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The Implementation of the Simple Additive Weighting (SAW) Method to Determining the Superior Commodity of Tasikmalaya City

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Abstract. Despite the significant role of determining superior commodity in the regional economic development, studies addressing this issue in the handicraft products remain scarcely conducted. This study aimed to investigate the superior products of handicraft commodities, including the creative industry of Tasikmalaya city, where the marketers go to foreign countr ies and develop the tourism industry in the Tasikmalaya city. This study used the Simple Additive Weighting(SAW) method to determine the superior commodity in Tasikmalaya city. The researcher had calculated three components to determine the superior commodity. They were capital investment values, production values, and employees. The result of this study revealed that embroidery was a superior commodity in Tasikmalaya city. The data show that embroidery consistently grows every year, with 0.4 capital investment values (K1) 0.3 production values (K2) and 0.3 employess (K3), which means that embroidery has experienced a very good increase compared to other commodities. . Based on the results of data processing and analysis that had been done with the Decision Support System with the SAW method, conclusions colud be drawn Embroidery commodity was a superior product from Tasikmalaya which was in demand by buyers with a V value of 0.4 for Capital Investment Value,0.3 for Production Value and Employees . All these findings confirm that the application of SAW method was meaningful to determine the superior commodity
Keywords: Superior commodity, Embroidery , Simple Additive Weighting(SAW)method

INTRODUCTION

To achieve national goals, Indonesia is continuing to strive to carry out development to bring the people obtain a standard of living and progress. Indonesia is a country with a large body of natural resources which undoubtedly calls for the ability to manage these assets, both technologically and managerially. Likewise, development in the world of tourism industry requires special handling and special management. Related to the management of the tourism industry, Buchari (2007), argues that the management of the tourism industry can be viewed in terms of macro and micro aspects. From the macro aspect, this management that is responsible and regulated by the government, while micromanagement arrangements are carried out by institutions that provide services to tourists, this management is directed to service truly to satisfy tourists. Tasikmalaya is dubbed the "Pearl of the East Priangan" because its richness in natural potential and located in the southern region of West Java, or referred to by the name "East Priangan". In addition, Tasikmalaya has long been known as a home-based creative industry, which produces a variety of enchanting "handicraft" products, which involve creative and skilled hands in it. Various types of handicrafts will display the characteristics and uniqueness of each, some of which have their histories. The existence of this handicraft has even been handed down and survived through the times, which is also able to support the local residents' economy for generations, including embroidery, mendong crafts, bamboo, footwear (kelom geulis, sandals, shoes), processed

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wood (furniture), batik, umbrella geulis, processed foods, building materials, clothing, printing, and so forth. As it is generally noted, economic development in national level is impossible to accomplish without regional economic development, and the determination of regional superior commodities is of great importance [2] of the development of local economy. If superior commodity has been determined, this could be the starting point to support local tourism development which is based on the concept of efficiency to achieve comparative and competitive advantage in the face of trade globalization [3]. With this significance of determining local superior commodities, a study addressing this issue particularly in the sector of handicraft products seems to experience paucity in recent years. The Reason Why we use the SAW Method The advantages of the the Simple Additive Weighting (SAW) method compared to other decisions Determine the weight value for each attribute then proceed with a ranking process that will select the best alternative from a number of alternatives. The assessment will be more precise because it is based on the criterion value of the predetermined preference weights. and There is a matrix normalization calculation in accordance with the attribute value (between the value of benefit and cost). Previous Research In Sri Devi's research, Hengki Tamando Sitohang [4] entitled Decision Support Systems Assessment of the best village in Perbaungan subdistrict with the Simple Additive Weighting (SAW) Method designed a decision support system application in the best village assessment process to encourage community business based on determination and their own strengths and the success of the community's efforts in improving the quality of economic, political, social and cultural life as well as security and order and Poverty level grouping [5]using the SAW method in his research explains that in determining the poverty level in Pringsewu sub-districts using the SAW method, Ambarawa is seen as an underdeveloped area so it is hoped that special attention needs to be given with the lowest score with a ranking of 0.697. In the research of Hendri et al., [6]the Decision Support System for the Selection of Potential Business Places with the SAW Method (Case Study: SahabatLink Tasikmalaya) based on the results of their research, the recommendation for a place of business using the Simple Additive Weighting (SAW) method is Jl. Cigeureung No 08 Beside SMK N 1 Tasikmalaya City is the best alternative if you want to open a new business area or branch because it has a total alternative value of 35.4. The final result of Teuku Mufizar, Rima Listiani Lestari's research entitled Implementation of the simple additive weifhting (SAW) method in the deciosn support system of commercial loan eligibility in SB simpan pinjam and loan Tasikmalaya [7], it was found that the decision support system with the SAW method for providing creditworthiness for commercial loans, the implementation of the SAW method was able to reduce errors in analyzing credit at SB Simpan Pinjam Tasikmalaya. The results of these tests are then compared with the results of tests carried out on systems that have been created using the same data. The final result of the tests carried out on the system that has been built turns out that Doni's alternative produces the same score, namely "75.2" and is declared "Eligible". The advantages of the Simple Additive Weighting (SAW) model over with other decision-making models lies in its ability to make a more accurate assessment. According to Sri Eniyati [8], the method SAW is suitable for the decision-making process because it can determine the value of weights for each attribute, then proceed with the ranking process which will select the best alternative from a number of the best alternatives. Other than that, The advantages of the SAW model compared to the decision-making model the other lies in its ability to make more judgments right because it is based on the criteria values and preference weights that have been determined determined. Henry Wibowo S [9]stated that the total change in the value of produced by the SAW method is more so that the SAW method is very relevant to solving decision-making problems Therefore, this study is trying to fill in this gap by determining the superior Tasikmalaya handicraft products with the SAW method which will affect the investment value, production value, and employment from 2009 to 2018 so that this becomes a reference and a good example for developing other handicraft products. The results of this study are expected to provide input to the handicraft entrepreneurs, and Tasikmalaya government can find out the causes of the development of other companies which in turn harm the decline in income for the entrepreneurs themselves and the Tasikmalaya government to be able to increase the sales volume of a product produced both services or goods, of course, it is necessary to have a proper and accurate analysis by marketing management, one of which is understanding consumer behavior whose purpose is to understand what is happening in the awareness of buyers ranging from external stimuli to emergence of buyer purchasing decisions (Philip, 2009). Superior commodities can be seen from two sides, the supply and demand. From the supply side, superior commodities are categorized by superiority in its development in the biophysical conditions, technology and socio-economic circumstances in a region [11]. Meanwhile, from the demand side, leading commodities can be recognised from the strong demand in both domestic and international markets. These commodities are main products of physical considerations (such as soil and climate conditions) as well as socio-economic and institutional (such as human resource, technological infrastructure, and socio-cultural conditions) to be developed in an area [12].

MATH AND EQUATIONS

his research designed its quantitative method where the authors took data in Trade, Cooperative, and UMKM Departement in Tasikmalaya City. We used Simple Additive Weighting (SAW) method. This method required the decision matrix to determine the value weights for each attribute. The total score for an alternative was obtained by adding up all of the multiplication results between the rating and the weight of each attribute. SAW method is known as the weighted sum method (Kusumadewi, 2006). In its completion, the SAW method requires the decision matrix normalization process (x)to a scale that can be compared with all available alternative ratings.

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

If j is atribute for benefit If j is atribute for cost

Explanation : rij: Normalized performance rating Maxi: The maximum value of each row and column Mini : The minimum Value of each row and column Xij : Rows and columns of the matrix rij is a normalized performance rating of Ai alternatives in attributes Cj ;i=1,2,...,m and j=1,2,...,n.

The preference value for each alternative (Vi) is given as:

Vi=(j = 1)

nwjri j

Source: (Kusumadewi, 2006, p. 74)

Explanation :

Vi : Final value of the alternative

Wi : Predetermined weight

Rij : Matrix normalization

Vi Value is the larger one that identifies that AI alternatives are chosen.

Data Analyses and Hypotheses Testing

All data collected from Trade, Cooperative, and UMKM Department in Tasikmalaya City. It started from 2009 to 2018 and has been processed using SAW method software. In this research, data were analyzed separately from each other. This data below showed the development of industry investment value amount in Tasikmalaya city, the development of industrial production value amount in Tasikmalaya City, and the development of industry employees value amount in Tasikmalaya City. In Tasikmalaya, there are many industry commodities, such as embroidery, mendong crafts, bamboo, footwear (kelom geulis, sandals, shoes), processed wood (furniture), batik, umbrella geulis, processed foods, building materials, clothing, printing, and so forth. Table 1: The development of industry investment value amount in Tasikmalaya City from 2009-2018

TABLE I. The development of industry investment value amount in Tasikmalaya City from 2009-2014

No	Commodity Industry Superior	2009	2010	2011	2012	2013	2014
1	Embroidery	150.500.992	167.510.992	183.823.492	201.918.942	223.117.942	228.318.442
2	Mendong Handicraft	6.838.232	6.891.232	6.891.232	6.891.232	6.891.232	6.891.232
3	Bamboo Handicraft	1.200.038	1.200.038	1.200.038	1.200.038	1.200.038	1.200.038
4	Footlayer (Kelom Geulis, Sandal, Sepatu)	41.868.112	44.720.612	45.565.612	46.769.612	47.097.612	47.868.612
5	Furniture (Meubel)	9.154.199	9.397.199	9.493.199	9.712.199	9.712.199	9.980.699
6	Batik	7.700.576	7.700.576	7.840.576	7.840.576	7.840.576	7.840.576
7	Beautiful Umbrella	45.500	45.500	45.500	45.500	45.500	45.500
8	Culinary food	33.808.160	36.222.160	37.307.160	37.781.160	38.872.160	39.690.960

TABLE II. The development of industry investment value amount in Tasikmalaya City from 2015-2018

No	Commodity Industry Superior	2015	2016	2017	2018
1	Embroidery	239.774.416	242.607.416	243.329.416	244.051.416
2	Mendong Handicraft	6.891.232	7.011.232	7.011.232	7.011.232
3	Bamboo Handicraft	1.200.038	1.200.038	1.200.038	1.200.038
4	Footlayer (Kelom Geulis, Sandal, Sepatu)	48.361.562	48.813.562	49.019.562	50.586.562
5	Furniture (Meubel)	10.100.699	24.871.699	26.971.699	28.677.699
6	Batik	7.840.576	7.840.576	7.840.576	7.840.576
7	Beautiful Umbrella	45.500	78.500	78.500	78.500
8	Culinary food	43.645.460	49.036.460	51.790.460	52.860.460

TABLE III. The development of industry investment value amount in Tasikmalaya City from 2009-2014

No	Commodity Industry Other	2009	2010	2011	2012	2013	2014
1	Building Material	44.217.194	44.879.582	46.040.582	47.599.582	51.763.582	208.265.582
2	Clothings	612.189.000	13.600.300	13.646.300	16.324.300	18.548.300	22.213.800
3	Printing	5.295.500	5.751.500	6.274.500	8.009.500	8.009.500	8.528.500
4	Others	50.869.534	53.675.236	60.749.236	65.593.436	67.415.436	67.961.534

TABLE IV. The development of industry investment value amount in Tasikmalaya City from 2015-2018

No	Commodity Industry Other	2015	2016	2017	2018
1	Building Material	208.719.677	216.419.677	216.619.677	216.770.677
2	Clothings	23.348.800	23.629.800	24.085.800	24.188.800
3	Printing	8.701.000	9.021.000	9.566.000	9.566.000
4	Others	68.128.084	68.773.084	68.925.084	69.590.084

TABLE V. The development of industry production value amount in Tasikmalaya City from 2009-2014

No	Commodity Industry Superior	2009	2010	2011	2012	2013	2014
1	Embroidery	664.386.176	727.564.576	799.997.576	891.767.576	977.616.576	1.001.368.476
2	Mendong Handicraft	41.143.874	42.223.874	42.223.874	42.223.874	42.223.874	42.223.874
3	Bamboo Handicraft	5.466.606	5.466.606	5.466.606	5.466.606	5.466.606	5.466.606
4	Footlayer (Kelom Geulis, Sandal, Sepatu)	301.192.510	339.919.730	354.013.230	368.253.230	371.630.230	382.228.230
5	Furniture (Meubel)	50.812.745	51.880.745	52.788.745	55.003.745	55.003.745	60.898.745
6	Batik	50.145.682	50.145.682	51.540.682	51.540.682	51.540.682	51.540.682
7	Beautiful Umbrella	636.800	636.800	636.800	636.800	636.800	636.800
8	Culinery Foods	653.964.166	665.807.854	676.684.162	678.937.162	688.088.238	693.881.238

TABLE VI. The development of industry production value amount in Tasikmalaya City from 2015-2018

No	Commodity Industry Other	2015	2016	2017	2018
1	Embroidery	1.050.412.116	1.063.666.116	1.066.657.116	1.067.757.116
2	Mendong Handicraft	42.223.874	43.203.874	43.203.874	43.203.874
3	Bamboo Handicraft	5.466.606	5.466.606	5.466.606	5.466.606
4	Footlayer (Kelom Geulis, Sandal, Sepatu)	389.531.430	391.896.430	393.146.430	395.566.430
5	Furniture (Meubel)	63.623.745	65.706.245	75.006.245	82.656.245
6	Batik	51.540.682	51.540.682	51.540.682	51.540.682
7	Beautiful Umbrella	636.800	636.800	1.216.800	1.216.800
8	Culinery Foods	709.578.990	938.429.830	947.719.830	950.004.830

TABLE VII. The development of industry production value amount in Tasikmalaya City from 2009-2014

No	Commodity Industry Other	2009	2010	2011	2012	2013	2014
1	Building Material	296.151.396	306.204.396	316.943.896	326.392.896	371.872.896	542.905.763
2	Clothings	80.212.800	95.328.600	95.460.600	114.386.850	134.596.850	153.420.850
3	Printings	22.416.916	22.826.916	24.436.716	27.575.716	27.575.716	28.302.716
4	Others	264.377.598	284.824.510	304.135.510	396.140.176	403.490.176	408.963.776

TABLE VIII. The development of industry production value amount in Tasikmalaya City from 2015-2018

No	Commodity Industry Other	2015	2016	2017	2018
1	Building Material	546.888.403	560.310.403	561.840.403	561.840.403
2	Clothings	161.961.350	164.960.350	167.605.350	167.930.350
3	Printings	27.868.462	29.039.462	31.521.862	31.521.862
4	Others	414.492.776	417.897.576	418.522.576	419.972.576

TABLE IX. The development of industry employees value amount in Tasikmalaya City from 2009-2014

No	Commodity Industry Superior	2009	2010	2011	2012	2013	2014	
1	Embroidery	11.881	12.208	12.506	12.907	13.366	13.571	13.958
2	Mendong Handicraft	2.252	2.262	2.262	2.262	2.262	2.262	2.262
3	Bamboo Handicraft	660	660	660	660	660	660	660
4	Footlayer (Kelom Geulis, Sandal, Sepatu)	5.273	5.607	5.737	5.887	5.969	6.054	6.132
5	Furniture (Meubel)	1.181	1.208	1.222	1.258	1.258	1.284	1.299
6	Batik	636	636	695	695	695	695	695
7	Beautiful Umbrella	47	47	47	47	47	47	47
8	Culinery Foods	4.054	4.331	4.497	4.528	4.594	4.659	4.809

TABLE X. The development of industry employees value amount in Tasikmalaya City from 2015-2018

1	Embroidery	13.958	14.054	14.071	14.097
2	Mendong Handicraft	2.262	2.292	2.292	2.292
3	Bamboo Handicraft	660	660	660	660
4	Footlayer (Kelom Geulis, Sandal, Sepatu)	6.132	6.163	6.202	6.213
5	Furniture (Meubel)	1.299	1.415	1.491	1.538
6	Batik	695	695	695	695
7	Beautiful Umbrella	47	56	56	56
8	Culinery Foods	4.809	4.958	5.049	5.143

TABLE XI. The development of industry employees value amount in Tasikmalaya City from 2009-2014

No	Commodity Industry Other	2009	2010	2011	2012	2013	2014
1	Building Material	3.489	3.533	3.588	3.658	3.835	4.042
2	Clothings	766	886	895	1.062	1.153	1.519
3	Printings	206	221	237	317	317	336
4	Others	2.398	2.654	2.775	2.915	2.973	3.010

TABLE XII. The development of industry employees value amount in Tasikmalaya City from 2015-2018

No	Commodity Industry Other	2015	2016	2017	2018
1	Building Material	4.072	4.124	4.132	4.152
2	Clothings	1.636	1.658	1.691	1.711
3	Printings	354	362	375	387
4	Others	3.054	3.079	3.081	3.099

The analyzed data were interpreted to answer the data in Table I - XII. We had processed the data by SAW method with the criteria as follows:

K1 = Capital Investment Value (40%)

K2 = Production Value (30%)

K3 = Employees (30%)

TABLE XIII. The result of data processing 2009

Number	K1	K2	K3	Result	Name of Product
V1	0,4	0,3	0,3	1	Embroidery
V10	0,03	0,04	0,02	0,09	Clothing
V11	0,014074326	0,01	0,01	0,03	Printing
V12	0,135200528	0,12	0,06	0,32	others
V2	0,02	0,02	0,06	0,09	mendong handicraft
V3	0	0	0,02	0,02	Bamboo handicrafts
V4	0,11	0,14	0,13	0,38	foot layer
V5	0,02	0,02	0,03	0,08	furniture
V6	0,02	0,02	0,02	0,06	batik
V7	0	0	0	0	Beautiful umbrella
V8	0,09	0,3	0,1	0,49	culinery foods
V9	0,12	0,13	0,09	0,34	building material

TABLE XIV. The result of data processing 2010

Number	K1	K2	K3	Result	Name of Product
V1	0,4	0,3	0,3	1	Embroidery
V10	0,03	0,04	0,02	0,09	Clothing
V11	0,013734024	0,01	0,01	0,03	Printing
V12	0,128171257	0,12	0,07	0,31	others
V2	0,02	0,02	0,06	0,09	mendong handicraft
V3	0	0	0,02	0,02	Bamboo handicrafts
V4	0,11	0,14	0,14	0,38	foot layer
V5	0,02	0,02	0,03	0,07	furniture
V6	0,02	0,02	0,02	0,05	batik
V7	0	0	0	0	Beautiful umbrella
V8	0,09	0,27	0,11	0,47	culinery foods
V9	0,11	0,13	0,09	0,32	building material

TABLE XV. The result of data processing 2011

Number	K1	K2	K3	Result	Name of Product
V1	0,4	0,3	0,3	1	Embroidery
V10	0,03	0,04	0,02	0,09	Clothing
V11	0,01	0,01	0,01	0,03	Printing
V12	0,13	0,11	0,07	0,31	others
V2	0,01	0,02	0,05	0,09	mendong handicraft
V3	0	0	0,02	0,02	Bamboo handicrafts
V4	0,1	0,13	0,14	0,37	foot layer
V5	0,02	0,02	0,03	0,07	furniture
V6	0,02	0,02	0,02	0,05	batik
V7	0	0	0	0	Beautiful umbrella
V8	0,08	0,25	0,11	0,44	culinery foods
V9	0,1	0,12	0,09	0,31	building material

TABLE XVI. The result of data processing 2012

Number	K1	K2	K3	Result	Name of Product
V1	0,4	0,3	0,3	1	Embroidery
V10	0,03	0,04	0,02	0,09	Clothing
V11	0,01	0,01	0,01	0,03	Printing
V12	0,13	0,11	0,07	0,31	others
V2	0,01	0,02	0,05	0,09	mendong handicraft
V3	0	0	0,02	0,02	Bamboo handicrafts
V4	0,1	0,13	0,14	0,37	foot layer
V5	0,02	0,02	0,03	0,07	furniture
V6	0,02	0,02	0,02	0,05	batik
V7	0	0	0	0	Beautiful umbrella
V8	0,08	0,25	0,11	0,44	culinery foods
V9	0,1	0,12	0,09	0,31	building material

TABLE XVII. The result of data processing 2012

Number	K1	K2	K3	Result	Name of Product
V1	0,4	0,3	0,3	1	Embroidery
V10	0,03	0,04	0,02	0,1	Clothing
V11	0,02	0,01	0,01	0,03	Printing
V12	0,13	0,13	0,07	0,33	others
V2	0,01	0,01	0,05	0,08	mendong handicraft
V3	0	0	0,02	0,02	Bamboo handicrafts
V4	0,09	0,12	0,14	0,35	foot layer
V5	0,02	0,02	0,03	0,07	furniture
V6	0,02	0,02	0,02	0,05	batik
V7	0	0	0	0	Beautiful umbrella
V8	0,07	0,23	0,11	0,41	culinery foods
V9	0,09	0,11	0,09	0,29	building material

TABLE XVIII. The result of data processing 2013

Number	K1	K2	K3	Result	Name of Product
V1	0,4	0,3	0,3	1	Embroidery
V10	0,03	0,04	0,03	0,1	Clothing
V11	0,01	0,01	0,01	0,03	Printing
V12	0,120860627	0,12	0,07	0,31	others
V2	0,01	0,01	0,05	0,08	mendong handicraft
V3	0	0	0,01	0,02	Bamboo handicrafts
V4	0,08	0,11	0,13	0,33	foot layer
V5	0,02	0,02	0,03	0,06	furniture
V6	0,01	0,02	0,02	0,05	batik
V7	0	0	0	0	Beautiful umbrella
V8	0,07	0,21	0,1	0,38	culinery foods
V9	0,09	0,11	0,09	0,29	building material

TABLE XIX. The result of data processing 2014

Number	K1	K2	K3	Result	Name of Product
V1	0,4	0,3	0,3	1	Embroidery
V10	0,04	0,05	0,03	0,12	Clothing
V11	0,01	0,01	0,01	0,03	Printing
V12	0,12	0,12	0,07	0,31	others
V2	0,01	0,01	0,05	0,07	mendong handicraft
V3	0	0	0,01	0,02	Bamboo handicrafts
V4	0,08	0,11	0,13	0,33	foot layer
V5	0,02	0,02	0,03	0,06	furniture
V6	0,01	0,02	0,02	0,04	batik
V7	0	0	0	0	Beautiful umbrella
V8	0,07	0,21	0,1	0,38	culinery foods
V9	0,36	0,16	0,09	0,62	building material

TABLE XX. The result of data processing 2015

Number	K1	K2	K3	Result	Name of Product
V1	0,4	0,3	0,3	1	Embroidery
V10	0,04	0,05	0,04	0,12	Clothing
V11	0,01	0,01	0,01	0,03	Printing
V12	0,11	0,12	0,07	0,3	others
V2	0,01	0,01	0,05	0,07	mendong handicraft
V3	0	0	0,01	0,02	Bamboo handicrafts
V4	0,08	0,11	0,13	0,32	foot layer
V5	0,02	0,02	0,03	0,06	furniture
V6	0,01	0,01	0,01	0,04	batik
V7	0	0	0	0	Beautiful umbrella
V8	0,07	0,2	0,1	0,38	culinery foods
V9	0,35	0,16	0,09	0,59	building material

TABLE XXI. The result of data processing 2016

Number	K1	K2	K3	Result	Name of Product
V1	0,40	0,30	0,30	1,00	Embroidery
V10	0,04	0,05	0,04	0,12	Clothing
V11	0,01	0,01	0,01	0,03	Printing
V12	0,11	0,12	0,07	0,30	others
V2	0,01	0,01	0,05	0,07	mendong handicraft
V3	0	0,00	0,01	0,02	Bamboo handicrafts
V4	0,08	0,11	0,13	0,32	foot layer
V5	0,04	0,02	0,03	0,09	furniture
V6	0,01	0,01	0,01	0,04	batik
V7	0,00	0,00	0,00	0,00	Beautiful umbrella
V8	0,08	0,26	0,11	0,45	culinery foods
V9	0,36	0,16	0,09	0,60	building material

TABLE XXII. The result of data processing 2017

Number	K1	K2	K3	Result	Name of Product
V1	0,4	0,3	0,3	1	Embroidery
V10	0,04	0,05	0,04	0,12	Clothing
V11	0,015725185	0,01	0,01	0,03	Printing
V12	0,113303332	0,12	0,07	0,3	others
V2	0,01	0,01	0,05	0,07	mendong handicraft
V3	0	0	0,01	0,02	Bamboo handicrafts
V4	0,08	0,11	0,13	0,32	foot layer
V5	0,04	0,02	0,03	0,1	furniture
V6	0,01	0,01	0,01	0,04	batik
V7	0	0	0	0	Beautiful umbrella
V8	0,09	0,27	0,11	0,46	culinery foods
V9	0,36	0,16	0,09	0,6	building material

TABLE XXIII. The result of data processing 2018

Number	K1	K2	K3	Result	Name of Product
V1	0,4	0,3	0,3	1	Embroidery
V10	0,04	0,05	0,04	0,12	Clothing
V11	0,015656018	0,01	0,01	0,03	Printing
V12	0,113893333	0,12	0,07	0,3	others
V2	0,01	0,01	0,05	0,07	mendong handicraft
V3	0	0	0,01	0,02	Bamboo handicrafts
V4	0,08	0,11	0,13	0,33	foot layer
V5	0,05	0,02	0,03	0,1	furniture
V6	0,01	0,01	0,01	0,04	batik
V7	0	0	0	0	Beautiful umbrella
V8	0,09	0,27	0,11	0,46	culinery foods
V9	0,35	0,16	0,09	0,6	building material

DISCUSSION

The results of the data processing show that all results proposed in this research are supported, regardless of where it was conducted. The data from Trade, Cooperative, and UMKM Department in Tasikmalaya, shows that capital value, production value, and employees have a positive effect on marketing in the tourism industry. High capital investment and high production have a positive effect on absorption labors. Employees' good skill to get a good product is also pivotal to satisfy customers and the customer satisfaction has a positive effect on repurchase intention. Based on these results, it can be concluded that the product will be sold out in the market if the owner of the company take into account these many factors such as needs, wants, demands, products and services, value, satisfaction, quality, exchanges, transactions, relationships, and markets.

This study researches how to determine superior commodities using the method of SAW. As it is generally known, Tasikmalaya has many handicrafts made both traditionally and modernly. This makes Tasikmalaya famous for its handicrafts and attracts many domestic and foreign tourists come to Tasikmalaya to see and buy Tasikmalaya typical handicraft products. This certainly has a good impact on marketing these products and of course generates revenue for the local government.

Why embroidery is a superior commodity has three factors to support it. First, its capital investment value increases almost every year because a lot of production must be added if we can see from table 1. Secondly, production value also increases by consumer demand we can see in table 2. Thirdly, employees is a very important factor in producing a product so that the products ordered by customers will be fulfilled and of course customers will feel satisfied so that the turnover will continue to increase and this will have a positive impact on the development of the tourism industry in Tasikmalaya, (table 3). This study concludes that to gain better business performance, the marketer of a

company has to combine all variables (consumer behaviour, marketing strategy, and customer satisfaction) rather than just focusing their efforts only on marketing strategy, where ensuring the highest level of customer satisfaction should become the most essential efforts to gain the highest business performance [19]

Nevertheless, there are some limitations of this study. We researched to determine the superior handicraft commodities in Tasikmalaya using the SAW method that we calculated, in this case, are capital investment value, production value, and employees. The results show that embroidery is a superior product commodity in Tasikmalaya. First, its capital investment rose from Rp. 150,500,992 (2009) to Rp. 244,404,416 (2018). Second, it can be seen from the production value in 2009 up to 2018 that production remains at 5,466,606. Finally, we see that the workforce from 2009 to 2018 starting from 11,881 to 14,097 continues to increase for labor absorption. It can be concluded that the condition of opportunity for the industry in Tasikmalaya City seems to give a bigger opportunity for the embroidery businessmen to develop their business compared to the condition of threat. The threats for this industry are the buying interest of people which tends to go down, ASEAN Economic Community, the embroidery industry in other areas that starts to penetrate the market, the main material that has to be paid in cash, the embroidery selling with postponing payment system, the fashion industry non-embroidery which is getting developed, and the competitors' reputation that start to be popular in the market [20]

CONCLUSION

The development of creative industries in Tasikmalaya city is supported by superior products which boosted by marketers. The study found three aspects in determining the superior products or commodity, those are capital investment values, production values, and employees. Based on the determination on superior commodity, it was found that embroidery is a superior commodity which dominate the commodity in Tasikmalaya. Based on the results of data processing and analysis that has been done with the Decision Support System with the SAW method, conclusions can be drawn Embroidery commodity is a superior product from Tasikmalaya which is in demand by buyers with a V value of 0.4 for Capital Investment Value,0.3 for Production Value and Employees . All these findings confirm that the application of SAW method is meaningful to determine the superior commodity .

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