provide product</td>
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<td></td>
<td></td>
<td>recommendations to those closest to him (Ferdinand, 2002)</td>
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<td></td>
<td>Preferential</td>
<td>the extent to which a product becomes the first choice at the stage</td>
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<td></td>
<td></td>
<td>of evaluating one’s alternatives (Ferdinand, 2002)</td>
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<td></td>
<td>Explorative</td>
<td>the behavior of someone who is looking for product information that he</td>
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<td></td>
<td></td>
<td>is interested in and looking for supporting information to buy the</td>
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<tr>
<td></td>
<td></td>
<td>product (Ferdinand, 2002)</td>
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<td>Performance Expectancy</td>
<td>Perceived Usefulness</td>
<td>a person’s level of belief that using a certain system will improve job</td>
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<td></td>
<td></td>
<td>performance (Davis, 1989; Davis et al., 1989)</td>
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<td></td>
<td>Extrinsic Motivation</td>
<td>the perception that doing certain things is necessary in achieving</td>
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<td></td>
<td></td>
<td>goals (Davis et al., 1992)</td>
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<td></td>
<td>Job-fit</td>
<td>an individual’s belief that using a technology can improve his job</td>
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<td></td>
<td></td>
<td>performance (Thompson et al., 1991)</td>
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<td></td>
<td>Relative Advantage</td>
<td>the perception that an innovation is better than its predecessor</td>
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<td></td>
<td>(Moore &amp; Benbasat, 1991)</td>
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<td></td>
<td>Outcome Expectation</td>
<td>a consequence of work-related behavior (Compeau &amp; Higgins, 1995)</td>
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<td>Effort Expectancy</td>
<td>Perceived Ease of Use</td>
<td>a person’s level of confidence that the system he is using is easy to</td>
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<tr>
<td></td>
<td></td>
<td>understand (Davis, 1989; Davis et al., 1989)</td>
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<tr>
<td></td>
<td>Complexity</td>
<td>a person’s level of belief that the system he is using is difficult to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>understand (Thompson et al., 1991)</td>
</tr>
<tr>
<td></td>
<td>Ease of Use</td>
<td>the extent to which using the innovation is considered difficult to use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Moore &amp; Benbasat, 1991)</td>
</tr>
<tr>
<td>Social Influence</td>
<td>Subjective Norm</td>
<td>The person’s perception that most people who are important to him</td>
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<td></td>
<td></td>
<td>think he should or should not perform the behavior in question</td>
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<td></td>
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<td>(Fishbein &amp; Ajzen, 1975)</td>
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<td></td>
<td>Social Factor</td>
<td>The individual’s internalization of the reference group’s subjective</td>
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<td></td>
<td></td>
<td>culture, and specific interpersonal agreements that the individual has</td>
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<td></td>
<td></td>
<td>made with others, in specific social situations (Thompson et al., 1991)</td>
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<td></td>
<td>Image</td>
<td>The degree to which use of an innovation is perceived to enhance one’s</td>
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<td></td>
<td></td>
<td>image or status in one’s social system (Moore &amp; Benbasat, 1991)</td>
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Table 1. Models and theories integrated in this research

Table 4. T-Statistic test results

<table>
<thead>
<tr>
<th></th>
<th>Original sample</th>
<th>T statistic (0/STDDEV)</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Expectancy →</td>
<td>Purchase Intention</td>
<td>0.317</td>
<td>5.686</td>
</tr>
<tr>
<td>Effort Expectancy →</td>
<td>Purchase Intention</td>
<td>0.688</td>
<td>10.465</td>
</tr>
<tr>
<td>Social Influence →</td>
<td>Purchase Intention</td>
<td>-0.028</td>
<td>0.490</td>
</tr>
</tbody>
</table>
Figure 3. Outer Model

Figure 5. Inner Model
The Effect of Performance Expectancy on Purchase Intention

From the hypothesis test that has been carried out, the results show that it turns out that Performance Expectancy has a big influence in increasing purchase intentions. Performance Expectancy has a big enough role so that it can be concluded that user expectations on the application in terms of increasing performance can increase purchase intention. So it can be said that the performance expectancy variable on the use of Sayurbox in the Bekasi City area can increase the buyer's intention of its users. In accordance with the path coefficient value of the performance expectancy variable of 0.317 so that it has a positive and significant relationship, so that the performance expectancy variable on purchase intention can be concluded that H1 is accepted.

The results of the study are supported by several previous studies, namely (Dewi, Murshid, 2020), (Mukminin et al, 2019), (Doan, 2020), (Putra & Kurnia, 2019), (San Martin & Herrero, 2012) stating that effort expectancy has an effect on the dependent variable is purchase intention. This study explains that the user's perception of using a system is very important in purchase intentions.

The Effect of Effort Expectancy on Purchase Intention

Based on the results of the hypothesis in this study, it shows that the effort expectancy variable has the greatest influence on purchase intention among the other two variables. Effort expectancy is the user's perception of how much effort is used to use a system. So in this case it means that Sayubox has succeeded in creating a system that is easy to use by its users where this has increased purchase intention. This can be confirmed by the path coefficient value of 0.688 which proves that the effort expectancy variable has a large contribution to the purchase intention of Sayurbox.

The results of the study are supported by several previous studies conducted by (Chayomchai, et al, 2020), (Glady & Rantung, 2020) which stated that social influence had no effect on the purchase intention variable. In this study, it can be explained that the COVID-19 crisis has made people limit social interactions. So this makes the dissemination of information to be limited especially if the information is very specific.

CONCLUSION

Conclusions

The results of the above test can be concluded that performance expectancy contributes to an increase in purchase intention. This proves that the greater the expectation regarding the increased performance of Sayurbox users in doing their work, the higher the purchase intention of the Sayurbox users. So that the researcher's hypothesis has been proven in the results of this study.

The effort expectancy variable contributes to an increase in purchase intention. This means that
the greater the expectations of Sayurbox users
to use this application easily, which are fulfilled,
the more the purchase intention of Sayurbox
consumers will also increase.

The social influence variable does not contribute
to an increase in purchase intention. So in the
study of consumer purchase intentions Sayurbox
is not influenced by social influences.

Limitations
The UTAUT model has many variables but
unfortunately this study only takes three main
variables, namely performance expectancy, effort
expectancy and social influence so that other
variables that have the potential to influence
purchase intention are not discussed in this
study.

There are only 100 respondents, so that the
questionnaire data that can be processed to
represent Bekasi City is only based on 100
respondents. The COVID-19 pandemic also made
the distribution of questionnaires only through
google forms and did not have the opportunity
to meet face-to-face with respondents. So that
respondents’ answers cannot be processed more
deeply.

Implications
The results of this study can be used to determine
strategies in management and marketing. The
method of this research is very suitable for use
at a time like this, where many technology-
based start-ups are emerging coupled with the
COVID-19 pandemic. It's pushes innovative and
creative side of the strategy to be able to give
consumers the best shopping experience which
will result in high purchase intention.

Future Research
For future research we suggest that for a larger
population, more respondents are needed, and
we also suggest that it would be better for
similar research to add qualitative side such as
conducting an interview to some respondents.
These things can greatly reduce research bias
and deepen the result of the research.

It would be great for future research to replicate
this study in different kind of business and
countries for comparative analysis. It is
important to do a research with similar model
with bigger variation of variable.

References
4CZR7U6RzUCSc1jRDznZIDdntoF4w3nrw1s9UYE.pdf
Berlianto, P. M. (2019). Faktor-faktor yang memengaruhi kepuasan dan niat membeli kembali pada
konteks e-commerce. Journal of Business and Applied Management, 12(2), 141–201
https://doi.org/10.1108/APJML-05-2015-0077
acceptance and use of online technology in Thai people during COVID-19 quarantine time.
Management Science Letters, 10(13), 3009–3016. https://doi.org/10.5267/j.msl.2020.5.024
MIS Quarterly, 19(2), 189e211.


