

Knowledge Management: Adoptions And Influence On The Implementation Of Competency Apprenticeship Smes “Style” In Makassar

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Abstract

Economic development of a nation is strongly influenced by the development of creative enterprises, namely Small and Medium Enterprises (SMEs). SMEs are considerably concerned to be the foundation of a country against the poverty issues. Some studies reveal the contribution of SMEs contribute up to 60.34 percent to a country's GDP. However, SMEs experience a variety of basic problems, among others, on knowledge adoption applied in SME-organizations as well as apprenticeship for the competency improvements of SMEs. Adaptability and adoption ability of knowledge in SMEs is one of the emerging issues (Kusumawijaya and Astuti, 2012; Ley T. et al., 2005).

The study aims to analyse the knowledge management adoption; consist of leadership, mutual understanding, system adoption, and learning culture; and its influence on apprenticeship competency of culinary SMEs in Makassar, both as a whole and partially. Employing a descriptive quantitative research design to 124 employees of culinary SMEs in Makassar, the results indicate the whole determinants can show a positive effect interactively to the competency apprenticeship of SMEs in Makassar. Contrary, only learning culture demonstrates a positive partial effect on the competency apprenticeship of employee..

Keywords: knowledge management (KM) adoption, leadership, mutual understanding, system adoption, learning culture, competency apprenticeship, SMEs.



INTRODUCTION

Small and Medium Enterprises (SMEs) need to be serious attention as one of the organizational entities. It is because of the role of SMEs as the economic pillar of Indonesia. SMEs have demonstrated their major contribution to the national development during Indonesian monetary crisis in 1997 through the creation of job opportunities, providing flexibility in needs and overall innovation (Partomo, 2002). In fact, more than 95% of the whole enterprises in the world are categorized as SMEs (Beck & Cull, 2014). In addition, MSMEs act as contributor to most of a country's GDP (Jasra et al., 2011). Indonesia, through the 1945 Constitution, has mandated that it becomes a joint task for all citizens to advance the welfare of the Nation. In article 27 paragraph 2 states that every citizen has the right to work and decent livelihood for humanity. The mentioned article mandates the equality of social and popular justice, showing that economic rights are guaranteed and regulated. The state is obliged to alleviate poverty, create jobs and improve national competitiveness. Therefore, SMEs are a real step towards efforts to alleviate poverty which are expected to contribute the long-term stability to the economic condition of a state.

Bank of Indonesia (www.bi.go.id, 2012) has released a report containing the number of SMEs in Indonesia that reaches 56,534,592 units, absorbing 107,657,509 workforces (97.6%). SMEs contribute 4,869,568.1 billion rupiah in GDP (at current prices, 2012) and 1,451,460.2 billion rupiah (at constant prices). The data represent the indisputable ability of SMEs to absorb labor, very large but not been matched by the competency with large enterprises especially multinational enterprises. The Cooperatives and Micro, Small and Medium Enterprises Office of South Sulawesi Province (Monday 30th January 2017 in the business rubric of rakyatku.com, Makassar) released a statement about providing capital assistance for SMEs to trigger their creativity. Capital assistance is expected to facilitate the production and marketing of SMEs' products in the region. It was also stated that by cooperating with the regional government, The Cooperatives and Micro, Small and Medium Enterprises Office would conduct the arrangement of production, marketing, and improvement of packaging that is expected to radically elevate the South Sulawesi SMEs' market. The assistance that will be given to SMEs spread across 24 provinces in South Sulawesi is ranging from 25 to 500 million rupiah. This policy shows that strategic efforts are carried out by the Government to accelerate the optimization of the performance of SMEs that are already so large.

Tambunan (2007) states a variety of problems SMEs in Indonesia is related to the limited capital which results in limited facilities and infrastructure, the ability of SMEs' actors, especially SMEs' owners who are generally the actors at the same time. In addition, information technology advance as well culture built in the management of



SMEs are the basic problems of SMEs. In fact, the Minister of Cooperatives and SMEs in 2014 said that the weakness in many SMEs is the value mismatch adopted by organizational leadership which will have an impact on not optimally utilizing the resources, and also strategies and innovations that have not been effective in accelerating SME performance in the competition.

The South Sulawesi Provincial Government has launched a million SMEs program applying in all regions in South Sulawesi, including Makassar, since 2010 until now. Through pro-SME policies, it is expected to trigger the spirit of SME entrepreneurs to continue growing and developing. Makassar, as the central axis of Indonesia, and a barometer of the size of the development of cities in Eastern Indonesia, has a large number of 103,154 enterprises categorized as SMEs in 2013. This number increased to 119,494 units in 2015 (Source of BPS, Makassar city). These data shows that the number of SMEs in Makassar continues to increase. In fact, it is expected that the increase will reach 10% in a year. To realize the plan, the Government of Makassar City has implemented a main program called Bulo (Badan Usaha Lorong or Aisle Business Entity). The idea of this program is the ease to establish small business entities or Bulo along the 7,255 aisles in Makassar. To date, there are 700 Bulos have been registered in Makassar. The emphasis of Bulo concept is to empower household enterprises with healthy pharmacies (detik.com, 2017). Referring to previous SMEs' observers, SMEs are essential in building the economy of a country. SMEs offer entrepreneurship, creativity, innovation and provide empowerment solutions for workforces (Birch in Utami & Lantu, 2013). Thus, the government has great concern to the alignments and support of for the SMEs development.

The support from government, however, solely seems to be meaningless when SMEs as creative industries cannot prepare themselves to capture various supports, which are also the launching of these opportunities. The Ministry of Industry and various writings related to SMEs detected the fundamental problems faced by SMEs in Indonesia including internal factors (Santoso et al., 2014; Kusumawijaya & Astuti, 2012). It was stated that the internal factors: market access and marketing activities, access to banking capital, governance and management, and quality of human resources. These are very crucial factors in determining the adaptability of SMEs to win the competition. Kusumawijaya & Astuti (2012) mentioned that there are several internal problems that become obstacles to the success of SMEs, namely 1) lack of awareness and willingness of SMEs to apply appropriate knowledge and technology, 2) limited capital to implement appropriate technology, 3) lack of entrepreneurial ability to take advantage of business opportunities, and 4) weak access and limited



information about sources of technology and knowledge so that it does not trigger the innovation of SMEs.

Of all these problems, some experts found that the adoption of Knowledge Management (hereinafter known as KM) in the form of a system is a critical factor in determining organizational success (Evangelista et al., 2010). Especially for SME-categorized organizations, SMEs are a milestone in improving the economy of a nation in this dynamic competition era. Therefore, SMEs should treat knowledge as an asset for their sustainability, especially for the sake of winning competition (Kusumawijaya & Astuti, 2012). Based on the background, the model is illustrated in Figure 1.

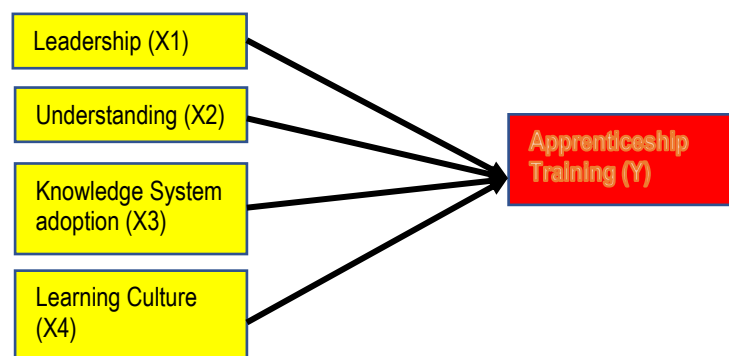


Figure 1. Conceptual framework of the study

Theoretical Background and Literature Review

Adoption of Knowledge Management and Apprenticeship SME

Entrepreneurship is categorized as a skill inherent in each individual human being. However, it is mixed with the instinctive tendencies of humans to explore and apply it in the business world. Father of world economy, Adam Smith, in 1776 defined entrepreneurship as an individual who created an organization for commercial purposes. Jean Baptiste Say (1803) described an entrepreneur as someone who has the art and skills to create new companies, and who has an understanding of the needs of the community. Other than those, John Stuart Mill (1848) viewed the need for entrepreneurship in private companies, since then the term of entrepreneur has become an icon for the founders of business companies (Acar, 1993).

Joseph Schumpeter (1934) gave a term of entrepreneurship as a force of creative destruction, namely a person who has the power to carry out creative destructive activities or better known as innovative activities. More specifically, Peter

F. Drucker (1964) stated that an entrepreneur is a person who is able to mobilize their resources to high-income fields (Beal R. M, 2000).

Entrepreneurship is generally synonymous with SMEs and is synonymous with innovation and creativity. This means that SME-categorized organizations strongly require innovation and creativity in their management management systems. There have been many inputs given by researchers related to the SME. Among them, Supriyanto (2016) found that SMEs, through their entrepreneurship, are able to overcome the problem of poverty in Indonesia. It is stated that the SME sector contributes to employment, up to more than 99.45% of Indonesia's workforce and contributes around 30% of our GDP. Realizing this, not a few government efforts to encourage the development of SMEs. The efforts are by providing SME actors competency development programs into four types of activities: (1) growth of a conducive business climate, (2) development of business support systems, (3) entrepreneurial development and competitive advantage, and (4) micro-scale business empowerment (Roffe, 2007). In addition, various research findings related to SMEs include suggested an applicable information system mechanism, which can support SMEs in disseminating information with fast response times, increasing interaction and building a conducive SME organizational culture, improving path cycle management, supplying goods etc. The whole "issue" is essentially very critical and related to the field of information management which can be said to be weak. It triggers other problems faced by SMEs, including the declining competitiveness of SMEs because of the low quality of human resources caused by low education levels (Tambunan 2002). All these problems are summarized in the scientific label "knowledge management".

Before understanding knowledge management, we need to understand in advance the basic understanding of knowledge. Knowledge is more than data and information (Devenport & Prusak, 1998), yet it is organized information for problem solving (Woolf & Liebowitz, 1999). It is the information that has been carefully analyzed, organized so can be understood and facilitates the interests of certain decisions (Turban et al., 2004). Even Albert Einstein clearly distinguished information and knowledge by stating that "knowledge is organizing experience, everything else is information".

As an organized information, knowledge must be managed effectively. Therefore, the management requires knowledge management. Knowledge management is the management of knowledge carried out by the organization in order to create value and optimize performance (Tiwana, 2000). Quintas et al. (1997) simply defined knowledge management as everything about a sustainable effort made by the organization to meet various currents and future needs. The process used in



managing the organization, by Probst et al. (2000) is divided into 8 process steps, namely 1) setting knowledge goals, 2) identifying knowledge, 3) acquiring knowledge, 4) developing knowledge, 5) distributing and transferring knowledge, 6) knowledge utilization, 7) knowledge maintenance and storage, and 8) knowledge evaluation. Of the eight processes of managing knowledge, the most popular process includes knowledge acquisition or adoption of knowledge (McElroy, 2002).

Researchers found that KM was effectively implemented, among others, indicated through competency apprenticeship programs (Ley T. et al., 2005). However, the limitations of KM research in the SME class industry are the main reasons underlying this study especially in the SME industry engaged in the culinary field. Anyone knows that the culinary industry is well known as “a very durable industry”. It is part of that civilization throughout human civilization. Emmanuella et al. (2012) found that in developing countries, SME activities exist in the very heterogeneous informal sector and are engaged in the food, textile, and various products that use light techniques such as bamboo and boards. Especially for the culinary industry, Entas et al. (2016) stated that culinary is an attribute of people's lifestyles which greatly supports the survival and welfare of the community. Through culinary encourage various economic activities in certain regions, of course based on the gastronomic expertise of the businessSMEN (Wolf & Suriani, 2009). Therefore, choosing the culinary industry is a best option to be the object in this study.

Various research findings related to SMEs suggested providing an applicable information system mechanism which can support SMEs in disseminating information with fast response times, increasing interaction and building a conducive SME organizational culture, improving path cycle management, supplying goods etc. The whole "issue" is essentially very critical and related to the field of information management which can be said to be weak and triggers other problems faced by SMEs. The problems include the declining competitiveness of SMEs because of the low quality of human resources caused by low education levels (Tambunan 2002). All these problems are summarized in the scientific label "knowledge management" or known as KM.

SMEs have principally adopted KM, although the implementation of KM adoption will certainly be different from the adoption of KM as other large industries. However, Wong (2005) stated that KM is universal which is needed by both large companies and SMEs. Particularly, regarding the adoption of KM in large scale organizations and SMEs, Wong (2015) distinguished it by including these differentiating factors in Critical Success Factors (CSFs).

Various expert opinions cited by Wong (2015) related to CSFs, including; Rockart in 1979 divided CSFs as regions when they were able to give satisfaction,



which would support the competitive advantage of the organization. Sarah (1989), also quoted by Wong (2005), identified management planning and its implementation as CSFs in adopting organizational KM. Both of these opinions by Wong (2005) are categorized as internal critical factors. Skrine & Amidon in Wong (2005) identified seven organizational CSFs in adopting KM, including strong relational in business, strong vision and architecture, leadership knowledge, culture, sustainable learning, infrastructure, systematics of technological development, and organizational knowledge process. It was stated that not all of these factors would be appropriate to be applied in smaller organizations. Yet, is that the case? This study aims to examine the effect of KM adoption factors on the implementation of the organization's employee competency apprenticeship, especially for SME-categorized organizations. The adoption of categorized knowledge becomes one of the sets of assets acting as a milestone in the SMEs to grow and maintaining their competitive advantage (Omerzet and Antoncic, 2008). Practically, the assumption built in this study adopts to Hunag & Lai (2012), stated that the company will encourage employees to use knowledge through KM, treat such knowledge as a strategy to win organizations in competition, and, of course, effective adoption of knowledge. No exception to the types of small and medium enterprises (SMEs). Why is that? The general findings suggested that SMEs have not been optimal in exploiting and managing their knowledge management (Evangelista et al., 2010). The application of knowledge management, especially in SMEs, is characterized as businesses that have various limitations (Hermann et al., 2007). In fact, many experts believe that conceptual knowledge management is only suitable for large companies. Especially for companies that have a complete information system, and the completeness of their data repositories so that the organization is able to create creativity, save and withdraw data for reuse, and transfer the data (Evangelista et al., 2010). In addition, these large companies implement effective leadership so that the organizational culture that is built is also very conducive and imposing their human resources as organizational intellectual assets.

Sparrow (2001) identified four distinctive features of knowledge management in SMEs, namely; 1) highly appreciates personality (personality of SME owner) and mutual understanding, 2) knowledge tailored to the system running in SMEs, 3) science integrated with contextual behavior carried out in SMEs, and 4) learning culture that runs in SMEs, which by Egbu et al. (2005) included the four characteristics more to the tacit knowledge. Competency-based management is the scientific domain of knowledge management (Draganidis & Mentzas, 2006). It is stated that management competencies greatly contribute to increasing organizational and personal effectiveness in the organization. Competence and expertise are closely related to the efforts of organizations to empower their employees in order to increase



competitive advantage, innovation, and organizational creativity in competition (Houtzagers, 1999). Management of employee competencies is a real effort of the organization to internalize the knowledge management system that is built in the organization (Hellstrom et al., 2003), especially in the implementation of competency-based apprenticeships.

Apprenticeship is one manifestation of the function of internalizing knowledge management. Ley et al. (2006) stated that competence functions as a yellow page or organization direction in implementing knowledge management, specific to tacit knowledge. Conversely, competency is also the basis for organizations in knowledge management. Hall (1997) and Sanchez (1997) found that competence principally emphasizes the importance of organizational resources, capabilities and knowledge management. Judrups et al. (2015) proposed an architectural chart of competencies in their articles. The article found that competency is the basis of organizational development, which is moderated by knowledge management. It was found that in managing the organization's human resources, through their knowledge management competency, is the basis for the development of the organization's human resources.

Trend in the development of organizations today states that knowledge management is an important element in developing a strategy for developing organizational human resources, one of which is through apprenticeship competencies (Perwez & Saleem, 2011). The research hypothesis is as follows:

- H1: There is a significant overall interactive effect between the adoption of Knowledge Management in the form of leadership, mutual understanding, knowledge system adoption, and a simultaneous learning culture towards the implementation of SME competency apprenticeship in the city of Makassar
- H2: There is a significant partial effect between the adoption of Knowledge Management in the form of leadership, mutual understanding, adoption of knowledge systems and learning culture towards the implementation of SME competency apprenticeships in the city of Makassar.

METHODS

The study involved 124 participants (SME culinary owners and employees). An amount of 150 questionnaires were distributed to culinary SMEs in Makassar and, from this amount, 124 questionnaires were collected. The study was designed quantitative-descriptive, the obtained data were analysed using SPSS to prove simultaneous and partial influence of KM adoption dimensions represented by leadership (X1), mutual understanding (X2), adoption of knowledge systems (X3) and learning culture (X4) on the implementation of competency apprenticeship (Y). Each



determinant consists of 10 questions, so that the questionnaire has the total 50 questions. The answer to the question consists of a score of score 1 score "very unsatisfied" - 5 "very satisfied".

RESULTS

The KM predictor determinants listed in table 1, namely the characteristics of respondents in the form of ages, gender, experience, education, assets, and competency.

Table 1. Characteristics of Respondents

Age (years)	Frequency	Percentage (%)	Valid Percentage (%)	Cumulative Percentage (%)
16-20	5	4.0	4.0	4.0
21-25	16	12.9	12.9	16.9
26-30	21	16.9	16.9	33.9
31-35	20	16.1	16.1	50.0
36-40	32	25.8	25.8	75.8
41-45	18	14.5	14.5	90.3
46-50	12	9.7	9.7	100.0
Total	124	100.0	100.0	



Gender	Frequency	Percentage (%)	Valid Percentage (%)	Cumulative Percentage (%)
Male	37	29.8	29.8	29.8
Female	87	70.2	70.2	100.0
Total	124	100.0	100.0	
Years of services	Frequency	Percentage (%)	Valid Percentage (%)	Cumulative Percentage (%)
1-5	43	34.7	34.7	34.7
6-10	38	30.6	30.6	65.3
11-15	32	25.8	25.8	91.1
16-20	7	5.6	5.6	96.8
21-25	2	1.6	1.6	98.4
26-30	2	1.6	1.6	100.0
Total	124	100.0	100.0	
Recent education level	Frequency	Percentage (%)	Valid Percentage (%)	Cumulative Percentage (%)



Senior High School	29	23.4	23.4	23.4
Diploma	7	5.6	5.6	29.0
Bachelor (S1)	53	42.7	42.7	71.8
Magister (S2)	35	28.2	28.2	100.0
Total	124	100.0	100.0	
Value of Enterprise' asset (Rp)	Frequency	Percentage (%)	Valid Percentage (%)	Cumulative Percentage (%)
0-5.000.000	106	85.5	85.5	85.5
6.000.000-10.000.000	8	6.5	6.5	91.9
11.000.000-15.000.000	4	3.2	3.2	95.2
16.000.000-20.000.000	5	4.0	4.0	99.2
46.000.000-50.000.000	1	.8	.8	100.0
Total	124	100.0	100.0	
Participation in the last three years' training(s)	Frequency	Percentage (%)	Valid Percentage (%)	Cumulative Percentage (%)
Yes	25	20.2	20.2	20.2
No	99	79.8	79.8	100.0



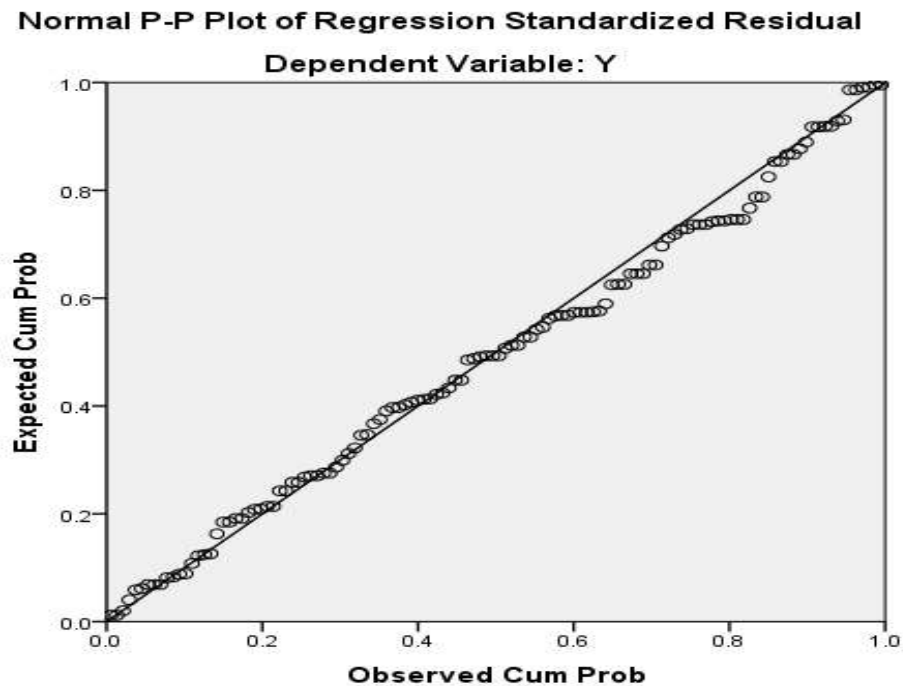
Total	124	100.0	100.0	
Competency embodiment after training(s)	Frequency	Percentage (%)	Valid Percentage (%)	Cumulative Percentage (%)
Yes	14	11.3	11.3	11.3
No	110	88.7	88.7	100.0
Total	124	100.0	100.0	

Table 1 shows that almost 30% of respondents are in the productive ages, ranged of 35-40 years, and are dominated by females. Whereas, based on years of services, about 35% SMEs recently exists around 1-5 years. In contrast, only 1.6% of respondents has been working in SMEs for almost 30 years. Looking at the education, the respondents generally own Bachelor's (42.7%). The rest have variative education levels, respectively senior high school, diploma, and magister. Based on the assets, almost 90% of respondents have under 5 million assets, whereas only 1 respondent has between 46 and 50 million. Majority of respondents (79.8%) don't have experience of attending for training for the last three years. As the impact of the experienced training, 11.3% of respondents stated that they achieved benefits from the training. The remaining respondents (88.7%) doubted the benefits of training and, included from the stated percentage, are having no training experiences. Finally, 8.9% of the already trained respondents is assumed to feeling the benefits for the training.

The study examined the validity and reliability of the determinants or the classical assumption test. The tests consist of three tests namely normality test for data distribution and multicollinearity test. The normality test shows that the data is normally distributed and is in the range of normal line scatter. In addition, the multicollinearity test shows both the tolerance value and standard error coefficient below 1, indicating partial change in the regression value of independent determinants X1, X2, X3 and X4.



1. Classical Assumption Test (Normality Test)

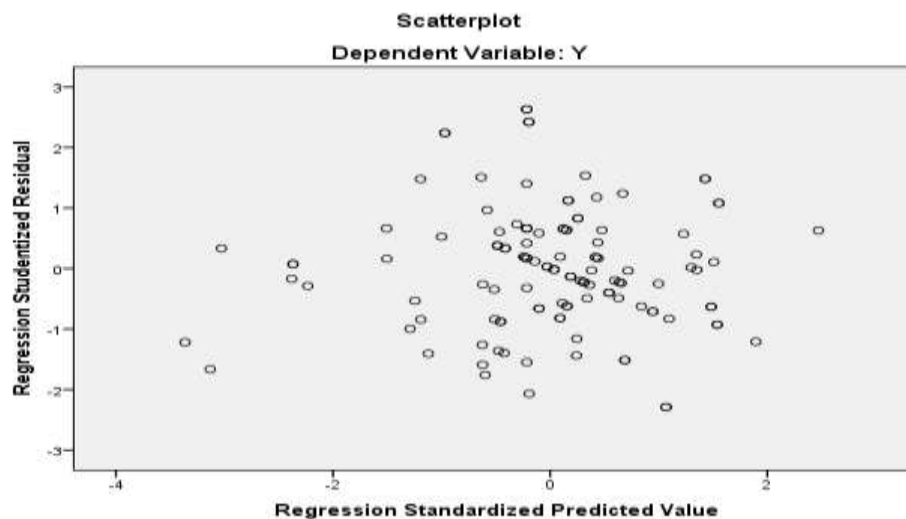


Classical Assumption Test (Multicollinearity Test)

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
X1	.909	1.100
X2	.587	1.704
X3	.681	1.468
X4	.676	1.479

a. Dependent Determinant: Y

Heteroskedasticity Test



Heteroscedasticity test demonstrates the evenly spread data, uncertain and no-tendency pattern. Supported by the results of normality test, data spread evenly along the top and bottom of the scatter plot of the 0 and Y axes. This shows that no heteroscedasticity in the distribution of data.

Autocorrelation Test

The autocorrelation test is performed by Durbin Watson (DW) test, comparing the calculated value to Upper Durbin (DU) and Lower Durbin (DL) values.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.606 ^a	.367	.346	.40820	1.883

a. Predictors: (Constant), X4, X1, X3, X2

b. Dependent Determinant: Y

Result of the test shows the DW is between DU and 4-DU ($1.7739 (DU) < 1.883 (DW) < 2.22261 (4-DU)$; $n=124$, $k=4$, $DW=1.883$, $\alpha=5\%$). Thus, the test reveals that autoconversion is unavailable toward the data.

Reliability Test

Reliability tests indicate that all determinants have a value greater than 0.6 ($X_1 = 0.946$, $X_2 = 0.942$, $X_3 = 0.940$, $X_4 = 0.931$, $Y = 0.916$). The test reveals that the determinants in the model have met reliable criteria for further test.

R Square Test

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.606 ^a	.367	.346	.40820	1.883

a. Predictors: (Constant), X_4 , X_1 , X_3 , X_2

b. Dependent determinant: Y

The results of the determination test (R square) indicate that all determinants in the model can explain variations in changes in Y. The R value is 0.606, while R square is $0.606 \times 0.606 = 0.367$. This shows that the ability of independent determinants, X_1 , X_2 , X_3 , X_4 in explaining the variant of the dependent determinant Y is 36.7%. The rest of 63.3% is contributed by other determinants not included in the model.

F Test (Simultaneous)

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	11.499	4	2.875	17.253	.000 ^b
Residual	19.829	119	.167		
Total	31.328	123			

a. Dependent Determinant: Y

b. Predictors: (Constant), X4, X1, X3, X2

The Simultaneous F Test shows the α value of $0,000 < 0,05$ is obtained. Compared to F table ($17.253 > F$ table (4,10)), the calculated F value reveals that the determinants of leadership, mutual understanding, system knowledge, and learning culture have the simultaneous effects on the implementation of apprenticeship programs.

Partial Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.444	.423		1.050	.296
1 X1	.160	.075	.162	2.123	.036
X2	.017	.094	.017	.179	.858
X3	.260	.093	.249	2.814	.006
X4	.385	.091	.376	4.242	.000

a. Dependent Determinant: Y

The partial test is performed to examine the partial effects of every X determinant to Y determinant. The test on leadership determinant results $X1 = 0.036 < \alpha_{0.05}$. This proves the leadership as the important factor to the implementation of competency apprenticeship ($t_{cal.} = 2.123$). Whereas, mutual understanding doesn't seem to influence the apprenticeship ($X2 = 0.858 > \alpha_{0.05}$). The knowledge adoption, represented by X3, is proven to contribute the effectiveness of the apprenticeship ($X3 = 0.006 < \alpha_{0.05}$, $t_{cal.} = 2.814$). Finally, learning culture that is represented by X4 shows the role to affect the implementation of competency apprenticeship ($X4 = 0.858 < \alpha_{0.05}$, $t_{cal.} = 4.242$). The $t_{cal.}$ of three significant determinants (X1, X3, and X4) are above the value of $t_{table} = 1.657$.

DISCUSSION, LIMITATION AND CONCLUSIONS

The simultaneous and partial effect of KM, represented by determinants of leadership (X1), mutual understanding (X2), adoption of knowledge systems (X3) and learning culture (X4) on the implementation of competency apprenticeship in culinary SMEs in Makassar are investigated in this study. Determination test shows the



independent determinants consisting of leadership, mutual understanding, adoption of knowledge systems and learning culture can explain 36.7% of the apprenticeship in culinary SMEs in Makassar. Whereas, the rest of 63.3% is contributed by external factors of the study construct.

The test on Hypothesis 1 analyses the simultaneous effect of Knowledge Management determinants towards the apprenticeships of Culinary SME in Makassar City. The finding is in line with the test from prior studies, proving the implementation of apprenticeship is significantly influenced by leadership, mutual understanding, adoption of knowledge and learning culture. SME is a sector that plays a major role in improving the welfare of the nation (Beck & Cull, 2014). Therefore, the SME sector has become the government's top priority in efforts to create employment and economic growth (IFC World Bank Report, 2016). Various funding supports from the banking sector and the non-bank financial institutions sector emphasize SMEs sector. In addition, the respondents working/owning the enterprises that pose worth up to 50 million rupiah assets dominate in the samples of this study. In the Act of SMEs Number 20/2008, the Ministry of Cooperatives and SMEs categorizes assets under 50 million rupiah into Micro Enterprises.

From Micro Enterprises have specific characteristics in the term of workforces, namely the cheap labor-based. Namely It means that the labors have low income and the enterprises are home-based industries. CGAR's 2009-2013 record shows that the MSME sector, particularly small-scale enterprises, could absorb the highest number of employees by 12.2%, and contribute GDP to 11.2% in 2013. Compared to corporations, the contributions to GDP in 2013 were only about 6.6%, 4.6% lower than what small-scale enterprises can do. Whereas, micro-entrepreneurs were still the absorbent of the lowest workers and the lowest GDP contribution in 2013.

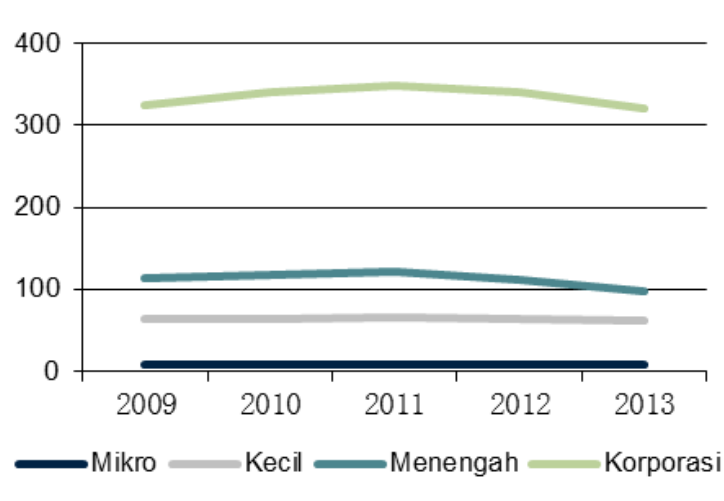
Table 2: CAGR 2009-2013 of SME sector indicators

	Jumlah perusahaan	Jumlah karyawan	PDB (harga konstan)	Investasi (harga konstan)
Micro	2,3%	3,8%	4,3%	3,2%
Small	4,6%	12,2%	11,2%	6,8%
Moderate	6,0%	9,8%	6,0%	16,7%
Corporate	1,7%	7,1%	6,6%	3,8%

Source: CGAR=Compound Annual Growth Rate, Kementrian Koperasi dan UKM, Frankfurt School of Finance & Management



From the aspect of productivity, corporations still lead the competition. Micro-enterprises had the lowest contributors to productivity during 2009-2013. The picture indicates a flat line and it tends to remain.



Source: Ministry of Cooperations and SMEs, Frankfurt School of Finance & Management.

Testing Hypothesis 2, the KM determinants represented by leadership (X1), knowledge adoption (X3), and learning culture (X4) are contribute to the implementation of apprenticeship to employees. In contrast, mutual understanding (X2) does not give a sole contribution.

One of the inherent characters in MSMEs is being family business. Most respondents included in the study have proven the family enterprises they have. In addition, 70.2% of SMEs in this study employs women. Therefore, it seems like the woman's leadership plays a major role in MSMEs. Hajase et al. (2013) found that the fundamental problem experienced by female leaders was the integration of internal functions of households with work. Significance of leadership role in the apprenticeship implementation has been proven. Research respondents generally are housewives who work in the culinary enterprises by cooking and offering their products through information devices on cell phones like *facebook* and other social media. It also answers the significance of the influence of the adoption of MSME knowledge through social media that has an influence on the implementation of apprenticeship.

Research on SMEs conducted by Jarudo Damanik found that the adoption of KM in SMEs in Tanjung Pinang was limited to simple ICT in the form of social media with cellular telephone devices. Other results recommend that ICT adoption for SMEs

has a considerable opportunity to advance SMEs because the paradigm and acceptance of SMEs is related to the importance of information as part of competitiveness (Saleh & Hidayat, 2016). This supports the statement that internal management is very important in the culinary MSME (Yusuf et al., 2016). Similar result was also found by Lin (1998), saying that the success of Taiwanese SME companies was largely determined by their attitude towards their internal management. Technology is not a very crucial aspect and it is being a need in marketing products. Supporting study by Kusumawati & Astuti (2012) which found that MSMEs should use knowledge as their sustainability milestone was also proven in this study.

This study also supports the findings by Sparrow (2001) who stated that the determinants of KM in MSMEs are leadership, adoption of knowledge, and the learning culture. Mutual understanding (X2) seems to not contribute an effect on the implementation of apprenticeship. It might be caused by the domination of Micro business actors in the respondents. The decision to send employees contributing in a competency training is very dependent on leadership, usefulness of the knowledge, and learning culture built in MSMEs (Judrups, 2015). The fast rhythm in culinary enterprises and the highly dependent on costumers' taste and request are considerably suspected to make competencies not crucial. The learning culture in the form of fast service and fulfilling costumers' taste and need are, even, crucial for culinary MSMEs in Makassar City. It is proven by the majority of respondents (79.8%) that don't have any apprenticeship trainings and 88.7% from all respondents consider that training is not beneficial. Thus, this finding also refutes the study of Perwez & Saleem (2011) which stated that the trend of apprenticeship competencies is a manifestation of KM strategies.

The restriction on the types of Culinary SMEs and the lack information from respondents representing Small and Medium Enterprises become the limitation of this study. Besides, respondents who were willing to answer the questionnaire are dominated by Micro Enterprises. In addition, this study only limits the KM determinants into leadership, mutual understanding, knowledge adoption, and learning culture. Thus, determination test only obtains a value of 36.7%, while 63.3% is still influenced by other possible determinants excluded in the study.

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