

Rational Choice Theory as a Concept for Optimizing Financial Software Empowerment and Digital Marketing for MSMEs in Bandar Lampung City

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Abstract. The new normal era is expected to be able to provide positive energy for the development of MSMEs in Indonesia. MSMEs actors must be able to prepare mature strategies and techniques to face the demands of change due to the impact of the COVID-19 pandemic. One of the optimal steps that can boost the existence of MSMEs is the empowerment of financial software and the use of digital marketing. The long-term goal of this research is to enrich the development of science, in particular to examine Rational Choice Theory as the dominant factor influencing the intentions of MSME actors in optimizing the empowerment of financial software and digital marketing for MSMEs. Data collection in this study was carried out by distributing questionnaires through online media to MSME actors in Bandar Lampung City who were respondents and a direct approach to MSMEs related to the use of financial software and digital marketing. Sampling technique in this study using purposive sampling technique. Meanwhile, for data analysis using Statistical Product and Service Solution (SPSS) version 22.0. The results of the study prove that Rational Choice Theory as the dominant factor influencing the intentions of MSMEs actors in optimizing the empowerment of financial software and digital marketing for MSMEs.

Keywords: Rational Choice Theory \cdot financial software \cdot digital marketing \cdot MSMEs

1 Introduction

In entering the new normal era, it is hoped that it will be able to bring fresh air to the economic climate in Indonesia. Micro, Small and Medium Enterprises (MSMEs) as pillars of the economy are expected to be able to rise and work together. MSME actors inevitably have to start adapting to the use of digital media in their daily operational activities. Empowerment of digital media which includes the use of financial software and digital marketing media is the main thing that supports the progress and existence of MSMEs actors, especially during the pandemic [1]. Based on the initial survey, it is

known that not all MSME actors are able to adapt to these conditions, using financial software and digital marketing media. The difficulty of adapting to new things is the main obstacle for MSME actors. The thought of risk and others has an impact on the reluctance to maximize the existing digitalization concept.

We found that most SMEs in Indonesia have used accounting software even though it is not optimal. Another research was conducted [3]. Who took a sample of MSMEs in Malaysia, the results of this research proved that the implementation of accounting information systems played a role in the development of MSMEs in Malaysia. Oswari, nproves that the use of accounting technology software increases the productivity and performance of small businesses. For research related to the implementation of digital marketing, among others, it has been carried out which proves that Digital Marketing has a positive and significant effect on instant online buying decisions. Similar research was conducted succeeded in proving online marketing has a positive and significant effect on purchasing decisions and increasing sales [2].

But the research conducted by Nurhidayanti stated different results, namely understanding information technology, as line as research by Safrianti reveals that e-commerce does not influence on the increase in MSME income in Tegal Regency. Based on this phenomenon, it can be seen that there is a gap in research conducted by previous researchers. For this reason, this research tries to dig up research related to the use of financial and digital marketing software using the concept of rational theory.

The concept of Rational Choice Theory is a concept of rational choice how individuals choose actions that can maximize utility or that can satisfy their wants and needs or in other words maximize profits and minimize costs. In line with MSME actors, the rational choice theory concept will try to examine whether the optimization of financial software and digital marketing media for MSMEs is capable of being the dominant factor that underlies MSME actors to use financial software and digital marketing media so as to have an impact on the sustainability of MSMEs, especially facing the new era. Normal, so that MSMEs are able to overcome various social problems.

The originality of this research consists of several fields, namely first, this research uses the grand rational choice theory as the concept that underlies MSME actors in using financial software and digital marketing. The second originality is related to the digital marketing model so that it can be maximized by MSME actors. The third originality is related to samples or research objects in Micro, Small and Medium Enterprises (MSMEs) that have survived the Covid 19 pandemic era in Bandar Lampung City.

A. Potential and Problems

The new normal era has begun to be implemented in the territory of Indonesia, this situation is expected to be able to boost the growth rate of MSMEs in Indonesia. Based on the initial survey, data was obtained that most of the MSMEs that were able to survive the shock of the COVID-19 pandemic were MSMEs that had implemented digitalization in the concept of their activities.

The use of financial software and digital marketing media is the dominant thing that supports the success of MSMEs in Indonesia in defending their business [8]. The main problem in this study is to analyze whether financial and digital marketing software can

be used optimally by MSME actors in Bandar Lampung City with the concept of rational choice theory.

B. Research Specific Purpose

The specific purpose of this study is to examine and analyze whether the concept of rational choice theory is the right concept in examining the optimization of financial software and digital marketing media for MSMEs.

2 Literature Review

A. Rational Choice Theory

Buchanan explains that rational choice theory is a neoclassical economic theory that tries to bridge between microeconomics and politics by looking at the actions of citizens, politicians, and public servants as an analogy to personal and consumer interests [9]. Furthermore, this theory is often also referred to as the theory of rational action, which is a framework for understanding and designing models of social and economic behavior. The basic assumption of rational choice theory is that all social behavior is caused by the behavior of each individual make his own decisions. This theory focuses on the determinants of individual choices.

Rational choice theory also assumes that a person has a preference among several alternative choices that allow the person to state the choice he or she wants. These preferences are considered complete (the person can always specify the alternative they want or no alternative is desired) and transitive (if option A is more desirable than option B and choice B is more desirable than option C, then A is more desirable than C). The rational agent then considers the available information, the likelihood of events, and the potential costs and benefits of making the choice, and acts consistently in choosing the best course of action. Rationality is often used as an assumption of individual behavior in microeconomic models and analysis and appears in almost all explanations of human decision-making.

B. Financial Software

Financial software is software that is used to record financial activities in and out of the company. The working principle of financial software is to convert a series of company financial activities into specific modules so that the final results are in accordance with financial reporting standards.accounting-based financial management support software, including SQL Ledger, GNUCash and Turbo Cash to support MSME operational activities.

C. Digital Marketing

Digital marketing is an activity in the field of marketing that utilizes platforms on the internet to reach target consumers, besides digital marketing is defined as marketing

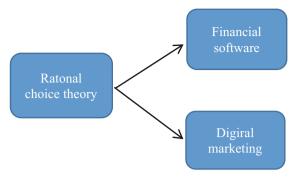


Fig. 1. Research framework

products or services via the internet or called marketing, web marketing, online marketing, e-marketing, or e-commerce [10]. Digital marketing activities are used by business people so that the application of internet media in the market increases (Fig. 1).

D. Research Framework

Research Methods

The sample in this study are MSME actors in Bandar Lampung City who became respondents as well as direct approaches to MSMEs related to the use of financial software and digital marketing.

A. Sampling technique

The sampling technique in this study using purposive sampling technique. With the criteria of MSMEs that have received certification and product standardization by the Ministry of Cooperatives and SMEs of the Republic of Indonesia, as well as MSMEs that have used financial software and digital marketing. The total research sample is 42 SMEs in the city of Bandar Lampung.

B. Research data

The data used in this study is primary data. This primary data was obtained from a list of statements answered by respondents in the research questionnaire. This research questionnaire was given directly to the respondent so as to reduce the possibility of uncertainty in filling out the questionnaire by the respondent.

C. Variable operational definition

1) Rational Choice Theory

Rational choice theory also assumes that a person has a preference among several alternative choices that allow the person to state the choice he or she wants [8]. Measurement of rational choice theory uses 5 (five) indicators, namely: voluntary, belief in benefits, profit oriented, interest, purpose of use. This measurement uses a Likert scale of 1 to 5 with categories = strongly disagree and 5 = strongly agree.

2) Financial Software

The financial software variable is measured using the indicator which consists of 12 (twelve) questions including indicators of data security, Access Speed and Timeliness and accuracy [11]. This measurement uses a Likert scale of 1 to 5 with categories = strongly disagree and 5 = strongly agree.

3) Digital Marketing

Digital marketing variables are measured by indicators that refer to Anwar's research, consisting of 5 (five) question indicators, namely digital marketing content, digital marketing benefits, digital marketing access, digital marketing scope and the purpose of using digital marketing. Measurement of digital marketing variables using a Likert scale of 1 to 5 with categories = strongly disagree and 5 = strongly agree [16].

D. Data analysis

In this study, quantitative data were analyzed by researchers with using statistics. The formula used is the MANOVA formula or test MANOVA and using the SPSS 21 for windows program, namely MANOVA.

4 Results and Discussion

A. Respondents Overview

Respondents in this study were MSME actors who were registered with the Ministry of Cooperatives and SMEs of the Republic of Indonesia, had obtained product certification and standardization and used financial software and digital marketing. The unit of analysis consists of managers or owners of MSMEs and the finance department. The total MSMEs that are included in the research criteria are 42 MSMEs, but from these criteria only 38 MSMEs are willing to be respondents, the remaining 4 MSMEs refuse on the grounds that they are busy. From 38 SMEs, with a sample of managers/owners and financial staff, a total sample of 76 samples was obtained. Questionnaires were distributed to 76 samples, from 76 questionnaires distributed, as many as 6 questionnaires could not be processed because they were incomplete, so that the final results of the questionnaires that could be processed were 70 questionnaires. The following is a list of the distribution of the questionnaire (Table 1).

Information	Total	Percentage		
Distributed Questionnaire	76	100%		
Incomplete questionnaire	6	7,9%		
Processed Questionnaire	70	92,10%		

Table 1. DAFTAR DISTRIBUSI KUESIONER

Table 2. RELIABILITY TEST RESULTS

No	Variable	Cronbach Alpha	Information
1	Rational choice theory	0.928	Reliabel
2	Financial software	0.864	Reliabel
3	Digital marketing	0.894	Reliabel

^b Source: Data processed, 2022

Table 3. DESCRIPTION OF RESPONDENTS BY GENDER

Information	Total	Percentage
Man	46	65,71%
Women	24	34,29%
Total	70	100%

^c Source: Data processed, 2022

1) Respondents by Gender

Based on gender, respondents can be grouped as follows (Table 3).

Table 2 shows that 46 respondents or 65.71% of the total respondents were male and the remaining 24 respondents or 34.29% were female.

B. Respondents Based on Age

Based on the age of the respondents can be grouped as follows.

Table 4 shows that respondents with an age range of 41-50 years have the highest number of 24 respondents or 34.28% of the total respondents. Respondents with the lowest number were in the age range >61 years, which amounted to 4 respondents or 5.66% of the total respondents.

^a Source: Data processed, 2022

Information	Total	Percentage	
21–30 years	9	12,86%	
31–40 years	18	25,71%	
41–50 years	24	34,28%	
51–60 years	15	21,49%	
>61 years	4	5,66%	
Total	70	100%	

Table 4. DESCRIPTION OF RESPONDENTS BY AGE

Table 5. DESCRIPTION OF RESPONDENTS BASED ON LAST EDUCATION LEVEL

Information	Total	Percentage
Junior high school	8	11,43%
Senior high school	43	61,43%
Diploma	5	7,14%
bachelor	14	20,00%
Total	70	100%

^e Source: Data processed, 2022

1) Respondents Based on Last Education Level

Based on the latest education level, respondents can be grouped as follows.

Table 5 shows that respondents with high school education have the highest number of respondents, namely 43 respondents or 61.43% of the total respondents. The lowest respondent is with the last education level of diploma, which is 5 respondents or 7.14% of the total respondents.

C. Data Quality Test

Data quality tests include reliability and validity tests. Reliability test was carried out with Cronbach alpha test using SPSS. A construct The following is a recapitulation of the results of the reliability test presented in Table 6.

D. Hypothesis Test Results

After testing the validity and reliability and testing the classical assumptions, the next step is to test the hypothesis. MANOVA or Multivariate Analysis of Variance test on Mutivariate procedure was used to calculate the analysis regression and variance for more than one dependent variable with using one or more factor variables (covariates).

d Source: Data processed, 2022

No	Variable	correlation	Signifikansi	Information
1	Rational choice theory	0.230**-0.822**	0.01	Valid
2	Financial software	0.298**-0.782**	0.01	Valid
3	Digital marketing	0.713**-0.835**	0.01	Valid

Table 6. VALIDITY TEST RESULTS

Table 7. MULTIVARIATE TEST RESULTS

Multivariate Test ^b						
Effect	Value	F	Hypothesis df	Error df	Sig	Partial eta squared
Intercept Pillai's	.965	4.504E2a	2.000	33.000	.000	.965
Trace Wikls' Lambda	.035	4.504E2a	2.000	33.000	.000	.965
Hotelling's Trace	27.294	4.504E2a	2.000	33.000	.000	.965
Roy's Largest Root	27.294	4.504E2a	2.000	33.000	.000	.965
Rational_Choice	.190	3.869a	2.000	33.000	.031	.190
Pillai's Trace Wikls' Lambda	.810	3.869a	2.000	33.000	.031	.190
Hotelling's Trace	.234	3.869a	2.000	33.000	.031	.190
Roy's Largest Root	.234	3.869a	2.000	33.000	.031	.190
Exact statistic						
b. Design: Intercept + Rational_Choice						

f Source: Data processed, 2022

Analysis – Multivariate is basically the same as univariate, only the dependent variable is more than one. Therefore, researchers using the MANOVA test because the independent variable rational choice theory (X) on the two dependent variables namely financial software (Y1) and digital maerketing (Y2). As for the results of the manova test are as follows (Table 7).

Multivariate Tests table Sig column on the rational choice theory competency line, all show the value of Sig (0.031). The Sig < 0.05 identifies the rational choice theory variable that influences financial software and digital marketing for MSMEs in Bandar Lampung (Table 8).

In the Test of Between-Subjects Effects table, it is possible to test the hypothesis of the influence of rational choice theory on Financial Software Empowerment and Digital Marketing. The significance value shows Sig 0.015 < 0.05 which indicates that there is an influence of rational choice theory on financial Software Empowerment. Furthermore,

Source	Dependent Variable	Type III Sum of Squares	df	F	Sig	Partial Eta Squared
Corrected Model	Financial software Digital marketing	300.444 ^a 215.111b	1 1	6.594 4.554	.015 .040	.162 .118
Intercept	Financial software Digital marketing	4188.444 42998.778	1 1	919.371 859.429	.000	.964 .963
Rational_Choice	Financial software Digital marketing	300.444 215.111	1 1	6.594 4.554	.015	.162 .118
Error	Financial software Digital marketing	1549.111 1601.111	34 34			
Total	Financial software Digital marketing	43738.000 44120.000	36 36			
Corrected Total	Financial software Digital marketing	1849.556 1821.222	35 35			

Table 8. TEST RESULTS OF BETWEEN-SUBJECTS EFFECTS

based on the Test of Between-Subjects Effects table for the hypothesis of the influence of rational choice theory on Financial Software Empowerment and Digital Marketing. The significance value shows a Sig value of 0.040 < 0.05 which indicates that there is an influence of rational choice theory on Digital Marketing.

E. Discussion

Rational Choice Theory as a Concept for Optimizing Financial Software Empowerment and Digital Marketing for MSMEs in Bandar Lampung City. Based on the results of data analysis, it is known that the rational choice theory is a concept that has an influence on the empowerment of financial software and digital marketing for MSMEs in Bandar Lampung City. The results of this study strengthen that the concept of rational theory is a concept that is able to explain a person's socioeconomic behavior.

^a R Squared =,162 (Adjusted R Squared =,138)

^b R Squared =,118 (Adjusted R Squared =,092)

g Source: Data processed, 2022

The basic assumption of rational choice theory is that all social behavior is caused by the behavior of individuals who each make their own decisions. This theory focuses on the determinants of individual choices. MSMEs actors in Bandar Lampung City decided to use financial and digital marketing software related to their business, because they believed in the decision that using financial and digital marketing software would help their performance process. The existence of rational choice thinking results in the emergence of rational actions that underlie the behavior of MSME actors in Bandar Lampung City.

This is in accordance with the basic concept of rational choice theory that the existence of a framework of understanding, concepts of beliefs and thoughts will lead to models of individual social behavior that have an impact on the decisions they take.

The results of this study support research conducted by Pawestri (2019), Haviz (2012), Hecter (2007) and Bankston (2002).

5 Conclusion

A. Conclusion

This study examines the concept of rational choice theory related to optimizing the empowerment of financial and digital marketing software for MSMEs in the city of Bandar Lampung. The results of the study prove that rational choice theory is able to explain the behavior of MSME actors that they use financial software and digital marketing because they believe in the impact of using these applications. MSMEs actors in Bandar Lampung City decided to use financial and digital marketing software related to their business, because they believed in the decision that using financial and digital marketing software would help their performance process. The results of this study strengthen that the concept of rational theory is a concept that is able to explain a person's socioeconomic behavior.

B. Limitations

This research is limited to MSMEs in the city of Bandar Lampung with certain criteria, thus limiting the generalization of the theory.

C. Suggestion

Further research can expand the scope of the sample of MSME actors in order to generalize the theory.

References

- Anwar, Khoerul. 2021. Pengaruh digital marketing dan citra merk terhadap keputusan membeli. Skripsi Program Studi Manajemen STIE-STAN Indonesia Mandiri
- Arifuddin, R. R., Kadir, A. R., & Kadir, N. 2019. Pengaruh Personal Selling dan Digital Marketing Terhadap Keputusan Pembelian Polis Asuransi PT. QBE General Insurance Indonesia Cabang Makassar. Hasanuddin Journal of Applied Business and Entrepreneurship, Vol. 2 (3)
- 3. Bankston, Carl L. 2002. "Rationality, Choice and the Religious Economy: The Problem of Belief", Review of Religious Research, Vol. 43, No. 4, Juni.
- 4. BPS.2016. Statistik Usaha Kecil dan Menengah 2016. Badan Pusat Statistik

- 5. Buchanan, James M. 1962. The Calculus of Consent: Logical Foundations of Constitutional Democracy. The Online Library of Liberty
- Buchanan, James M. 2003. Public Choice: Politics Without Romance. The quarterly review of The Centre for Independent Studies. Spring 2003
- Coleman & S. James. 1994. Rational Choice Theory. Terjemahan E. Priyanto. 2008. Dasar-Dasar Teori Sosial. Bandung: Nusa Media.
- 8. Haviz, Vedi R. dan Richard Robiso. 2012. Political Economy and Islamic Politics: Insights from the Indonesian Case. New Political Economy, Vol. 17, No. 2, April.
- 9. Hechter, Michael dan Satoni Kanagama. 1997. Sociological Rational Choice Theory. Annual Review Sociology, Vol. 23, 1997
- Kementerian Luar Negeri. 2020. Kebijakan Pemerintah Republik Indonesia terkait Wabah Covid-19. Diakses pada 12 Oktober dari Kemlu: https://kemlu.go.id/
- Kristanto, Andri. 2008. Perancangan Sistem Informasi dan Aplikasinya. Gaya Media. Jogjakarta
- 12. Media, Dien. 2008. "Gaya Hidup Wanita Perkotaan: Kajian tentang Pola Konsumsi Ibu Rumah Tangga Kelas Menengah di Kota Medan". Tesis--Universitas Negeri Medan, Medan..
- 13. Ndubisi, Oli Nelson. 2005. Effect of Perception And Personal Traits On Computer
- Technology Adoption By Women Entrepreneurs In Malaysia. Journal of Asia Entrepreneurship and Sustainability
- 15. Primasari, Dona. 2017. Analisis penggunaan impelementasi sistem akuntansi berbasis akrual dengan pendekatan teori Technology Acceptance Model 3 (Studi empiris pada Satuan Kerja Perangkat Daerah di Pulau Jawa dan Sumatera. Disertasi Universitas Diponegoro Semarang.
- Putri, S. S. A., Rachma, N., & Rahman, F. 2020. Pengaruh Viral Marketing dan Online Marketing Terhadap Keputusan Pembelian Dengan Kepercayaan Konsumen Sebagai Variabel Intervening (Studi Kasus Pada Mahasiswa FEB UNISMA Angkatan 2016 Pembeli Accessories Gadged Di Tokopedia). E Jurnal Riset Manajemen.
- Santoso, Bibit. "2012. Konsumerisme dalam Kehidupan Masyarakat Urban: Penelitian Kasus Masyarakat Perkotaan di Kecamatan Senen Jakarta Pusat". Disertasi-- Universitas Gadjah Mada, Yogyakarta
- 18. Sica, Alan. Weber, Irrationality and Social Order. 1988. (Barkeley: University of California Press, 1988).
- 19. Wulandari, Dessy. 2019. Pengaruh Sumber Daya Manusia, Sistem Pengendalian Internal, Efektivitas software keuangan. Skripsi Universitas Muhammadiyah Yogyakarta.

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