

TAM Model: The Concept of Intervening the Intention To Use The Gojek Application

Nursamsi Wahyu Aprianto¹, Deasy Wulandari², Hari Sukarno³

¹(Master of Management student, Jember University, Indonesia)

²(Master of Management Lecturer, Jember University, Indonesia)

³(Master of Management Lecturer, Jember University, Indonesia)

Abstract:

Background: Indonesia's startup industry in 2016 grew to be more attractive, more impactful to society, and increasingly attracting global attention, one of which was demonstrated by GoJek by becoming the first unicorn startup in Indonesia, followed by MatahariMall. Gojek as a startup pioneer in the service industry always makes changes both in terms of appearance and the system used. As one of the largest startups that has survived until now, it is necessary to carry out an assessment based on its system, it is possible to increase renewal in terms of system convenience with the Technology Acceptance Model (TAM) method.

Literatur Review: We provide a research concept using the Technology Acceptance Model (TAM) approach to assess the system's ability to influence the TAM variable by using the desire to use it as an intervening variable. In addition, we give consideration to the model that we propose with research indicators adjusting to the existing environmental conditions so that the research objectives will be in line with the wishes of the researcher.

Conceptual Models: The model uses 2 independent variables that affect 1 dependent variable using 1 intervening variable. focuses on the benefits of intervening variables as a measure of the success or failure of the research implementation.

Conclusion: Research using the TAM model has begun to increase. however, the given concept still cannot provide a big picture of the assessment of the system's influence on environmental conditions. The application of the TAM model that is adapted to the environment is expected to be able to provide an assessment of the system so that it always develops. This development is intended to maintain the system used to provide full service to consumer needs. In addition, a system that is always developed according to the wishes of consumers will have a major impact on the company.

Key Word: TAM Models; Startup; System.

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I. Introduction

Indonesia's startup industry in 2016 grew to be more attractive, more impactful to society, and increasingly attracts global attention, one of which was demonstrated by GoJek by becoming the first unicorn startup in Indonesia after receiving an investment of around 550 million dollars, followed by MatahariMall which received an investment of around 100 million dollars. This impressive amount of investment will of course have an impact on the pace of the Indonesian economy. This is supported by Syauqi (2016) in his research which concludes that startups as an application of industrial digitization play an important role in the growth of Indonesia's creative economy. Indirectly, this shows that the digital economy contributes to national economic growth, with one of the drivers being startups.

Startups in Indonesia feel competition between them, one of which is related to the development of startup applications on a regular basis. This is intended to make it easier and attract consumers to use the application. Over time, technological changes occur, Gojek as a startup pioneer in the service industry always makes changes both in terms of appearance and the system used. The reason is that many consumers suggest changes to be made and their research team sees user attitudes towards the use of the Go-Jek application. As one of the biggest startups that has survived until now, it is necessary to assess it from a system point of view using the Technology Acceptance Model (TAM) method. The need for an assessment based on the system is possible to improve renewal in terms of system convenience.

The TAM model is derived from psychological theory to explain the behavior of information technology users based on beliefs, attitudes, intentions and user behavior relationships. One of the factors that can influence is the user's perception of the usefulness and ease of use of information technology as an action in

the context of users of information technology so that the reason someone sees the benefits and ease of use makes that person's actions accept the use of information technology [1].

II. Literature Review

Since the decade of the 80s, efforts to create models to predict usage intentions for a particular system have been the focus of researchers. One of the most popular and reliable models has been proposed by Davis [2]. This is called the Technology Acceptance Model (TAM) and on average is estimated to explain 40% of the variance in usage intentions. Technology Acceptance Model (TAM) is the most widely used research model to examine the adoption of information technology. Simplicity and the ability to explain cause-and-effect relationships are the main reasons for using TAM. The purpose of TAM is to provide a general explanation of the things that determine technology acceptance and TAM is expected to be able to explain user behavior in a wide range of end users and user populations [2].

According to Loanata & Tileng [3] explaining that the Technology Acceptance Model (TAM) is a model system used to analyze and understand the factors that influence the acceptance of the use of technology. The TAM model can explain that the user's perception will determine his attitude in accepting the use of information technology. This model more clearly illustrates that acceptance of the use of information technology is influenced by ease to use, usefulness, attitude toward using, and intention to use.

Furthermore, it is explained that there are external variables that have an impact on perceived ease to use and perceived usefulness [4]. Meanwhile, according to Venkatesh mentions that the mediating effect of attitude toward use does not fully mediate the impact of perceived usefulness on technology use. People tend to show behavior even though they do not have a positive attitude (impact) on behavior [4]. Technology Acceptance Model (TAM), which has a strong element of behavior (behavioral), assumes that when someone forms a part to act, they will be free to act without restrictions. Several studies have replicated Davis's study to provide empirical evidence of the relationship between Perceived Usefulness, Perceived Ease to Use and System Use [4].

This model proposes that when users are offered to use a new system, a number of factors influence their decisions about how and when to use the system, particularly in terms of usefulness (users believe that their performance will increase by using this system), ease to use (users believe that their performance will increase by using this system), and ease of use (users believe). believe that the use of this system will free him from trouble, in the sense that the system is easy to use).

a. Perceived Ease to Use

According to Davis [2] the perception of ease of use is defined as the degree to which a person believes that the use of information technology is easy and does not require hard work from the user. Based on the research of Tyas & Darma [5], this variable can be observed with indicators of Flexibility, Easy to learn and Can Control Work.

b. Perceived Usefulness

Perception of usefulness according to Davis [2] is defined as the level of individual belief that the use of certain information technology will improve their performance. Based on the research of Tyas & Darma [5], this variable can be observed with the indicators of Speed, Effectiveness and Satisfaction.

c. Intention to Use

According to Loanata & Tileng [3], it is explained that Intention to use is a tendency of the user's intention to use the given technology. The level of use of a computer technology in a person can be predicted from the attitude of his attention to the technology, for example the desire to add supporting peripherals, motivation to keep using, and the desire to motivate other users. Based on Widiyanti's research [6] this variable is observed with indicators of Intention because it is profitable, Intention because it is easy and Reputation.

d. Actual System Usage

According to Tyas & Darma [5], Actual System Usage is a form of external response that can be measured by someone using nayta with the concept of measuring frequency and duration of technology use. Based on the research of Tyas & Darma [5] this variable is observed with the indicators of Need, Time of Use and Usage.

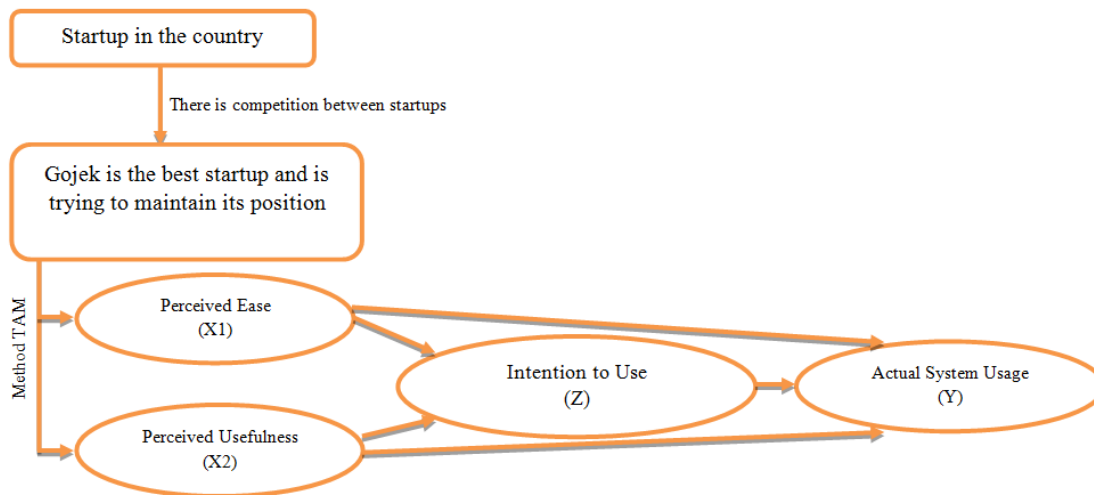
Conceptual Models

The selection of the Technology Acceptance Model (TAM) method is because this method is considered simpler and easier to implement. TAM was developed to explain computer usage behavior. This model places the attitude factor and each user's behavior with two variables, namely Perception of Ease and Perception of Benefit [5].

One method to measure the level of user behavior towards an information system is the Technology Acceptance Model (TAM) method from Furneaux in Rahayu et al. [7] where there are four variables to be able to calculate the level of acceptance of a technology, these four variables, namely Perceived Ease to Use is Perceived Ease

(X1), Perceived Usefulness is Perceived Usefulness (X2), Intention to Use is Intention to Use (Z), Actual System Usage is Actual Usage (Y).

From this thought, it can be described in the form of a simple schema that describes the conceptual framework of this research, which can be seen in Figure 10 as follows:



Hypothesis

a. Perception of Ease on Intention to Use.

Based on the conceptual framework that has been described, it can be explained that the TAM method is a model system used to analyze and understand the factors that influence the acceptance of the use of technology [3]. According to research by Nisar & Prabhakar [8] that the perception of the ease of using cellular has a significant influence on the Intention to Use of cellular devices to provide information. Furthermore, Revyathi & Tsellos [2] Intention to use e-Class is positively and significantly influenced by the Perception of Convenience factor. From the explanation above, this research makes the following hypothesis:

H₁ : Perception of convenience has a significant partial effect on the ease of using the Gojek application

b. Perception of Benefit on Intention to Use

Based on the conceptual framework that has been described, it can be explained that the TAM method is a model system used to analyze and understand the factors that influence the acceptance of the use of technology [3]. Furthermore, in Ahmed & Ward [9] that perceived usefulness has a significant effect on students' intention to use e-portfolios. From the explanation above, this research makes the following hypothesis:

H₂ : Perceived usefulness has a significant partial effect on the variable Intention to Use the Gojek Application

c. Intention to Use on Reality of Use

Based on the conceptual framework that has been described, it can be explained that the TAM method is a model system used to analyze and understand the factors that influence the acceptance of the use of technology [3]. In the research of Tarmudji, et.al [10] that the Intention to Use has a direct effect on the Reality of Use. Furthermore, in Stal & Pekosz [11] that Intention to Use Cellular has a significant effect on Reality of Use of cellular devices to provide information and Muliati [12] explains that there is an insignificant effect of Intention to Use on Reality of Use. From the explanation above, this research makes the following hypothesis:

H₃ : Intention to use affects the reality of using the Gojek application

d. Perception of Ease on Reality of Use

Based on the conceptual framework that has been described, it can be explained that the TAM method is a model system used to analyze and understand the factors that influence the acceptance of the use of technology [3]. Tyas & Darma [5] explained that the perceived ease of use did not significantly affect the actual usage. From the explanation above, this research makes the following hypothesis:

H₄ : Perception of convenience has a significant partial effect on the reality of using the Gojek application

e. Perception of Benefit on Reality of Use

Based on the conceptual framework that has been described, it can be explained that the TAM method is a model system used to analyze and understand the factors that influence the acceptance of the use of technology [3]. Tyas & Darma [5] explained that perceived usefulness did not significantly affect actual usage and was strengthened by research by Gusni et al. [13] which explains that there is no effect of perceived usefulness on the reality of direct use. From the explanation above, this study makes the following hypothesis:

H5 : Perceived usefulness has a significant partial effect on the Reality of Using the Gojek Application

III. Conclusion

Research using the TAM model has begun to increase. However, the given concept is still not able to provide a big picture of the assessment of the system's influence on environmental conditions. the concept of research using TAM there are still many obstacles as described by previous research. In addition, problems often occur due to changing research focus in the middle of the road. The application of the TAM model that is adapted to the environment is expected to be able to provide an assessment of the system so that it always develops. This development is intended to maintain the system used to provide full service to consumer needs. system changes in accordance with consumer desires can increase consumer demand for use. so that system development is needed and carried out periodically. In addition, a system that is always developed in accordance with the wishes of consumers will have a major impact on the company..

References

- [1] T. Irawati, E. Rimawati, and N. A. Pramesti, "Penggunaan Metode Technology Acceptance Model (TAM) Dalam Analisis Sistem Informasi Alista (Application Of Logistic And Supply Telkom Akses)," *is Best Account. Inf. Syst. Inf. Technol. Bus. Enterp. this is link OJS us*, vol. 4, no. 2, pp. 106–120, 2020, doi: 10.34010/aisthebest.v4i02.2257.
- [2] A. Revythi and N. Tselios, "Extension of technology acceptance model by using system usability scale to assess behavioral intention to use e-learning," *Educ. Inf. Technol.*, vol. 24, no. 4, pp. 2341–2355, 2019, doi: 10.1007/s10639-019-09869-4.
- [3] T. Loanata and K. G. Tileng, "Pengaruh Trust dan Perceived Risk pada Intention To Use Menggunakan Technology Acceptance Model (Studi Kasus Pada Situs E-Commerce Traveloka)," *JUISI (Jurnal Inform. dan Sist. Informasi)*, vol. 02, no. 01, pp. 64–73, 2016.
- [4] A. S. Soetasad, "Analisis Pengaruh Perceived Ease of Use terhadap Perceived Usefulness dan Perceived Enjoyment serta Implikasinya pada Intention to Use Platform KASKUS," Universitas Multimedia Nusantara, 2020. [Online]. Available: https://kc.umn.ac.id/15191/%0Ahttp://kc.umn.ac.id/15191/1/HALAMAN_AWAL.pdf
- [5] E. I. Tyas and E. S. Darma, "Pengaruh Perceived Usefulness, Perceived Ease of Use, Perceived Enjoyment, dan Actual Usage Terhadap Penerimaan Teknologi Informasi: Studi Empiris Pada Karyawan Bagian Akuntansi dan Keuangan Baitul Maal Wa Tamwil Wilayah Daerah Istimewa Yogyakarta," *Reviu Akunt. dan Bisnis Indones.*, vol. 1, no. 1, pp. 25–35, 2017, doi: 10.18196/rab.010103.
- [6] W. Widiyanti, "Pengaruh Kemudahan Penggunaan, Kemudahan Penggunaan dan Promosi terhadap Keputusan Penggunaan E-Wallet OVO di Depok," *Monet. - J. Akunt. dan Keuang.*, vol. 7, no. 1, pp. 54–68, 2020, doi: 10.31294/moneter.v7i1.7567.
- [7] S. Rahayu, Z. Hakim, and Masitoh, "Sistem Informasi Pengendalian Bahan Baku Material Mentah," *J. Sisfotek Glob.*, vol. 9, no. 1, pp. 57–62, 2019.
- [8] T. M. Nisar and G. Prabhakar, "Exploring the key drivers behind the adoption of mobile banking services," *J. Mark. Anal.*, vol. 5, no. 3–4, pp. 153–162, 2017, doi: 10.1057/s41270-017-0023-5.
- [9] E. Ahmed and R. Ward, "A comparison of competing technology acceptance models to explore personal, academic and professional portfolio acceptance behaviour.," *J. Comput. Educ.*, vol. 3, pp. 169–191, 2016, [Online]. Available: <https://doi.org/10.1007/s40692-016-0058-1>
- [10] N. Tarmuji, S. Ahmad, N. Abdullah, A. Nassir, and A. Idris, "Perceived Resources and Technology Acceptance Model (PRATAM): Students' Acceptance of e-Learning in Mathematics," 2019. [Online]. Available: https://doi.org/10.1007/978-981-13-0203-9_13
- [11] J. Stal and G. P. Pękosz, "No Mobile Technology Acceptance Model: An Empirical Study on Users' Acceptance and Usage of Mobile Technology for Knowledge Providing," in *EMCIS 2018. Lecture Notes in Business Information Processing*, 2019, p. 341. [Online]. Available: https://doi.org/10.1007/978-3-030-11395-7_42
- [12] N. Muliati, "Pengaruh Perceived Usefulness, Perceived Ease Of Use, Attitude Toward Using Dan Behavior Intention To Use Terhadap Actual System Use Dalam Implementasi Teknologi Enterprise Resource Planning (ERP) System (Studi Pada End User ERP System Di PT Semen Gresik)," *J. Manaj. dan Inov.*, vol. 2, no. 2, pp. 31–46, 2019, doi: 10.15642/manova.v2i2.191.
- [13] Gusni, R. Hurriyati, and P. D. Dirgantari, "Pengaruh Perceived Usefulness dan Perceived Ease of Use terhadap Attitude dan Actual Usage Go-Pay," *J. Manaj. Dan Kewirausahaan*, vol. 8, no. 1, pp. 22–33, 2020, doi: 10.26905/jmdk.v8i1.3892.

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