The Digital Platform Promotion Strategy To Support UMKM In Bangka Belitung Province

Hengki[1*], Bambang Adiwinoto[2], Sarwindah[3], Jonari Pandia[4], Rismar Yanti[5]

[1] ISB Atma Luhur
Bangka Belitung Island
[1345] Department of Business Digital, Faculty of Economy and Business
Pangkalpinang, Bangka Belitung, indonesia

[*] Corresponding Author:
Email: Hengki@atmaluhur.ac.id

Abstract.

Since the COVID-19 pandemic entered Indonesia in early March 2020, the economy had stopped, thus affecting the socio-economic life of the community. With the pandemic, people's lives are mostly done at home (Work from Home) so that the use of digital platform technology in helping companies work on a large and small scale, especially in small and medium enterprises in the startup world. In the promotion strategy by utilizing it is also necessary to use a business intelligence model which is an analytical tool in the form of business information that is used to consolidate, analyze, store and access a lot of data in the context of business processes that lead to making decisions and actions with the aim of improving the performance of business or business strategies in the future. UMKM, especially in the province of Bangka Belitung. Therefore, we intend to carry out service in educating the public with the theme "digital platform promotion strategy to support UMKM in Bangka Belitung Province" which aims to review the use of digital platform technology and the benefits of Business Intelligence in the digital business era.

Keywords: *Platfom Digital, UMKM, Business DIgital*

I. INTRODUCTION

Since the COVID-19 pandemic has shaken the world, the economy has experienced a contraction, thus affecting the socio-economic life of the community. With the pandemic, people's lives are mostly done at home, so the use of digital business-based technology helps companies work on a large and small scale, especially in their application in the UMKM. In its application, it uses a digital platform combined with Business Intelligence which is an analytical tool in the form of business information that is used to consolidate, analyze, store and access a lot of data in the context of business processes that lead to making decisions and actions with the aim of improving business performance [1].

Therefore, we have a goal to carry out community service in educating the community with the theme Utilizing business platforms in the Digital Business Era which aims to review the use of Business Intelligence technology in this all-digital era. With this Community Service activity, a sustainable relationship is established with the title

Utilizing Digital platforms for marketing strategies in the Digital Business Era which aims to review the use of Business Intelligence technology in the digital business era [2].

Currently, various kinds of human needs have widely applied the support of the internet and the digital world as a vehicle for interaction and transactions. Currently, several types of business models and jobs in Indonesia have been affected by the digitalization era [3]. Conventional stores that already exist are starting to be replaced with marketplace business models. Traditional taxis or motorcycle taxis have begun to be shifted to online-based modes. Financial technology FinTech is the result of a combination of financial services and technology Changing the business model from conventional to moderate [4].

II. METHODS

In carrying out this activity, we use a descriptive clustering method, which is a way of obtaining correlations. Trends, clusters, and anomalies) to conclude data so as to produce information for useful decision making. Descriptive clustering method is part of data mining tasks related to business intelligence [5]. Descriptive clustering functions to identify natural groups of data based on similar attributes and is sometimes referred to as segmentation [6]. The algorithm used at this stage is to use SAW (Simple Additive Weighting) A method in a decision support system which is part of business intelligence that adds up the weights of the positive or negative aspects of each alternative on the proposed criteria [7]. This method needs a normalization process so that it can be compared with all criteria which become the decomposition of all criteria and alternatives . The following is the formula for the simple additive weighting (SAW) method [8]

$$r_{ij} = \begin{cases} \dfrac{X_{ij}}{Max\ X_{ij}} \\ \\ \dfrac{Min\ X_{ij}}{X_{ij}} \end{cases}$$

Fig. 1. SAW Formulation

Formula Description
rij = Normalized Value Rating
Maxij = Maximum Value of each Criteria
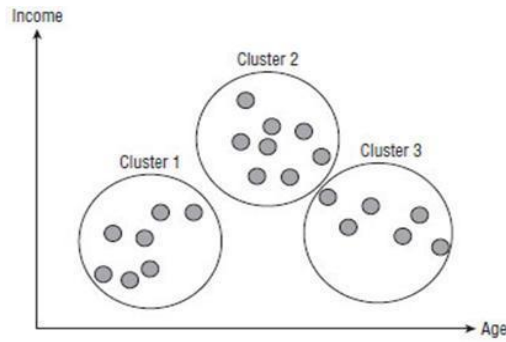Minij = Minimum Value of each Criteria
Xij = Matrix value of each criterion

Fig. 2. SAW Distribution (exp)

III. RESULT AND DISCUSSION

The marketing strategy by utilizing the digital platform used is a data mining processing model which is used as a marking technique and business analysis that focuses on statistical data, predictions, company data, and optimization.

This model also uses various alternative definitions with reference to the collection of business data in finding good results for making business decisions for small and medium enterprises, especially in the province of Bangka Belitung.

This model uses five main criteria according to the method above, namely Application (APK) with a value of 0.25, Service (SVC) with a value of 0.20, User Friedly (UFY) with a value of 0.15, Cost (COS) with a weight value of 0.20, and Connection (CON) with a value of 0.20. After the weight of the criteria, simulations will be carried out on alternative digital platforms, for example with 5 digital platforms, namely BB01, BB02, BB03, BB04, BB05. In the calculation of the main criteria and the derived criteria, values have been obtained from surveys that have been carried out where data and information are obtained from various sources. After that, distinguish which one is the negative type (COS Criteria) and the positive type (APK, SVC, UFY, CON). The results of data processing can be seen in the table below:

Table 1 Digital Platform Value Data Simulation

NO	PLATFORM DIGITAL	PLATFORM NAME	APK	SVC	UFY	COS	CON
1	BB01	PN A	1.0	0.5	1.0	0.5	1.0
2	BB02	PN B	1.0	0.75	0.5	0.5	0.5
3	BB03	PN C	1.0	0.5	0.5	0.5	1.0
4	BB04	PN D	0.75	1.0	1.0	0.5	1.0
5	BB05	PN E	1.0	0.5	1.0	0.5	0.5
Ket			Max 1	Max 1	Max 1	Min 0,5	Max 1

From the table above, the simulation results of alternative digital platforms are obtained according to the results of the respective criteria values, then normalization will then be carried out where each existing criterion is multiplied by the weight of the positive criteria and negative criteria.

Table 2 Data Normalization Value of each alternative

NO	PLATFORM DIGITAL	PLATFORM NAME	APK	SVC	UFY	COS	CON
1	BB01	PN A	1.0	0.5	1.0	1.0	1.0
2	BB02	PN B	1.0	0.75	0.5	1.0	0.5
3	BB03	PN C	1.0	0.5	0.5	1.0	1.0
4	BB04	PN D	0.75	1.0	1.0	1.0	1.0
5	BB05	PN E	1.0	0.5	1.0	1.0	0.5

The data normalization process has been carried out, then the next step is to add up or calculate the overall value of the simulated alternatives by adding up the normalized criteria weights multiplied by the initial criteria weights so that the value of each alternative digital platform is obtained to make decisions for marketing strategies at Bangka Belitung UMKM. From the simulation results, the following values are obtained: Based on the table, it is found that the best digital platform is the BB04 digital platform with the name PN D with a value of 0.94 points while the less feasible is the BB03 digital platform with the name PN C with a value of 0.72 points.

Table 3 Simulation of Normalization X Criteria Weight

NO	PLATFORM DIGITAL	PLATFORM NAME	APK	SVC	UFY	COS	CON	TOTAL
1	BB01	PN A	0.25	0.10	0.15	0.20	0.20	0.90
2	BB02	PN B	0.25	0.15	0.07	0.20	0.10	0.77
3	BB03	PN C	0.25	0.10	0.07	0.20	0.10	0.72
4	BB04	PN D	0.19	0.20	0.15	0.20	0.20	0.94
5	BB05	PN E	0.25	0.10	0.15	0.20	0.20	0.90

Then the value of the BB01 digital platform is 0.90, the BB02 digital platform is 0.77, the BB03 digital platform is 0.72, the BB04 digital platform is 0.94, and the BB05 digital platform is 0.90. Based on the table below, it is found that the best digital platform is the BB04 digital platform with the name PN D with a value of 0.94 points while the less feasible is the BB03 digital platform with the name PN C with a value of 0.72 point.

IV. CONCLUSION

From the research above, it can be concluded several things, including: The digital platform strategy in supporting UMKMdesigned is able to determine which digital platforms are suitable for use or less used based on the Simple Additive Weighting (SAW) method with 5 (five) criteria, namely the target, namely Application (APK) with 0.25, Service (SVC) with a value of 0.20, User Friedly (UFY) with a value of 0.15, Cost (COS) with a weight value of 0.20, and Connection (CON) with a value of 0.20. In this study, it combines the Business intelligence model with the clustering description method which is used to see the function of a digital platform. This research is only a model or design but has not been implemented in an application.

V. ACKNOWLEDGMENTS

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