



DEVELOPMENT OF DIGITAL TRANSFORMATION INSTRUMENTS AND PARTNERSHIP FOR MSMEs IN DENPASAR CITY

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ABSTRACT

SMEs are a type of industry that is more customer focused and have better opportunities if supported by the use of digitalization transformation and collaboration with partnerships that can provide support for the development of an SME. This research was conducted to analyze the digital transformation and partnership questionnaire in SMEs. Method: The questionnaire will be analyzed using validity and reliability tests, where validity tests include content validity, face validity, Focus Group Discussion and construct validity. The number of respondents in the validity test was 5 respondents and 30 respondents in the reliability test. The results of the questionnaire analysis in the content validity analysis test were declared valid with an items content validity index (1-CVI) value of ≥ 0.78 . In the results of face validation, it was found that the statement items in the questionnaire described the construct well. The results obtained after the focus group discussion process were that the majority of panelists agreed on the statements made with a minimum value of 2 which means "easy to understand" and a maximum value of 3 which means "very easy to understand". The number who got a score of 2 (easy to understand) was 25% and the number who got a score of 3 (very easy to understand) was 75%. The reliability test obtained a Cronbach alpha value of 0.940; So according to table 4 above, this value means Very Reliable and suitable to be distributed to respondents. From the results of the table analysis, all question items are reliable. The instruments analyzed in this research, namely the digitalization transformation and partnership instruments, can be categorized as valid and reliable instruments so they can be used as research tools.

Keywords: partnership; transformation; questionnaire

INTRODUCTION

With the start of the 4th industrial revolution, the world movement is increasingly changing to the digital era which can no longer be stopped, making organizations/companies have to look again at their business processes (Hadiono et al., 2021). Data from the Ministry of Cooperatives and SMEs states that the number of SME business sectors in Indonesia in 2021 will reach 64.19 million with participation in gross domestic product (GDP) of 61.97 percent. The SME business sector also has a role in improving the Indonesian economy, as seen in its ability to absorb 97 percent of the workforce in Indonesia. Digital transformation has become a buzzword in the business world in recent years. This is believed to be the Industrial Revolution due to the impacts and opportunities it presents for companies. In (Rupeika-Apoga & Wendt, 2021) the theme of the current state of business is "transform or go home!" This shows the urgency faced in the business world regarding the use of digital. Digital transformation is not just having a website or using social media for sales, but like creating a digital shop and carrying out all business activities in the digital area, from ordering, processing, to sending (Chonsawat & Sopadang, 2020).

SMEs are a type of industry that is more customer-centered and have better opportunities if

digitalized in accordance with (Berghaus & Back, 2016) who argue that digital transformation will be most prominent in industries that are traditionally more customer-centered, industries that focus on B2C. One effort that can be taken to be able to compete is through cooperation in the form of partnerships in the innovation process and partnerships can improve production performance. It is further stated that Indonesian MSEs are recommended to create partnerships to improve the performance of SMEs (Nurhayati & Ardianingsih, 2021).

In (Vanags et al., 2018) a partnership strategy can encourage competitiveness and increase profit levels, this partnership speeds up the overall process and its effectiveness while reducing the costs of each company and increasing its competitiveness. In order to collect data on the use of SMEs, it is said to be rational, it can be done using a questionnaire/questionnaire method. In this study, researchers formulated a questionnaire which was then tested for validity and reliability. The validity test of a research questionnaire is a procedure to ensure whether the questionnaire that will be used to measure research variables is valid or invalid, while reliability is defined as an index that shows the extent to which the measuring instrument used can be trusted (Sugiyono, 2018). The aim of this research is to develop digital transformation instruments and MSME partnerships in Denpasar City.

The questionnaire will be analyzed using validity and reliability tests, where validity tests include content validity, face validity, Focus Group Discussion and construct validity. The number of respondents in the validity test was 5 respondents and 30 respondents in the reliability test. In the stages of creating a questionnaire on the rationality of digital transformation and partnerships in MSMEs in Denpasar City, the researcher started by creating a research instrument grid that focuses on indicators of digital transformation and partnerships in MSMEs in Denpasar City, then created a research instrument or questionnaire question list. After that, Expert Judgment continued or expert testing regarding the content of the material involving experts in the field of transformation and partnership, namely a developer and startup, then Expert Judgment data processing was carried out and the instrument was revised for questions that were not appropriate. Next, face validity was carried out to see the acceptance of the test measurement function and continued with a Focus Group Discussion with the panelists for the final final questionnaire. Finally, instrument testing was carried out on respondents and finally the results of the trial analysis were processed which included Validity and Reliability Tests to find out how valid and reliable the questionnaire developed was.

METHOD

This research is research that tests a questionnaire that will be used as an instrument in collecting data on digital transformation and partnerships. The analysis stages will start from content validity, then face validity, then group discussion forum and finally construct validity using 5 respondents. After that, it was continued with a reliability test with 30 respondents.

RESULTS AND DISCUSSION

Content validity testing

The content validity testing process involved 5 experts who are experts in the field of digital transformation and partnerships. All questions in the questionnaire are declared valid, namely when the items content validity index (1-CVI) value is ≥ 0.78 (Sugiyono, 2014).

Table 1.
Content Validity Test Results

NO	P1	P2	P3	P4	P5	ne	CVR ANALYSIS & CVI		
							N	CVR	CVI
Digitalization									
1	1	1	1	1	1	5	5	1	1
2	1	1	1	1	1	5	5	1	1
3	1	1	1	1	1	5	5	1	1
Online media									
1	1	1	1	1	1	5	5	1	1
2	1	1	1	1	1	5	5	1	1
3	1	1	1	1	1	5	5	1	1
Worker abilities									
1	1	1	1	1	1	5	5	1	1
2	1	1	1	1	1	5	5	1	1
3	1	1	1	1	1	5	5	1	1
Digital integration									
1	1	1	1	1	1	5	5	1	1
2	1	1	1	1	1	5	5	1	1
3	1	1	1	1	1	5	5	1	1
Goal Focus (Goal Focus)									
1	1	1	1	1	1	5	5	1	1
2	1	1	1	1	1	5	5	1	1
3	1	1	1	1	1	5	5	1	1
Unveiling (openness)									
1	1	1	1	1	1	5	5	1	1
2	1	1	1	1	1	5	5	1	1
3	1	1	1	1	1	5	5	1	1
Synergy									
1	1	1	1	1	1	5	5	1	1
2	1	1	1	1	1	5	5	1	1
3	1	1	1	1	1	5	5	1	1
Trustworthiness (Responsibility)									
1	1	1	1	1	1	5	5	1	1
2	1	1	1	1	1	5	5	1	1
3	1	1	1	1	1	5	5	1	1
Objectivity (Justice)									
1	1	1	1	1	1	5	5	1	1
2	1	1	1	1	1	5	5	1	1
3	1	1	1	1	1	5	5	1	1

In developing this instrument, the CVR value must be more than or equal to 0.99 because there are 5 panelists or validators. The results of the first round of content validation testing showed that the questionnaire items were valid with a value of 1.00 (>0.99) and a CVI of 1.00. Based on Lawshe (1975) values in the range 0.80 – 1.00 indicate very high validity results. So the research results show that the questionnaire created has very high validity because it has a value of 1.00.

Face validity

Face validity or appearance validation is used to assess acceptance of the test measurement function, and is not related to validity statistics such as coefficients by distributing questionnaires to respondents. This test is carried out using the Excel function in the form of the countif function which is used to calculate the amount of data based on certain conditions. The face validity of the questionnaire was tested on 5 respondents.

Table 2.

Face validity test					
Questionnaire items	P1	P2	P3	P4	P5
D1	3	3	4	3	4
D2	4	4	4	4	3
D3	4	3	3	3	4
MO1	3	4	4	4	4
MO2	4	4	4	4	4
MO3	3	3	4	3	4
KP1	4	4	4	4	3
KP2	4	3	3	3	4
KP3	3	4	4	4	4
ID1	4	4	4	4	4
ID2	3	3	4	3	4
ID3	4	4	4	4	3
FT 1	4	3	3	3	4
FT 1	3	3	4	3	4
FT 1	4	4	4	4	3
U1	4	3	3	3	4
U2	3	4	4	4	4
U3	4	4	4	4	4
S1	3	3	4	3	4
S2	4	4	4	4	3
S3	4	3	3	3	4
T1	3	4	4	4	4
T2	4	4	4	4	4
T3	3	3	4	3	4
O1	4	4	4	4	3
O2	4	3	3	3	4
O3	3	4	4	4	4

Information:

1. D = digitalization indicator question
2. MO = online media indicator questions
3. KP = worker ability indicator question
4. ID = digital integration indicator question
5. FT = goal focus indicator question
6. U = unveiling indicator question
7. S =questionindicatorssynergy
8. T = indicator question Trustworthiness
9. O = objectivity indicator question

In the results of face validation, it was found that the statement items in the questionnaire described the construct well. This can be seen from the results of the values in the table for the poor category, none of which exceeds 25%.

FGD

The Focus Group Discussion process was carried out with 5 panelists. The FGD was carried out online within 2 hours online via the Webex application. The opening begins with an explanation of the background, objectives and results that have been completed before the FGD stage was carried out. The FGD process is carried out by discussing each point of the statement to be discussed again after going through the content validation stage to see whether it has been approved or needs to be changed again. The total number of questionnaire statement items is 27. The final results of the discussion and assessment of the ease of each statement can be seen in table 3.

Table 3.
FGD results

No	<i>Digital Transformation</i>	MARK
A	Digitalization	
1	Our business uses electronic applications/devices to receive information during business processes	3
2	Our business uses electronic applications/devices to store information during business processes	3
3	Our business uses electronic applications/devices to send information during business processes	
B	Online media	3
1	Our business regularly and consistently uses online/application tools to provide promotions with consumers	3
2	Our business regularly and consistently uses online tools/applications to interact with consumers	3
3	Our business has consumers who are active in online/application facilities	3
C	Worker abilities	
1	Workers in our business can use electronic devices during business processes	3
2	Workers in our business are accustomed to using electronic devices during business processes	3
3	Workers in our business feel more helped/easier when carrying out business processes using electronic devices	3
D	Digital integration	
1	During our business activities, it is easier to process data when using applications/devices	3
2	Our business activities are more productive when we use applications/devices	3
3	Our business activities are simpler and more efficient when using applications/devices	3
A	Goal Focus (Goal Focus)	
1	I feel our partnership goals align with our business goals.	2
2	All parties in our partnership are committed to achieving shared goals.	2
3	Our partnership regularly evaluates and adjusts shared goals.	3
B	Unveiling (openness)	

No	Digital Transformation	MARK
1	Relevant information is shared openly in our partnerships.	2
2	There is transparency in the decision-making process in our partnerships.	3
3	Our partners regularly share relevant information or updates.	3
C Synergy		
1	Our partnership creates significant added value to our business.	3
2	Our resources, knowledge or skills are used more effectively in these partnerships.	3
3	The results of our partnership efforts are greater than if we worked individually.	2
D Trustworthiness (Responsibility)		
1	I believe in the credibility and reliability of our partners.	2
2	Our partners always fulfill their promises.	3
3	I feel our partners act with ethics and integrity in the partnership.	3
E Objectivity (Justice)		
1	I feel treated fairly in our partnership.	3
2	The benefits and burdens of partnership are distributed equally.	3
3	I have an equal opportunity to participate in partnership decision making.	3

The results obtained after the focus group discussion process were that the majority of panelists agreed on the statements made with a minimum score of 2 which means "easy to understand" and a maximum score of 3 which means "very easy to understand". The number who got a score of 2 (easy to understand) was 25% and the number who got a score of 3 (very easy to understand) was 75%.

Construct validity testing

To test the validity of the construct, questionnaires were distributed to respondents. This instrument was tested on a minimum of 30 respondents. The results obtained were then analyzed using the SPSS program. The testing technique used to test construct validity is using Pearson Correlation. This analysis is done by correlating each item score with the total score. The total score is the sum of all items. Question items that have a significant correlation with the total score show that these items are able to provide support in revealing what they want to express. If $r_{count} \geq r_{table}$ (2-sided test with sig. 0.05) then the instrument or question items have a significant correlation with the total score (declared valid)(Sugiyono, 2014).

Table 4.
Validity and reliability tests

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
D1	33.4333	140,944	,799	,948
D2	33.5333	141,361	,787	,948
D3	33.5333	140,395	,840	,947
MO1	33.4667	141,361	,750	,948
MO2	33,6000	140,731	,822	,947
MO3	33.4667	145,568	,601	,950
KP1	33.4667	143,982	,691	,949
KP2	33.4667	141,085	,808	,948
KP3	33.5667	140,530	,857	,947
ID1	33,5000	141,431	,764	,948
ID2	33.5333	141,361	,787	,948
ID3	33.5333	140,395	,840	,947
FT 1	33,5000	141,293	,771	,948
FT 1	33.5333	140,395	,840	,947
FT 1	35.1333	151,361	,446	,951
U1	35.2667	150,754	,540	,950
U2	34,9000	152,300	,390	,951
U3	35.0667	149,651	,582	,950
S1	35.0667	154.133	,218	,953
S2	35.1333	151,361	,446	,951
S3	35.1333	151,361	,446	,951
T1	35.1333	151,361	,446	,951
T2	35.0667	150,616	,503	,951
T3	35,1000	151,403	,440	,951
O1	35.0667	150,616	,503	,951
O2	35.2667	150,754	,540	,950
O3	35.0667	155,099	,142	,953

The r table value for n = 30 is 0.361, so Corrected Item-Total Correlation values below 0.361 are declared invalid and removed from the questionnaire for further research. From the validity test above, it is known that all statements are valid.

Reliability test

Reliability testing is used to determine whether the data collection tool shows a level of precision, level of accuracy, stability or consistency in capturing certain symptoms from a group of individuals even though it is carried out at different times. According to (Sugiyono, 2014), that reliability shows an understanding that an instrument is reliable enough to be used as a data collection tool because the instrument is good. A reliable instrument will produce reliable data. Reliable means trustworthy. The purpose of reliability is to understand that the instrument is reliable enough to be used as a data collection tool because the instrument is good. Cronbach's Alpha coefficient ($C\alpha$) is a statistic that is often used to test the reliability of a research instrument. A research instrument is indicated to have an adequate level of reliability if the Cronbach's Alpha coefficient is greater than or equal to 0.60. Technically, instrument testing with the formulas above uses SPSS software facilities. The reliability test obtained a Cronbach alpha value of 0.940; So according to table 4 above, this value means Very Reliable and suitable

for distribution to respondents. From the results of the table analysis, all question items are reliable.

The impact of the industrial revolution 4.0 and the Covid-19 pandemic that occurred had an impact on the implementation of the digital economy, it also provided opportunities and challenges for the economic sector. In this study, we will review the application of the implementation of the digital economy to MSMEs, which can be an alternative solution to deal with these conditions. UMKM technology and digital business are defined as a type of venture involving the latest technology in its practices and development. The application of digital concepts in business development can create new business models, experiences and operational codes that will later help to influence consumerism in both products and services that are offered. From competition, networking and networking and are networked with umkm products advanced through classes and go international. This research is focused on UMKM in the culinary sector, namely a case study at the Rahma gift center in Kendalrejo Village which had previously been operating before the Covid-19 outbreak hit Indonesia (Hisnul et al., 2022). Fashion MSMEs in Jambi City use Tiktok to transactions and promotions, then have the opportunity to increase their income 7,072 times compared to not using Tiktok for sales transactions buy and promote. In this variable, the social media Instagram and Tiktok have a significant value which are very close, namely 0.034 and 0.035, where TikTok has significant numbers higher than Instagram, this is because currently the social media is TikTok is currently very popular with the market as a place for free promotions because has a more extensive algorithm today (AYUNDA, 2023).

CONCLUSION

The deeper and more detailed conclusions of this research, which combines digitalization and partnership transformation instruments, reveal important insights about how SMEs (Small and Medium Enterprises) can develop in the digital era and collaborative economy. The instruments analyzed in this research have been tested for validity and reliability, providing a robust tool for further research in the MSME context. From the FGD on partnerships, we understand that success in business partnerships does not only depend on formal agreements, but also on relational and strategic aspects. Five key aspects—Goal Focus, Openness, Synergy, Responsibility, and Fairness—emerged as key pillars in building and maintaining strong partnerships. Specifically, Goal Focus helps in aligning partners' vision and mission, while Openness emphasizes the importance of transparency and effective communication. Synergy paves the way for collaboration that produces greater added value than individual contributions. Shared responsibility strengthens trust and accountability, while Justice ensures that all parties feel valued and treated fairly. Effective application of these principles can result in partnerships that are not only sustainable but also innovative and adaptive to market changes.

On the other hand, digital transformation has proven to be a driving force in modernizing MSMEs. Digitalization is not only about adopting new technologies, but also about transforming business processes, culture and strategies. The experience of MSMEs in implementing digital technology shows that this is a continuous process and requires strategic adaptation. Online Media, for example, has been revolutionary for MSMEs in their interactions with customers, emphasizing the importance of building online communities and creating resonant content. Workers' ability to use digital technology is critical, underscoring the need for continued investment in training and development. Digital Integration, which includes combining technology in various operational aspects, allows MSMEs to make more informed and responsive decisions. The biggest challenge in this aspect is ensuring smooth integration between technology and daily operations, so that it does not disrupt existing business processes.

The sharper conclusion from this research is that MSMEs must adopt a holistic approach in implementing digital transformation and building partnerships. Effective integration between healthy partnership practices and strategic use of digital transformation can strengthen the position of MSMEs in a competitive market. Through partnerships that focus on synergy, transparency and fairness, MSMEs can access broader resources and expertise. Meanwhile, by adopting the right digital transformation, MSMEs can increase efficiency, innovation and customer engagement. In a broader context, this conclusion is not only relevant for business growth but also for the development of a more dynamic, sustainable and inclusive MSME ecosystem.

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