

Management Model of Rural-Owned Enterprises Due to Impact of Pandemic COVID-19 Based on Transformation of Economic Behavior

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Abstract— Empirical data on the development of rural-owned rural in 2020 shows that around 77% of rural-owned rural in Bali and around 73% are still running savings and loan businesses, and other businesses such as 19.8% shop business units, 8.8% market management businesses, waste management 10.8%, leasing 15.8%, clean water management 14%, tourism object 2.8%. The main problem faced by rural-owned enterprise in Bali today is related to the source of community income, which has decreased by 40-50% due to COVID-19 as a source of credit repayment, especially the savings and loan business unit. The two priory variables as such: financial managing and transformation of economic behavior. The results of the descriptive qualitative analysis can be found in the constructs management model in Financial Managing of Rural-Owned Enterprises and Transformation Economic Behavior to impact of Pandemic COVID-19. Derived variables as such the eight variables tested in the field include psychology, perception and motivation, managing risk, transaction, utility, quality, social networking. The result of tested descriptive and Micmac Factor analysis shows found the financial managing model of rural owned enterprise and transformation of society economic behavior in the impact of pandemic COVID-19. The results of the preparation and formation of financial managing model of Rural Owned Enterprises due to the impact of COVID-19 based on the transformation of economic behavior can be seen in the Direct Influence Graph and Indirect Influence Graph. The Direct Influence Graph

shows that transactions are shaped by perceptions, while social impacts are shaped by social networks, satisfaction, and life quality. The Indirect Influence Graph shows that social impact is formed by the strongest cognitive, followed by satisfaction, quality, social networking and psychological variables. **Keywords**—rural-owned enterprises; management; entrepreneurship; innovation; tourist attraction.

Keywords-Financial Managing; Rural-Owned Enterprises; Pandemic Covid; Transformation; Economic Behavioral

I. INTRODUCTION

Data is shown by the Ministry of Villages (2020) that 73% of Rural-Owned Enterprise in running a business are affected by the COVID pandemic 72%. Currently, Rural-Owned Enterprise is still operating about 27%. Rural-Owned Enterprise also has an important role as a buffer institution, for this reason, serious handling is needed through cognitive mechanisms and the spirit of entrepreneurship-cognitive competence, so that community economic activities can be carried out and provide cost-benefit. In addition, Rural-Owned Enterprise has a role as capital accumulation for the development of rural

micro-enterprises in the long term. [1] The stated of pandemic COVID-19 has an impact on neurobiological/cognitive risks, so changes need to be made through cognitive mechanisms. The research findings of [2] that top management competence can affect business management results. Similar research with logistic regression analysis in the US by [3] that the use of e-digital/social media can affect business growth and solving marketing business problems. As is the case [4] that rural micro and small enterprises can grow and assist in solving poverty problems, implementing government policies and transforming economic behavior. The findings of [5] that the success of micro business institutions is determined by the encouragement of business members; systematic division of labor; have regular accounting records.

. The problem of Rural-Owned Enterprise as a result of the COVID-19 pandemic is due to the weakness of the operational working system, the capacity of competent human resources on a digital basis, and the spirit of entrepreneurship. The management of Rural-Owned Enterprise in Bali is the same as national conditions. Exploitative is negatively related to perceived critical threat and business ownership and positively related to risk experience. [6] business training has a positive impact on making decisions on financial allocation/human capital interests, increasing credit access, but has no impact on costs and benefits. [7] revealed that personal and cultural attributes as the largest social capital have been used or explored as the basis for making financial decisions. The research was conducted by [8] that cognitive (service quality) and affective (characteristics attached to the company's brand) can shape the company's business image. Research on the influence of behavioral transformation on competence was conducted by [9] that explored the interconnection of empathy relationships, personal values, and personality models with moral assessment competencies and work behavior. Data on the results of Rural-Owned Enterprise management in Bali Province in 2020 that the number of 77% Rural-Owned Enterprise, 73% run a savings and loan business, and other businesses such as 19.8% shop business, 8.8% market manager, 10.8% waste management, 15.8% leasing, 14% clean water management, tourism object 2, 8%. The main problem faced by Rural-Owned Enterprise in Bali today is related to the source of community income, which has decreased by 40-50% due to COVID-19 as a source of credit repayment, especially the savings and loan business unit. The problem of savings and loans in Kenya [10], the solution is carried out with the "Table Banking" system, namely a group-based funding system. Business success in Malaysia [11] is determined by the motivation to do business;

systematic division of labor; have regular accounting records; marketing plan; and have quality certification.

According of [12] in the USA about 33% of rural areas are highly vulnerable to COVID-19, driven by older age compared to productive age of about 6%. Findings of [13] the risk of being affected by COVID-19 in Pakistan in the midst of a lockdown and socio-economic impacts such as financial uncertainty, decreased income, and food insecurity. Rural-Owned Enterprise due to the impact of the COVID-19 pandemic require handling related to socio-economic problems of the community with strategic innovation through a strategy of transforming economic behavior and cognitive competence. Findings of [14] disruptive business model innovation strategies are carried out through: (1) exploratory adoption of disruptive business models; and (2) exploitative strengthening of existing business models of training through increasing entrepreneurial knowledge can increase the profits and incomes of the poor in developing countries [15]. Findings of [16][17] Cognitive transformation can be done through entrepreneurship education, so that the business that has been built can be realized results and business income.

The objectives of this study are: Identifying, exploring the dimensions of Rural-Owned Enterprise financial management as a result of the COVID-19 Pandemic, transforming economic behavior; Conduct field testing of the relationship between the dimensions/indicators of the financial management of RURAL-OWNED ENTERPRISE impact of COVID-19 with the dimensions of transformation of economic behavior; develop a financial management model for Rural-Owned Enterprise impact of COVID-19 based on the transformation of economic behavior

II. RESEARCH METHODS

2.1 Design Research

Design research used qualitative-comparative approach. Research data used primary data. *Quantitative research is carried out with a research class or focus discussion group. The selection of this research design aims to identify, explore and formulate eight variable dimensions in measuring research in the conditions and phenomena of the impact of COVID-19* Research location is Rural-Owned Enterprises in Bali Province. Data were collected by means of a questionnaire, interview, and group discussion. The questionnaire data was validated with truth claims, empirical claims, and reliability. Validity with truth claims aims to validate the correctness of information from various informants, so that the concepts built are correct and make sense/logic. Empirical claims are meaningful to

build a suitability of understanding ideas with real reality in the field.

2.2 Data Analysis with Micmac Method

Data analysis used Micmac Factor Analysis. The results of the Micmac factor analysis can be found in the key variables of the application of management models in Rural-owned enterprises based on transformation economic behavioral. Eight variables dimensions used include: psychological and behavioral responses; perception and motivation; risk and cognitive mechanisms; social impact of the digital management; transactions; satisfaction; quality; consumer social-cultural network. The identification data were analyzed using descriptive statistical methods and testing using Micmac Factor Analysis. The stepwise used Micmac Factor Method as such: (1) setting the first idea for choose key variable. (2) to choosing number of iteration matrix, (3) the Iteration influence/dependence, (4) The Matrix Graph of key variables.

III. RESULTS AND DISCUSSION

3.1 Exploration of The Keys Dimensions Variables

Eight dimensions of variables in the measurement of research such as: psychological-response behavior; perception -motivation; risk and cognitive mechanisms; social impact-risk management. digital transactions; customer satisfaction, quality of life-service; consumer social-cultural network.

TABLE 1. MATRIX DIRECT INDIRECT ROW COLUMN

Dimension of Variable	Total Number of Row	Total number of column
1 Psychologies-behavioral responses	11	6
2 Perception-motivation	7	6
3 Mechanism-cognitive risk	11	13
4 Social damage-management risk	8	18
5 Digital transaction	9	9
6 Customer utility	9	10
7 Life quality-services	8	5
8 Social networking-consumer cultural	9	5
Total	72	72

Source: data accounted MDI-Micmac Factor analysis

The MDI results in Table 1 show that the psychological-response behavioral dimensions (11;6), perception-motivation (7;6), risk and cognitive mechanisms (11;13), social impact-risk management (8;18), Digital transactions (9;9), customer satisfaction (9;10), quality of life-service (8;5), consumer social-cultural network (9.5). The results of the MDI on the dimensions of Rural-Owned Enterprise financial management as a result of the

COVID-19 pandemic show that the social impacts, management risks and cognitive risk mechanisms have a high total matrix value. The Construct dominant of the key dimension variables of matrix value as such risk and cognitive mechanisms and psychological of behavioral responses[18].The results of the MDI dimensions of economic behavior transformation that digital transactions and customer satisfaction have a high total value. The stability of the MDI results can be shown in Table 2.

3.2 Stability of Key Variables

The key variable iteration stability consists of influence to dependence (i%; j%). Iteration stability managing of rural-owned enterprises is obtained (67%; 120%); Stability of iteration role policy, standard operational procedure was obtained (100%; 83%). The iteration stability of sources of finance or fund is obtained (100%; 120%); stability iteration (performance evaluating and accountability) is obtained (100%; 83%); Iteration stability of transactions as such intensity, quickly obtained (100%; 120%); Iteration stability of market information networking was obtained (100%; 100%). Iteration stability shows that the stability of the influence and the stability dependence.

TABEL 2. MATRIX DIRECT-INDIRECT STABILITY

Iteration	Influence (%)	Dependence (%)
1	83	83
2	92	109

Source: data accounted MDI Stability-Micmac Factor Analysis

Table 2 shows that the dimension of the influence variable has a lower percentage of interaction than the dependent variable dimension. The gap of the total iteration percentage value is lower on the influence of 17%. However, the second iteration has a difference in the value of influence which is lower than the value of dependence.

Based on the results of the direct and indirect relationship testing of the eight dimensions of the research measurement variables, it can be stated that the Rural-Owned Enterprise financial management based on the transformation of economic behavior is formed by multivariate elements between the social impact-risk management as a dependence variable, with psychological-response behavior, quality of life-service, customer satisfaction, consumer social-cultural network as a variable influence. These results are in line with the findings of [7] that personal and cultural attributes as the largest social capital have been used or explored as the basis for making financial decisions. However, the financial management of the Rural-Owned Enterprise impact of COVID-19 based on economic transformation is formed by a partial perception-motivation relationship as a dependence variable with digital transactions as an influence variable. These results are in line with

research conducted in Thailand by [11]. The findings stated that the success of micro business institutions is determined by the motivation in doing business; systematic division of labor as the basis of today's digital transactions; have regular and detailed accounting records; a mature marketing plan; and quality certification oriented

3.3 The Mapping of Key Variables

Testing the direct and indirect relationships of eight variable dimensions in measuring the financial management of Rural-Owned Enterprise due to pandemic covid-19 based on the transformation of economic behavior can be analyzed by testing the Micmac Factor Method. The test results are shown in "Fig.1." and "Fig.2."

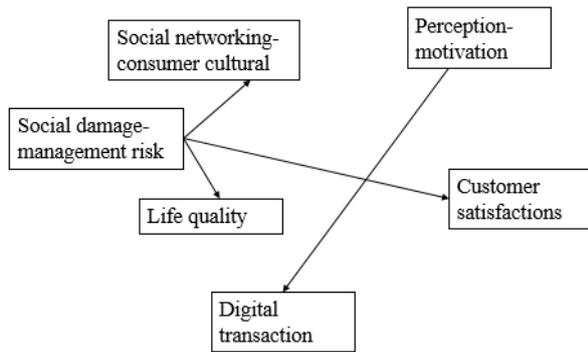


Fig.1. Direct Influence Graph

"Fig.1." shows that the Direct Influence Graph means that perception-motivation has a partial relationship with digital transactions, while the social impact of management risk has a multivariate relationship with the variables of quality of life-service, social-cultural network of consumers, and customer satisfaction. Correlated among perception-motivation with digital transaction in line of found of [19]-[21].

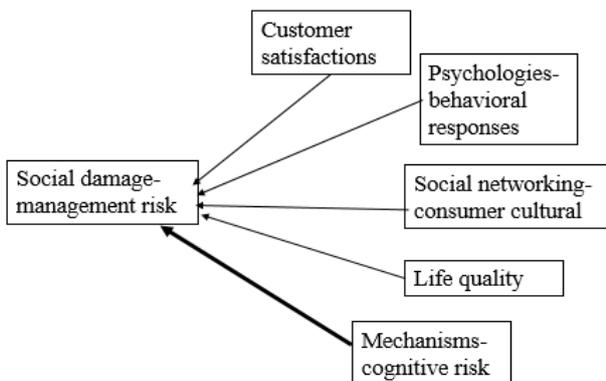


Fig. 2. Indirect Influence Graph

"Fig. 2" shows the Indirect Influence Graph means that the impact of social – risk management has a multivariate relationship with psychological-response behavior, perception – motivation, risk and cognitive mechanisms, customer satisfaction, quality of life-service, social-cultural network of consumers. However, the social impact – management risk does not have a direct relationship with digital transactions.

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IV. CONCLUSION

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REFERENCES

- [1] I. Marchetti, E. H. W. Koster, E. J. Sonuga-Barke, and R. De Raedt, "The Default Mode Network and recurrent depression: A neurobiological model of cognitive risk factors," *Neuropsychology Review*. 2012.
- [2] M. O. Latukha and A. Y. Panibratov, "Top management teams' competencies for international operations: Do they influence a firm's result?," *J. Gen. Manag.*, vol. 40, no. 4, 2015.
- [3] K. Kuhn, T. Galloway, and M. Collins-Williams, "Near, far, and online: small business owners' advice-seeking from peers," *J. Small Bus. Enterp. Dev.*, 2016.
- [4] C. Blankson, K. Cowan, and W. K. Darley, "Marketing Practices of Rural Micro and Small Businesses in Ghana: The Role of Public Policy," *J. Macromarketing*, 2018.
- [5] A. Al Mamun, "Access to Credit, Education and Entrepreneurial Competencies: A Study among Women Micro-entrepreneurs in Malaysia," *Vision*, vol. 20, no. 3, 2016
- [6] X. Giné, W. Bank, G. Mansuri, and C. Jel, "Money or Ideas? A Field Experiment on Constraints to Entrepreneurship in Rural Pakistan," *World Bank Policy Res. Work. Pap. Ser.*, 2011.
- [7] B. Boateng, M. Silva, and C. Seaman, "Financing decisions of migrant family businesses: the case of a Ghanaian-owned shop in Kent," *J. Fam. Bus. Manag.*, 2019.
- [8] S. F. Syed Alwi and P. J. Kitchen, "Projecting corporate brand image and behavioral response in business schools: Cognitive or affective brand attributes?," *J. Bus. Res.*, 2014.
- [9] R. Pohling, D. Bzdok, M. Eigenstetter, S. Stumpf, and A. Strobel, "What is Ethical Competence? The Role of Empathy, Personal Values, and the Five-Factor Model of Personality in Ethical Decision-Making," *J. Bus. Ethics*, 2016..
- [10] N. Gichuki, C.N., Mutuku, M.M. and Kinuthia, "No Title: Influence of participation in 'Table banking' on the size of women-owned micro and small enterprises in Kenya," *J. Enterprising Communities People Places Glob. Econ.*, vol. 9, no. 4, 2015.
- [11] R. J. Zwanka and C. Buff, "COVID-19 Generation: A Conceptual Framework of the Consumer Behavioral Shifts to Be Caused by the COVID-19 Pandemic," *J. Int. Consum. Mark.*, 2020
- [12] D. J. Peters, "No Title: Community Susceptibility and Resiliency to COVID-19 Across the Rural-Urban Continuum in the United States," *J. Rural Heal.*, vol. 36, no. 3, pp. 446–456, 2020
- [13] Amjad Ali; Mumtaz Ahmed; Nazia Hassan, "No Title: Socioeconomic impact of COVID-19 pandemic: Evidence from rural mountain community in Pakistan," *J. Public Aff.*, 2020
- [14] O. Osiyevskyy, & J. Dewald, "Explorative Versus Exploitative Business Model Change: The Cognitive Antecedents of Firm-Level Responses to Disruptive Innovation," *Strategic Entrepreneurship Journal*, vol.9, .Issue 1, March .2015.
- [15] G. Calderon, J. M. Cunha, and G. de Diorgi, "Business literacy and development: Evidence from a randomized controlled trial in rural Mexico," *Econ. Dev. Cult. Change*, 2020.
- [16] W. Schelfhout, K. Bruggeman, and S. De Mayer, "Evaluation of entrepreneurial competence through scaled behavioural indicators: Validation of an instrument," *Stud. Educ. Eval.*, vol. 51, 2016.
- [17] N.N.Aryaningsih, M.Marsa Arsana, I.K. Irianto, "Development of Business Competencies Based on Entrepreneurship in The Area of Urban Sprawl". *Advanced Science Letters*, Vol. 23, Number 12, December 2017, pp.12079-12083(5).
- [18] E. Parlapani *et al.*, "Psychological and Behavioral Responses to the COVID-19 Pandemic in Greece," *Front. Psychiatry*, 2020
- [19] N.N.Aryaningsih, "Assessing of Poverty Alleviation Model based on the Entrepreneurship Spirit in Tourism Villages." *International Journal of Psychosocial Rehabilitation*, 2020. Vol. 24, Issue 06. ISSN: 1475-7192
- [20] D.J. Teece, "Competition, cooperation, and innovation. Organizational arrangements for regimes of rapid technological progress". *Journal of Economic Behavior and Organization*. 1992.
- [21] I. Reife, S. Duffy, K.E. Grant, "The Impact of Social Support on Adolescent Coping in the Context of Urban Poverty." *Cultural Diversity and Ethnic Minority Psychology*, 2019.
- [22] S. Cunningham, "From Cultural to Creative Industries: Theory, Industry and Policy Implications. *Media International Australia Incorporating*". Culture and Policy. 2018.