AN INVESTIGATION TO THE LEVEL OF LEARNING IN SMALL AND MEDIUM SCALE ENTERPRISES/SMES USING BLOOM'S TAXONOMY OF INDIVIDUAL LEARNING

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ABSTRACT

The study aims at investigate the level of individual learning in small and medium scale enterprises/SMEs as an important element in organizational knowledge, which will further determine the competitive advantage in SMEs. Using qualitative methodology, the study was empirically undertaken as a case study research with four SMEs in two major business sectors in Padang, West Sumatra - Indonesia. Owners-managers and employees were the informant of the study. Bloom's taxonomy of individual learning was used as the cornerstone and thematic analysis to the result of in-depth interview was operated as the method of analysis. The study found that the level of learning in SMEs in the context of study is low. In affective and cognitive domains of individual learning, the study found that owners-manager and employees in SMEs in the context of study reached the level 1 (affective domain) and the level 2 (cognitive domain). This paper has value and originality in terms of the detailed empirical description of the level of learning in SMEs which is based on the interview with informants. Practically, results of this study can be used as an important academic consideration to assist the formulation of government interventions in the personal capacity building for SMEs.

Keywords: *affective and cognitive domains; bloom's taxonomy; individual learning; level of learning*

ABSTRAK

Penelitian ini bertujuan untuk melakukan investigasi mengenai tingkat pembelajaran individu pada usaha kecil dan menengah/UKM sebagai elemen penting dalam pembentukan pengetahuan yang berkembang dalam organisasi, yang lebih lanjut akan menentukan daya saing UKM. Penelitian ini menggunakan metodologi kualitatif dan secara empiris dilakukan melalui pendekatan case study pada pemilik-pengelola dan karyawan UKM pada dua sektor usaha di Padang, Indonesia. Taksonomi Bloom yang merupakan konsep utama dalam proses pembelajaran individu digunakan sebagai teori dasar dalam penelitian ini. Analisis tematik terhadap hasil interview lebih lanjut digunakan sebagai metoda analisis. Penelitian ini menemukan fakta rendahnya tingkat pembelajaran dalam UKM. Pada domain afektif maupun kognitif, pemilik-pengelola dan karyawan UKM pada konteks penelitian menunjukkan level 1 pada domain afektif dan level 2 pada domain kognitif. Artikel ini dinilai memiliki nilai dan orisinalitas terkait dengan temuan empiris secara detil mengenai tingkat pembelajaran individual dalam UKM. Secara praktis, hasil penelitian ini dapat digunakan sebagai sebuah pertimbangan akademis penting untuk membantu proses penetapan formulasi intervensi pemerintah bagi program personal capacity building dalam UKM.

Kata kunci: *bloom's taxonomy*; domain afektif dan kognitif; pembelajaran individual; tingkatan pembelajaran

Detail Artikel :
Diterima : 4 Juli 2020
Disetujui : 22 Oktober 2020
DOI : 10.22216/jbe.v5i3.5380

INTRODUCTION

Small and Medium Scale Enterprises/SMEs have been a panacea in tackling economic problems and in improving economic performance of a region. The important roles of SMEs in economic development of a region can be found in their contribution, for example, to GDP, to employment rate, to minimize inflation and to the rate of investment in many countries (see Robu, 2013; Katua, 2014; Armeanu et al., 2015; Vandenberg et al., 2016; Herr and Nettekoven, 2017; Obi et al., 2018). Relatively similar and relate it to the context of Indonesia, the positive contributions of SMEs have been previously investigated by Tambunan, (2008) and further, the Indonesian Ministry of Cooperatives and SMEs of the Republic of Indonesia (2014 and 2015). In Indonesia, SMEs are relatively well developed since they use local resources during the production process, focus on local market and contribute in distributing the results of economic development to every level of communities (Bank Indonesia and LPPI, 2015).

Globalization and more dynamic business environments have forced SMEs to become more flexible and more precise in identifying, improving and unleashing the potential of their resources to maintain their competitive advantage (Vladimirov, et al., 2015; Okeowo, et al., 2018). The current development related to industry 4.0 has also brought consequences and particular challenges to SMEs in terms of their readiness and ability to compete, Schröder (2016). These are due to the lack of resources, limitations to assess the technological maturity of the relevant solutions and their business uses, (Schröder, 2016; Kleindienst and Ramsauer, 2016) and the lack of the perception of the link between managerial and technological knowledge, and the satisfaction of production needs, Dassisti et al., (2017). However, SMEs in any ways, need to respond to those challenges and one of possible responses is related to the maximum use and the improvement of knowledge acquisition and learning process in the business operation.

A previous study by Rahman and Siswowiyanto (2018) insisted that one source of competitive advantages that should be possessed by SMEs is the availability to gain, store and share knowledge and to use it as the main source for learning processes inside the company. There should be an interaction and a close linkage between knowledge and learning process that would create a conducive innovation climate and process in SMEs. As scholars argued, innovation and innovative process are a prerequisite for SMEs to sustain themselves in the business and to maintain their competitive business performance (see for example, studies of de Jong et al., 2003; Abouzeedan, 2011; Ndesaulwa and Kikula, 2016; Burch, 2018). The innovation processes and innovation can only be undertaken and performed if SMEs can acquire and apply appropriate knowledge in the whole business operation through the learning process.

Sardiman (2000) mentioned that learning can be seen from two perspectives, which are [a] a board meaning, and [b] a specific meaning. Leaning, from the board and general perspective, can be meant as a psycho-physic activities undertaken individuals in order to achieve their personal development at large. Meanwhile, from the specific meaning, learning can be viewed as efforts donated by individuals to acquire knowledge which is a part of activities in developing their personality as a whole. Syah (2000) further stressed and viewed learning process as all attitudes which involve individuals' cognitive processes as the result of experiences and interaction between themselves and their environments.

In the classic literature regarding learning as an output of individuals' verbal behavior, Skinner (1948) stressed that learning processes allow the possibility for the creation of individuals' reinforcement – whether they will seriously undertake their tasks and become more active in learning as the consequence of the existence of punishments or rewards from people who have given the tasks, or not. Gagne (1985) further viewed that learning is a change that occurs in individuals' ability after they conducted continuous learning which is

not only undertaken based on the biological development processes. Learning occurs if a stimulant together with a memory in one event are influencing actions of an individual and as the result, an individual will change his/her actions after he/she passed the event. Therefore, we can view that learning is influenced by [a] internal factor of individuals, in terms of contents of their memory, and [b] external factor of individuals, in terms of stimulants which come from outside of that individuals. Gagne (1985) further mentioned domains of learning within individuals, which can be divided into five categories: [a] motoric skills – a coordination of every body movements, [b] verbal information – an ability to explain by using language, writing and painting, [c] intellectual ability – an ability to use symbols to interact with outer world, [d] cognitive strategy – an ability to memorize and think by using internal organized skills, and [e] attitude. In a more recent literature, Schunk (2012) viewed learning as an eternal changing in attitudes and/or capacity to change the attitude, which is produced from exercises and other types and forms of experience. According to Schunk, (2012), learning has three criteria, which is: [a] learning that involves change, [b] continuous learning, and [c] learning from/through experiences.

In order to achieve output of the learning process, SMEs need to be firstly aware about the current stage of their level of learning. This will be used as the basis to determine what kind of knowledge they need to acquire, how they store knowledge and how to they will share it to other people inside the organization. Therefore, the identification of level of learning in SMEs would be a significant and important task to do if we want to know about the needs of knowledge in SMEs, and what learning process that they can do once they acquire that particular knowledge.

Unfortunately, there is no particular documents and sufficient information that can be used as the basic data and information to show the actual level of learning within SMEs in Indonesia. This is of course, a serious situation for SMEs stakeholders in Indonesia, especially if they need to formulate interventions and support programs related to personnel capacity building in SMEs. An investigation regarding the actual level of learning in SMEs would be needed and reasonable to do since it can assist to formulate interventions and support programs related to the capacity building for personnel in SMEs. This study tries to give us insights regarding the actual level of learning in SMEs as the basis for knowledge creation in SMEs and their competitiveness. It uses Bloom's taxonomy of individual learning as the major foundation and guidance for our understanding regarding individuals' level of learning in an organization. A case study with owners-managers and employees from four SMEs in two business sectors in Padang, Indonesia was undertaken as the context of study.

RESEARCH METHOD

This study is qualitative with case study and uses exploratory approach as its main methodology. Unit analysis is in the organizational level. Data and information were collected through an in-depth interview with the informant of the study. This study uses inductive approach – which generally summarizes every data and information based on facts. The study uses SMEs in trading and services sectors as the context and object based on the reason that both sectors are the two biggest sectors that influence the dynamic of economy in Padang, West Sumatra-Indonesia. There are two SMEs from each sector which are operated as the object of the study. HNH Minimarket and Dayumart are two SMEs which represent SMEs from trading sector while Metacom and Meli Motor Workshop are representing SMEs from service sector. Main data collection is in the form of in-depth interview to the informant of the study and interview list was prepared by the researchers to identify the level of learning in each SMEs and it was arranged using Bloom's taxonomy of individual learning as the main foundation. Points in the interview list are as the following table 1.

Table 1
Interview List to Identify Level of Learning in SMEs in Padang

Bloom's Taxonomy	Points of question in interview list
Affective domain	○ If there was a person talks about new information, how is your perspectives to that person? Will you listen and pay any attention to it? Will you positively respond to that person and involve in the discussion with him/her? ○ When you need to face problems in the operation of your business, will you use your knowledge to solve that problems? After that, have you given any suggestion for the improvements? ○ Can you make a good decision based on the knowledge that you have and based on your plan? ○ Do you think that you are truly depend on other people when doing your tasks and solve problems?
Cognitive domain	○ How do you know and understand about this store? Do you only remember and know about this store OR have you really known and understood about the store? ○ Is there any procedure or knowledge about something that you apply to the operation of this business? ○ If your business does not run smoothly, how could you find the failure and the reason of that failure? ○ Do you regularly check your business (in regards of supplies, equipment and employee) in order t make sure whether your business is on track or not? ○ Have you designed or made a new procedure to undertake several tasks in one time in order to let them be more effective and efficient? ○ Have you found and spread new ideas which are related to the operation of this business or to make a new product?

Source: Krathwohl, Bloom, and Masia (1973), Anderson, (2010) and Krathwohl (2001)

In order to specify substance and content of the study, it refers and follows to the operational definition of research constructs as shown in the following table 2.

Table 2
Operational Definition of the Research Construct

No.	Construct	Concept of Construct	Parameter
1	Bloom's taxonomy	……. is a hierarchy of individuals learning structure which identifies thinking skills of individuals – starting from the lowest level up to the highest one which first consisted of two parts, [a] cognitive domain, and [b] affective domain, Bloom (1950).	○ Cognitive ○ Affective
2	Level of learning	There are four stages of learning process that can be used as the basis to stipulate education and training schemes. Every stage in the learning process will generate different outcomes and will require different learning strategies and methodologies.	○ Level I: Awareness ○ Level II: Knowledge/ Understanding ○ Level III: How to apply knowledge and skill to the job

Rycus and Hughes (2001)	o Level IV: Skills development

Source: Bloom, (1950), Rycus dan Hughes, (2001)

Data analysis in this study uses the thematic analysis – which can identify, analyse, arrange, describe and report themes that have been found in one set of data, Braun & Clarke, (2006). The use of thematic analysis in this study is reasonable because it will allow the researcher to find patterns of the themes, which will further put in classification and certain codes.

RESULTS AND DISCUSSION

Brief Description of the Case Study Context

The case study in this paper was undertaken with four SMEs in Padang, West Sumatra – Indonesia. To specify, the case study was conducted in two biggest industrial sectors in Padang, which are [a] trading, and [b] services. From each sector, the researcher chooses two SMEs as the main target. Those SMEs are [1] HNH Minimarket (trading), [2] Dayumart (trading), [3] Metacom (services), and [4] Meli Motor Workshop (services). One main criteria when choosing those SMEs is in term of the number of employees each SME has (minimum five employees).

HNH Minimarket and Dayumart are SMEs in trading sector, specifically in consumer goods. HNH Minimarket has branches in four locations in Padang, [a] Anduring, [b] Lubuk Lintah, [c] Lubuk Begalung, and [d] Pasar Baru. Our study was conducted to HNH Minimarket Pasar Baru Branch, which was established three years ago. Initially, it only had two shophouses and was later added by another outlets specifically for garment since July 2018. During the first period of its establishment, this minimarket only had earning for about IDR 500,000 per day (around USD 35) – but thanks to its massive development, the current earning has reached IDR 15,000,000 per day (around USD 1,035). HNH Minimarket Pasar Baru Branch has eight employees who are allocated into four sections, which is [a] cosmetics and toiletries, [b] garments, [c] books and literatures, and [d] bric-a-brac.

Dayumart is a minimarket which sells daily needs and the headquarter is located in Rawang, South of Padang. It currently has four branches, which are located at [a] Rawang, [b] Parak Laweh, [c] Kampung Kelawi, and [d] Bung Hatta University's campus. Our study was conducted to Dayumart Rawang Branch, which was established since 2013 with initial capital of IDR 200,000,000 (equivalent about USD 13,100). Initially it only had two outlets with daily earning of IDR 13,000,000 (around USD 900), Nowadays, it currently operates in four outlets with daily earning around IDR 40,000,000 (around USD 2,765) to IDR 50,000,000 (around USD 3,450). Dayumart currently has twenty employees in Rawang Branch only.

Metacom is a computer rental business which is located in Pasar Baru, Padang. Apart from that main service, it also offers internet access rental, scanning-printing-editing-photocopying services and it also sells stationary and computer peripherals. Metacom was started with the initial capital of only IDR 5,000,000 (around USD 350) and it has been in the business for about twenty years by now. Metacom currently has two outlets with six employees.

Meli Motor Workshop has a business in motorcycle maintenance, and it is located in Simpang Hikal, South of Padang. It currently active in the business for eleven years and the main business is in the fields of [a] maintenance, [b] spare-parts trading, and [c] engine mounting. According to its owner, initially Meli Motor could only earn IDR 300,000 to IDR 500,000 per day (around USD 21 to USD 35) but it currently reaches IDR 2,000,000 per day

(around USD 140). Nowadays, Meli Motor has six employees which are mostly engineers and technicians.

Affective Domain

In regards to the affective domain in individuals' learning, our study found facts that in HNH Minimarket, either the manager or employees of HNH Pasar Baru Branch have been able to act as the following:

a. acquiring new information
b. responding to that new information
c. solving various problems based on knowledge acquired
d. suggesting improvements to the owner
e. internalizing values in order to make decisions
f. contemplating the values by showing and demonstrating self-reliance and independency to undertake the tasks

Based on this finding, we view that either the manager or employees of HNH Minimarket Pasar Baru Branch have reached all categories in the affective domain of individual learning. However, in the point [e] specifically, we view that there is a slight difference between the manager and employees. Whilst the manager shows more self-reliance and independency when undertaking the tasks, employees on the other hand, show the collaborative attitude between themselves during the tasks. Analysing this circumstance, we view it as a result of a difference value system that is adopted by each party. The manager believes that he does not need to depend on other people when undertaking his tasks and responsibilities. Meanwhile, employees feel and believe that they need to collaborate when undertake the tasks and responsibilities, and to solve problems (since they think that they are not able and capable to do the tasks alone). This value system is then developed inside the manager and employees and becomes as a foundation in creating personal characters and attitudes.

In the affective domain of individual learning in Dayumart, we found facts from the interview that either the store manager or employees of Dayumart in Rawang Branch can achieve all categories in the affective domain of individual learning [acquiring new information, responding to that new information, solving various problems based on knowledge acquired, suggesting improvements to the owner, internalizing values in order to make decisions, and contemplating the values by showing and demonstrating self-reliance and independency to undertake the tasks]. However, in the fifth category (internalizing values as the basis to make decisions), either the store manager of Dayumart or employees can show collaborative attitude and in the same time, self-reliance and independency when undertaking the tasks and responsibilities. This circumstance indicates one thing: the store manager and employees of Dayumart have the same value system that is long adopted by each party. This further means that in certain circumstances, both parties feel and think that they need others through collaboration to let their tasks and responsibility run smoothly. This value system is then developed and has become a personal character and attitude of each party.

The same situation was also found in Metacom. Generally, both the owner and employees are found to fill all of the criteria in the affective domain (acquiring new information, responding to that new information, solving various problems based on knowledge acquired, suggesting improvements to the owner, internalizing values in order to make decisions, and contemplating the values by showing and demonstrating self-reliance and independency to undertake the tasks). In the criteria of internalizing values, both the owner and employees of Metacom were found to the same value system, which leads them to become self-reliance without any dependencies to others.

An interesting finding can be described in relation to Meli Motor Workshop. Although both the owner and employees can fill all criteria in the affective domain of individual learning, however in the fifth category (internalizing values), both parties showed different value's contemplation. Whilst the owner showed the collaborative attitude and self-reliance as well as independency, the employees however just showed the self-reliance and independency. This findings further indicate that the owner think and feel that he needs others through collaboration in order to run the business smoothly. Meanwhile, employees think and feel that they are able to solve problems by themselves without any dependencies to other people. This feeling has brought consequence in terms of a lower collaborative attitude raised between the employees and between the employees and the owner.

Cognitive Domain

The cognitive domain of individual learning consists of [a] the ability to know and remember the business, [b] understanding the business, [c] implementing knowledge in the business, [d] undertaking analysis regarding business problems, [e] conducting evaluation to the business, and [f] creating ideas to develop the business, which is specifically related to the planning for the establishment of new branches. Based on those criteria, we then found several important facts in our study contexts.

In HNH Supermarket Pasar Baru Branch, we found that both the store manager and employees have filled all criteria in the cognitive domain. Specifically, both parties revealed in the interview that they can also create new procedures related to the display of the goods, and creating ideas to add variative supplies of the goods. The same responses were also found in the Dayumart Rawang Branch, where both the manager and employees revealed that they are able to do all criteria in the cognitive domain of individual learning. One specific expression was revealed by the employees that in terms of creating new procedure, they are able to undertake the tasks for arranging the goods and system of human resources in the company.

In the case of Metacom, it is found that the owner has already filled all categories of cognitive domain, meanwhile the employees of Metacom can only achieve and fill five out of six categories in cognitive domain. The only one category that cannot be filled and achieved by the employees is 'creating' (creating ideas to develop the business). Based on our interview that was undertaken on 6 September 2018 at 5 pm. (Western Indonesian time zone), the employees revealed that their working experience has influenced this. The employees told us that they are considerably new employees (as the average of their working experience in Metacom is just four months). Employees admitted that they still need more times to get in touch and understand everything related to Metacom's businesses. They believe that the longer working experience they have, the bigger possibility for them to be more creative in creating ideas that would be beneficial for Metacom. Therefore, in the case of Metacom, we view that the employees cannot fully cognitively get in touch with their tasks and responsibility in creating ideas for the development of the business since they have limited working experience in the company.

In Meli Motor Workshop, the situation is different compared with that in Metacom. In Meli Motor, both the owner and employees have already filled and achieved all categories in the cognitive domain of individual learning. This further means that cognitively, the owner and employees at Meli Motor can use information and knowledge that they acquire during the day to day business operation as the basis to strengthen the company – and the most important thing, in creating ideas that would be useful for the business.

Identification of the Level of Learning

As a reminder and to give us a glimpse about the concept of individuals' level of learning, there are four levels of learning that usually occurs in individuals, which is [a] First level – Awareness, [b] Second Level – Knowledge/Understanding, [c] Third Level – Application of knowledge and skills in the job and tasks, and [d] Level Four – Skills development. These four levels usually occur as a process – which means that individuals usually need to achieve every level of learning before they can move to the next higher level of learning. This is where the important task of our study lies – to identify and to analyze the level of learning of owners-managers-employees for SMEs in the context of our study. The findings of our study are shown in the following table 3.

Table 3
The Summary of Research Findings

No	Case Study	Informant	Category of the Domains		Level of Learning								Remarks
					Affective				Cognitive				
			Affective Domain	Cognitive Domain	1	2	3	4	1	2	3	4	
1	Trading 1 (HNH Minimarket)	Store Manager	• Able to receive new information & questioning that information	• Able to memorize and understand the business (managing goods & store)	v					v			
			• Able to respond and discuss the new information	• Able to understand aspects of the business	v					v			
			• Able to solve problems based on acquired knowledge • Encourage employees to have regular meetings & suggest improvements	• Able to implement knowledge from previous business experience , in terms of maintaining the customers	v						v		
			• Able to direct employee to find the best solutions and generating ideas for improvements	• Able to look at the situation to find failures, investigate reasons of failures, & think about the problem solving			v			v			
			• Feeling of independency	• Able to check the goods, equipment and	v					v			

No	Case Study	Informant	Category of the Domains		Level of Learning								Remarks
					Affective				Cognitive				
			Affective Domain	**Cognitive Domain**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	
			• Finding the idea, look at the situation & think about implementation of ideas. • Self-reliance	employees regularly, in order to make sure that the business runs smoothly and fits with the procedures. • Able to create ideas to develop the business, in terms of establishing new business branch.								v	
			Tally		**4**	-	1	-	-	**4**	1	1	Level of learning 1 for affective domain & level of learning 2 for cognitive domain
		Employees	• Able to receive new information by listening and looking at others.	• Able to remember and know all aspects business operation	v					v			
			• Able to respond and involve in the discussion about new information	• Able to understand business matters	v					v			
			• Able to solve problems in the business operation based on acquired knowledge and further, suggest improvements	• Able to implement knowledge acquired, (pricing, the way to get supplies & price labelling)	v						v		
			• Able to create decision which fits with planning, and based on knowledge possessed	• Able to consider circumstances to identify failures & why does it happen.			v			v			

No	Case Study	Informant	Category of the Domains		Level of Learning								Remarks
					Affective				Cognitive				
			Affective Domain	**Cognitive Domain**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	
			• Feeling of dependencies to others for problem solving – so it will need collaboration with others and the feeling of inability to serve more than two customers which further determine the attitude in collaboration.	• Able to check stock supplies & equipment regularly to guarantee the business operation runs smoothly.	v					v			
				• Able to create new procedures in arranging stock and create new ideas to add variative stocks.								v	
			Tally		**4**	**-**	**1**	**-**	**-**	**4**	**1**	**1**	Level of learning 1 for affective domain & level of learning 2 for cognitive domain
2	Trading 2 (Dayumart)	The Manager	• Able to receive new information by paying attention and ask	• Able to remember & know everything about the business	v					v			
			• Able to respond to information and involve in the discussion about the information.	• Able to understand everything about the business.	v					v			
			• Able to solve problems based on the acquired knowledge and further suggesting improvements to the owner.	• Able to implement knowledge from experiences and based on the situation of market circumstances.	v						v		
			• Able to create decision which fits with planning, and based on knowledge possessed The	• Able to look at the situation in order to find failures, to investigate			v			v			

No	Case Study	Informant	Category of the Domains		Level of Learning								Remarks
					Affective				Cognitive				
			Affective Domain	**Cognitive Domain**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	
			decision must be coordinated with the owner.	reasons of failures and to think about the problem solving									
			• Able to cooperate with others such as cooperation with distributors of the products – so it will need collaborative attitudes and self-reliance.	• Able to check stock supplies and equipment in regular basis to make sure that the business operation runs smoothly.	v					v			
				• Able to create new procedures in terms of the security of the store by using CCTV.								v	
			Tally		**4**	**-**	**1**	**-**	**-**	**4**	**1**	**1**	Level of learning 1 for affective domain & level of learning 2 for cognitive domain
		Employees	• Able to receive new information by paying attention to others.	• Able to remember and know everything about the store.	v					v			
			• Able to respond to information and involve in the discussion about the information.	• Able to remember & know everything about the store (hisstory of the store, number of branches, and the operation of the store.	v					v			
			• Able to solve problems based on the acquired knowledge &	• Able to implement knowledge from the	v						v		

No	Case Study	Informant	Category of the Domains		Level of Learning								Remarks
					Affective				Cognitive				
			Affective Domain	**Cognitive Domain**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	
			suggest improvements to the owner.	manager in managing the store									
			• Able to create the decision which fits with the planning, and based on knowledge possessed (including ordering the stocks).	• Able to look at the situation in order to find failures • Investigating reasons of failures • Think about the problem solving			v			v			
			• Feeling independent from other in undertaking the tasks. Still requires guidance from the manager to solve the problems – so it will need collaboration with others which further determine the attitude in collaboration.	• Able to check the expired product and the lay out of stocks in regular basis, in order to make sure the operation of the business runs smoothly. • Able to create new procedures (arranging display of the products and employee system).	v					v		v	
			Tally		**4**	**-**	**1**	**-**	**-**	**4**	**1**	**1**	Level of learning 1 for affective domain & level of learning 2 for cognitive domain
3	Service 1 (Metacom)	The owner	• Able to receive new information by paying attention to others	• Able to remember customers' demands in certain months	v					v			
			• Able to respond to	• Able to understand	v					v			

No	Case Study	Informant	Category of the Domains		Level of Learning								Remarks
					Affective				Cognitive				
			Affective Domain	**Cognitive Domain**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	
			information, learn it and involve in the discussion about the information.	everything about the business.									
			• Able to solve problems based on the acquired knowledge (getting from the internet and other places) and further, suggesting improvements	• Able to implement knowledge from experiences by visiting cafes and stores. Implementing services ala Chinese which is viewed as the best practice	v						v		
			• Able to create the decision which fits with the planning, and based on knowledge possessed and ideas.	• Able to look at the situation in order to find failures, to investigate reasons of failures and to think about the problem solving by asking certain people			v			v			
			• Self-reliance and independent. Owner attempts to implement his own ideas and just ask for other's suggestion once it is required	• Able to check stock supplies and equipment in regular basis to make sure that the business can run smoothly	v					v			
				• Able to create new ideas & procedures in terms of the appearance of business & how to serve customers								v	
			Tally		**4**	**-**	**1**	**-**	**-**	**4**	**1**	**1**	Level of learning

No	Case Study	Informant	Category of the Domains		Level of Learning								Remarks
					Affective				Cognitive				
			Affective Domain	Cognitive Domain	1	2	3	4	1	2	3	4	
													1 for affective domain & level of learning 2 for cognitive domain
		Employees	• Able to receive new information by paying attention to others. They further consider that such information.	• Able to know and remember how to serve the customers.	v					v			
			• Able to respond to information and involve in the discussion	• Able to understand how to serve the customers	v					v			
			• Able to solve problems based on the acquired knowledge and further, suggest improvements to the owner	• Able to implement knowledge getting from the owner about how to operate the computer.	v						v		Unable to answer – but was further confirmed by the owner that employees are able to do so.
			• Able to create decision which fits with planning, and based on knowledge possessed	• Able to look at the situation to find failures, to investigate reasons of failures and to think about the problem solving			v			v			
			• Feeling independent from other in undertaking the tasks which further determine the attitude in collaboration	• Able to check stock supplies and equipment in regular basis to make sure that the business operation runs smoothly.	v					v			

No	Case Study	Informant	Category of the Domains		Level of Learning								Remarks
					Affective				Cognitive				
			Affective Domain	Cognitive Domain	1	2	3	4	1	2	3	4	
				• Unable to create procedures and new ideas for the business								-	
			Tally		**4**	**-**	**1**	**-**	**-**	**4**	**1**	**-**	Level of learning 1 for affective domain & level of learning 2 for cognitive domain
4	Service 2 (Meli Motor Workshop)	The Owner	• Able to receive new information by analyze it.	• Able to know and remember the whole business operation.	v					v			
			• Able to respond to information, learn it and involve in the discussion about the information.	• Able to understand the business from a long experience, training and long term working period.	v					v			
			• Able to solve problems based on the acquired knowledge. Seldom to involve others to solve problems but may discuss problems with employees.	• Able to implement knowledge getting from the experience of working at other workshops and from training.	v						v		
			• Able to create decisions which fit the planning, and based on knowledge possessed	• Able to look at the situation to find failures, to investigate reasons of failures and to think about the problem solving			v			v			
			• Feeling of collaboration with	• Able to check	v					v			

No	Case Study	Informant	Category of the Domains		Level of Learning								Remarks
					Affective				Cognitive				
			Affective Domain	**Cognitive Domain**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	
			others and simultaneously independent. In certain circumstances may involve others in supporting the business	equipment and communicate with other fellow to make sure the business runs smoothly • Unable to create procedures and new ideas for the business, by innovating own tools								v	
			Tally		**4**	**-**	**1**	**-**	**-**	**4**	**1**	**1**	Level of learning 1 for affective domain & level of learning 2 for cognitive domain
		Employees	• Able to receive new information, try to implement & develop it.	• Able to know and remember the whole business operation.	v					v			
			• Able to respond to information and involve in the discussion about the information	• Able to understand the business from a long term working period	v					v			
			• Able to solve problems based on the acquired knowledge and further, suggest improvements to the owner.	• Able to implement knowledge getting from schools and training.	v						v		
			• Able to create decision which fits with planning, and based on knowledge possessed.	• Able to look at the situation to find failures, to investigate reasons of failures and to think about the problem solving.			v			v			

No	Case Study	Informant	Category of the Domains		Level of Learning								Remarks
					Affective				Cognitive				
			Affective Domain	**Cognitive Domain**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	
			• Feeling independent in undertaking tasks which determine the attitude in collaboration. Problem solving type tend to more self-problem solving with no involvement of others.	• Able to check equipment to make sure that the business operation runs smoothly. • Able to create new ideas & procedures (maintaining the motorcycle and create own tools)	v					v		v	
			Tally		**4**	**-**	**1**	**-**	**-**	**4**	**1**	**1**	Level of learning 1 for affective domain & level of learning 2 for cognitive domain

Source: primary data from the interview with informants (2019)

Based on the findings in table 3, we can see that for both business sectors (trading and services) in the case study context, the level of learning possessed by the owner-manager and employees are in the level of learning 1 for affective domain – and level of learning II for cognitive domain. The demographic nature of people working in SMEs is viewed as the reason to this situation. A typical situation of low educational background of the people working in SMEs is believed to contribute to the low level of individual learning within SMEs. In Padang, people who are working in SMEs (especially SMEs in low-technology sectors) are considered to have low level of educational background (senior high school and below) – which further influences their ability and willingness to learn as well as the capability to adopt new knowledge. There is a certain limitation in term of eligibility of level education to work in bigger companies and formal institutions and they just simply search job in SMEs, which is more informal and easier to get. On the other hand, people with a higher level of education (with the bachelor degree and above) prefer to work in bigger companies or any other bigger formal institutions.

Our finding proves that actually SMEs in Padang have low competitive advantage in terms of the quality of human resources. This low quality is a result of a relatively low education level of human resources working in SMEs in Padang. Higher education background people prefer to work as an employee in bigger institutions, either public or private – and this has left job opportunities for lower level education people. As we aware and can understand, low competitive advantage of a company may be bigger sourced from the inability of the person in company to acquire knowledge (Omerzel and Gulev, 2011) which is sourced from low level of education. The ability to acquire knowledge which results in innovation (Urbancova, 2013) through learning processes undertaken by individuals will further lead to the creation of organization learning (Farrukh and Waheed, 2015), in which at the end will determine the level of competitive advantage of the company in the industry.

CONCLUSION

This study clearly indicates the low level of individual learning of human resources in SMEs in Padang (as the context of study). This can be proven by results of the interview with owners-managers and employees of SMEs in trading and service sectors – which revealed the level of individual learning 1 in affective domain and level of individual learning 2 in cognitive domain. This will be of course, an indication of why SMEs in Padang have low competitive advantage in the industry and the main reason of why they cannot compete with other (bigger) companies. The low level of learning may also a sign that SMEs in Padang are difficult to improve their knowledge and are actually not innovative, in which both these circumstances also contribute to the creation of low competitive advantage of SMEs in Padang as a whole. The actual level of individual learning within SMEs should be seen and considered as a warning for stakeholders of SMEs in Padang if they want to increase the competitiveness of SMEs and further, to develop SMEs in their region.

As the managerial implication of this study, SMEs in Padang need to increase their level of learning into at least to the level of learning III (applying new skills and knowledge in the tasks and jobs). Consequently, it requires highly initiative from owners-managers and employees of SMEs to be more intensively join and attend the schematic learning processes through applied workshops and trainings. Some of learning methods that can be used in the level of learning III are [a] group discussion, [b] presentation by the trainers, [c] simulations, [d] case study, [d] audio-visual learning assistance, [e] field and practice based learning, [f] feedback, and [g] modelling. This study also brings policy implications, that stakeholders of SMEs in Padang (government, universities, consultants, NGOs, business associations and caring communities, etc) should be responsible to choose a more appropriate type of workshop and training or other type personal capacity building intervention – which aims to

increase and improve the level of individual learning in SMEs into, at least, the level III. Interventions and schemes provided by the stakeholders should consider the involvement and the application of more practice and field based learning approaches rather than conservative learning approaches (such as one way communication and in class presentation). The aim is clear i.e. to create the climate of a learning organization within SMEs which is in principle can change individuals, in terms of [a] attitudes, [b] knowledge, [c] motivation and, [d] capacity to learn and further, can increase the capacity of the group and organization to be more innovative.

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