Knowledge Management and Performance of Small and Medium Entities in Indonesia

Diah Hari Suryaningrum

Abstract—past researches showed that successful knowledge management programs can produce more returns, thus indicating that knowledge management might also have a positive effect on firm performance. This study examines the determinant of knowledge management and its effect on Small and medium entities (SMEs) performance by conducting quantitative study on empirical data of SMEs in Surabaya—East Java, Indonesia. The result shows that knowledge is managed on people-based-approach in Small and medium enterprises. Given SMEs characteristics–mainly owned by local people, labor intensive, workers and entrepreneurs are low educated, and financing their operations from personal savings –knowledge management capability in SMEs are mainly achieved by networking with other organization such as companies, universities, technical colleges, and government agencies through alliances. This study found that organizational learning and competitive strategy have positive correlation with knowledge management while family orientation has a negative correlation. It means that the lower the family orientation, the more they open to other knowledge to improve company's performance.

Index Terms—competitive strategy, family orientation, innovation, knowledge management capability, organizational learning.

I. INTRODUCTION

Evidence exists that Small and Medium Entities (SMEs) in Indonesia has an important role in domestic economic activities [24]. Not only their capability to provide a large employment, but also as a generator of primary and secondary sources of income for many households. SMEs have also been an important engine for the development for local economies and communities. Over the past decades, SMEs have developed rapidly. Even if the economic crisis struck, small business confidence is increased by 5 points to 106, in line with the strengthening of regional and global economy. This increase continues the trend strengthening of small business optimism in Indonesia, which has returned to positive zone since the second quarter of 2009. There is optimism about the consistency of strengthening Indonesian SMEs. The Global Small Business Confidence Monitor survey is very encouraging, especially to Indonesia. In line with regional and global recovery, small business optimism in Indonesia has been consistently increasing, continuing the positive trends of previous surveys. Besides Asia and Indonesia, the survey also shows that SMEs in almost all countries also have a positive outlook. Middle East SMEs

have a total of 125 points, Latin America amounted to 118, the U.S. and Canada amounted to 107 and the UK amounted to 101. The survey shows that emerging markets in all regions; has a degree of optimism which is well above the developed world, with an index of 121 versus 106 for developed countries. In Asia, the recovery rate of small business confidence is demonstrated by the strengthening of business confidence index significantly by 15 points, from 107 in the second quarter of 2009 to 122 points in the fourth quarter of 2009. Strengthening this index shows that business confidence of small business people have returned to pre-crisis optimism. Besides the return of their belief in the economic recovery in the nation, they began to re-invest for the employees and its operations (HSBC survey, 2009). Indonesian Chamber of Commerce and Industry estimates the sector of micro, small, and medium enterprises would grow about 25% in 2010 compared to 2009, which predictions ranged 15% - 20%. These evidences and the vital and important role of SMEs had prompted this study on the performance of SMEs in Indonesia. The ability of SMs to survive in conditions of crisis raises the question of this research: what factors that affect SMEs performance?

In this global market era, traditional organizational management is no longer considered an appropriate strategy. Even though globalization has open new opportunities, this phenomenon also open new competitors, not only threatening big business market share but also SMEs. One of the characteristics of SMEs in Indonesia is their close relationship with their customer. Therefore, SMEs must compete for their survival through continuous improvement and innovation to maintain or gain customer advantages. Knowledge management (KM) has been examined in past research not only as a possible determinant of firm innovation capability, but also as a work life quality of knowledge workers [13], [21]. Successful KM programs can produce more returns, thus indicating that KM might also have a positive effect on firm's performance [11], [18], and [25].

Past researches on KM have been conducted mostly on large firms [4], [11], [12], [14] [17], [18], [25], and in Indonesia [10]. This study examines the determinant of KM capability and its effect on SMEs performance by conducting quantitative study on empirical data of Small and medium enterprises in Surabaya – East Java, Indonesia. The determinant of KM in this study is limited to three factors – organizational learning (OL), competitive strategy, and family orientation – as used in research by [29]. The research participants are from 379 SMEs located in Surabaya and type of industries divide in two categories: (1) chemical, agro, and forest product (IKAH) industry, and (2) metals, machinery, electronics and various (ILMEA) industries.

II. THEORY AND HYPOTHESES

This section reviews the literature to identify the relevant practices comprising KM capability and organizational performance and KM capability relationship with organizational learning (OL), competitive strategy, and family orientation.

A. Knowledge Management Capability

To understand KM capability, it is important to answer some questions about knowledge first. Question of knowledge has been done on the ontological and epistemological level. In this level, the goal is to understand the "nature" of knowledge so that management activities directed towards its generation, use and diffusion are effective, efficient and humane. The concept of knowledge was based on the assumption that KM aims at the better generation and better use of a resource that is expected to create competitive advantage. The strategic literature applies concepts that are too abstract or too inclusive to direct managerial action which is also reflected in practical field [8], [22]. She suggested to applied Spencer Brown's law of firm and Derrida's balanced gliding to the concept of knowledge in organization, so that the people involved will cooperatively construct the object of KM activity while performing it in a reflexive manner.

KM has become a very important concept in the business world. Reference [5] stated that "there is no business or economic issue that is more important to our long-term competitiveness and standard of living than making knowledge worker more productive". In other word, knowledge is the one sure source of lasting competitive advantage. Existing research and literature present various measurement of KM capability. Reference [15] define KM as a set of processes developed in an organization to create, gather, store, maintain, and disseminate the firm's knowledge. The knowledge-flow theory suggested that not only is knowledge about knowing, but that knowing affects, and is affected by the environmental at all times. This theory emphasized in process. Reference [11] considers KM capability with innovation. They construct management capability as the process of acquisition, conversion and application. Reference [25] proposes KM capability on the relatedness of information technology, which includes creation of related knowledge, transfer of related knowledge, integration of related knowledge, and leverage of related knowledge. SMEs use technology fit in information technology rather than advance or modern technology.

Reference [2] defines KM capability as a combination of processes that control and manage the creation, codification, dissemination, storing and leveraging of knowledge in organization. In addition, reference [29] based their research on the definition of KM capability as KM practices. There are three phases of KM to unlock tacit knowledge: (1) capturing and locating knowledge, (2) transferring and sharing knowledge, and (3) enabling knowledge. In conclusion, there are three factors in KM capability including: learning and obtaining knowledge, transferring and sharing knowledge, and storing knowledge. These three factors were used in this study.

B. Organizational Performance

Organizational performance usually measure by the actual output or result of organization against its intended output – goals or objective, or how well a company achieves their objectives. Reference [16] suggested that measure of firm's performance may include financial performance and economic performance (efficiency). Further, he argued that there is discrepancy between profitability and efficiency, which depends on market conditions and goals pursued by managers. It means higher efficiency may not necessarily translate into higher profitability. In addition, reference [20] argued that in organizational context, performance may link with growth through improvement in efficiency, productivity, quality, market share, etc. Reference [17] implied that organizational performance can be assessed by organization's efficiency and effectiveness of goal achievement. As mentioned by [17], stated that the concept of effectiveness is a ratio, implying that two entities are required when defining and measuring effectiveness. He also argued that when effectiveness is conceptualized as a degree of goal attainment, that is, the achievement of profitability goal.

Many studies have applied different ways to measure organizational performance [4], [25]. Reference [4] proposed business management performance with two dimensions of performance: behavior and business management performance. Behavior performance indicates learning attitude and business management performance indicates management perception on organization capabilities. Reference [26] proposed three dimensions for performance evaluation, namely financial performance, business performance, and organizational performance. In addition, reference [17] constructs two dimensions of organizational performance, which includes market performance and human resource performance. Marker performance refers to profit margin, sales, and customer satisfaction. While human resource performance refers to relationship between managers and employees, attraction and retention of employees, and employee motivation. From those studies, it can be generalized that there are two dimensions on evaluating organizational performance: financial performance and non-financial performance. These two dimensions are adopted in this study.

C. Organizational Learning and Knowledge Management Capability

The word "organizational learning" was first used in the l980's to describe an organization that was trying new ways to do business in order to survive in a highly competitive market [1]. Further, there are two opinions whether OL is a technical process or a social process as mentioned by [6]:

"The technical view assumes that organizational learning is about the effective processing, interpretation of, and response to, information both inside and outside the organization. This information may be quantitative or qualitative, but is generally explicit and in the public domain…. The social perspective on organization learning focuses on the way people make sense of their experiences at work. These experiences may derive from explicit sources such as financial information, or they may be derived from tacit sources, such as the 'feel' that skilled craftsperson has, or the intuition possessed by a skilled strategist. From this

view, learning is something that can emerge from social interactions, normally in the natural work setting. In the case of explicit information it involves a joint process of making sense of data… The more tacit and 'embodied' forms of learning involve situated practices, observation and emulation of skilled practitioners and socialization into a community of practice." (pp. 3-5).

Therefore, OL is hard to achieve, especially for the sharing of tacit knowledge. Reference [18] suggests that OL can be done by sharing knowledge through social process between groups and individuals. They emphasized on OL through which employees share knowledge to one another. Thus, the key elements that enable learning are a high level of commitment to the entire organizations [12] and channel of communication which encourage individuals to use knowledge and generated in work activity rather than an inaccessible tacit knowledge [8]. In conclusion, there must be both collective commitments of the partners on the one hand, as well as a certain amount of not only individual, but also organizational autonomy on the other hand. Or in other word, factors in OL include management and individual in the organization. These factors were adopted in this research.

The idea of relationship between OL and KM capability is that an organization consists of factors that build up in to a system in which the individual learning to become effective and will enhance KM capability [17]. In addition, reference [11] concluded in their study that OL as characteristic of knowledge significantly affects a firm's level of KM capability. Therefore, the first hypotheses can be formulated as follows:

Hypotheses 1: characteristics of organizational learning will significantly affect organization's KM capability.

D. Competitive Strategy and Knowledge Management Capability

Competitive strategy refers to how a company competes in a particular business. Competitive strategy is concerned with how a company can gain a competitive advantage through a distinctive way of competing [19]. In line with competitive strategy, theory of flexible specialization stated explicitly that new technologies (such as computers, monitor tools, and control engine plant) makes the economies of scale become less important, which in turn make smaller plants more efficient and this is all to promote the feasibility of SMEs in the era of globalization. As quoted by [24] qualitative advantage of small firms , stated that:

"Small firms are supposedly learner, less bureaucratic, more entrepreneurial, and more innovative than large firms, and as a result, it is supposed that they grow further and faster than establish firms. Small firms are thought to be especially important as wealth creators and job creators, and they are also to be more committed to their local communities than large firms, both in the sense of sourcing and recruiting locally and in the sense of being less geographically footloose than large companies."

Qualitative advantage of small firms, as referred to Holt, is part of small firm's competitive strategy, namely: innovation orientation, market orientation, and competitor orientation.

In recent years, emerging literatures explicitly see that SME or entrepreneur as a source of innovation. Reference [20] explained that for innovation to occur something more

than idea or insight is required, that is putting the idea into action to make a genuine difference as competitive advantage for the organization. From this point of view, creativity may be displayed by individuals, but innovation occurs in the organizational context. Innovation as a strategy concerns about internal and external information, which in turn affect the level of KM capability. Therefore, hypotheses 2a formulated as follows:

Hypotheses 2a: Firms following innovation orientation strategy will significantly affect organization's level of KM capability.

A market orientation has been described as an organizational culture that builds activities that create superior value for customers. Market orientation as a construct created from three main elements: customer orientation; which is firms' focus on client needs; competitor orientation, which analyzes the opponent strategy and market movement; and inter-functional coordination, which introduces cooperation among employees [27]. Others indentified market orientation as relationship marketing. Relationship marketing is identified by Morgan and Hunt as "all marketing activities directed toward establishing, developing, and maintaining successful relational exchanges" (1994). The purpose of market orientation is to create a long-term relationship. In addition, most markets are moving towards a more market oriented approach because customers have become more knowledgeable. To compete, firms need to be more sensitive to their customers needs; otherwise they will lose sales to the competitor. Market orientation is framed as a consequence of firm's information acquisition activities [7]. Hence, firms that applied market (customer) orientation strategy will contribute to KM capability, so hypotheses 2b is defined as follows:

Hypotheses 2b: Firms following market orientation strategy will significantly affect organization's KM capability.

Knowledge about competitor is important for managers to stay alert to competitor's movement. Causal knowledge about competitor may not sufficient in implementing competitive strategy. Competitor should be analyzed systematically to gather a wide array of information so that well informed strategy decisions can be made. Reference [3], as mentioned by [23], defines market orientation as "superior skills in understanding and satisfying customers" and emphasize market-sensing and customer-linking capabilities that set market-driven firms apart as the key to better anticipation and response to changing market requirements ahead of competitors. Firms with competitor oriented (market share) objectives will need to develop their sense of competitor capabilities. Reference [29] implied that such firms must continuously up dated their stored information and knowledge about their competitor. Consequently, firms that implemented competitor orientation strategy will enhance their KM capability. Therefore, hypotheses 2c formulated as follows:

Hypotheses 2c: Firms following competitor orientation strategy will significantly affect organization's KM capability.

E. Family Orientation and Knowledge Management Capability

One of the characteristic of SMEs is the ownership of

companies that are generally owned by certain individuals or by family. Thus, there is no clear division between management and operation, or between owner and management. Most SMEs are managed by individual who doubles as the owner as well as company manager, and utilize labor mainly from family or close relatives. The advantage of family firms may be viewed from two perspectives: ownership and management [16]. From the perspective of ownership, the uniqueness of family firms is that family members hold a substantial stake of firm assets. From the management perspective, one common characteristic of family firms is that family members serve as the firm's CEO or fill other top management positions.

From the perspective of agency theory, there are three elements that distinguish family firms – ownership, control, and management. Family ownership will reduce cost of agency problem because it alleviates the conflict of interest between owners and managers. Reference [28] found that family ownership creates value only when it is combined with certain forms of family management and control. Family management adds value as long as the founder serves as the CEO of the family firm or as its Chairman with a non-family CEO. Reference [29] proposed that since family orientation less likely use formal HRM practice, less systematic in their use of accounting procedures and policies, less coordination, and less formality, KM practice would be less formal and used in the family-owned firm. Therefore, the third hypotheses formulated as follows:

Hypotheses 3: family orientation will significantly affect organization's KM capability.

F. Knowledge Management Capability and Organizational Performance

Leading theorists have popularized the concept of KM as a competitive advantage. They suggest that in order to remain competitive, organizations must efficiently and effectively create, allocate, and catch as well as share knowledge and expertise to apply in solving problems and exploiting opportunities. Studies on KM capability revealed the importance of developing organizational knowledge as an asset to be able to face competition [18], [25]. Increased capacity to face the competition of course indicates an increase in performance. This strengthens the application of KM capability to be able to create synergies of knowledge, and can be used by companies as a competitive sustainability advantage so as to improve organizational performance.

Positive and significant influence between KM capability and organizational performance indicates that the three dimensions of KM capability – creation of related knowledge, transfer of related knowledge, integration of related knowledge – create and exploit synergies across units when the three dimensions were applied together, forming a cross-unit knowledge synergies that can improve organizational performance [25]. Thus, the fourth hypotheses formulated as follows:

Hypotheses 4: KM capability will positively and significantly affect organizational performance.

III. DATA AND METHOD

A. Sample and Data Collection

SMEs data was obtained from the Department of Trade and Industry Surabaya City on October 2010. Participants are from 379 SMEs located in Surabaya with the type of industries divide in two categories: (1) chemical, agro, and forest product (IKAH) industry (226 SMEs), and (2) metals, machinery, electronics and various (ILMEA) industry (153 SMEs).

The data used in this research consists of questionnaire responses from the above participants. A total of 379 survey forms were circulated, of which 284 Survey were returned and 233 were valid for analysis (valid return rate is 61.5 percent).

TABLE I: RESPONDENT STATISTICS

GROUP		SMALL INDUSTRY			MEDIUM INDUSTRY			
	UNIT	INVESTMENT (IDR 000)	LABOR (person)	PRODUCTION (IDR 000)	UNIT	INVESTMENT (IDR 000)	LABOR (person)	PRODUCTION (IDR 000)
1 Chemical, agro, and forest product Industry (IKAH)								
- Chemical	19	2.520.815	150	1.616.692	21	45.186.163	609	6.571.834
- Agro	35	4.140.496	239	2.581.492	13	21.288.905	427	4.249.559
- Pulp and paper	25	3.604.994	161	1.740.551	17	38.642.240	540	5.829.524
- Forest product	2	390.516	23	247.719	6	16.373.768	173	1.464.191
Total IKAH	82	10.656.821	573	6.186.454	57	121.491.075	1.748	18.115.108
2 Metal, machinery, textil, electronics , and various Industry (ILMEA)								
- transportation	5	616.958	44	475.881	9	18.308.097	322	3.480.008
- Metal & Machinery	7	958.001	56	599.741	16	52.240.618	659	7.116.650
- Textil	18	2.332.543	173	1.864.411	3	2.211.881	96	1.041.959
- Electronics and various	22	2.596.183	177	1.910.043	15	36.444.789	1.493	16.126.532
Total ILMEA	52	6.503.685	449	4.850.076	42	109.205.385	2.571	27.765.149
Total IKAH & ILMEA	134	17.160.506	1.022	11.036.530	99	230.696.459	4.319	45.880.257

Source: The Department of Trade and Industry – Surabaya City

Table I describes composition SMEs respondents in each category. Non-response analysis is conducted to ensure the absence of non-response biases. The result show there is no difference between mail-survey respondents and direct-survey respondents.

B. Data Analysis

To test the hypotheses of the relationship between OL, competitive strategy, family orientation and KM capability and organizational performance, multiple and simple regression analysis is used. Table II defines all variables and the prediction direction association with KM capability and organizational performance.

A multiple regression model is used to test hypotheses 1 – 3 and simple regression model to test hypothesis 4. The regression models are as follows:

$$KMC = \beta_0 + \beta_1 OL + \beta_2 CS + \beta_3 FO + \varepsilon$$
$$OP = \beta_0 + \beta_1 KMC + \varepsilon$$

where:

KMC = KM capability
OL = OL
CS = Competitive strategy
FO = Family orientation
OP = Organizational performance

Reliability and validity tests were conducted for each of the construct using Cronbach's alpha. In this study, the Cronbach's alpha of each constructs was greater than 0.7 [9], which indicates a strong reliability for this research instrument. Table III shows the description statistics for dimension. In addition, measures with item to total correlation larger than 0.5 are considered to have high criterion validity. Since the item-to-total correlations of each measures was at least 0.552 (table III), it is considered that the criterion validity of each scale in this study is satisfactory.

Variable Name	Expected Sign	Description
Dependent: Organizational performance		Instrument used in this study is an instrument developed by [10] with a nine item variable in the form of perceived performance that is achieved by comparing the current performance and performance standards that have been targeted, either financial or non financial.
KM capability	+	KM capability is a combination of processes of learning and obtaining knowledge, transferring and sharing knowledge, and storing knowledge with a nine item variable which has been used by [29].
Independent: Organizational learning	+	Indicator variable includes information of new development and ideas that are being shared among management and individual in the organization, comprising of a three item variable.
Competitive Strategy:		Competitive strategy refers to how a company competes in a particular business, which includes innovation, market, and competitor orientation. Instrument used in this study is instrument used by [29]
Innovation orientation	+	Indicator variable indicating new product or services with a four item variable: attitude towards innovation of products, services or production processes, and expected investments in innovations.
Market Orientation	+	Indicator variable emphasizing on marketing activities with 2 item scale on attitude towards market activities regarding sales performance.
Competitor Orientation	+	Indicator variable emphasizing on competitor activities with 2 item variable on attitude towards competitors.
Family Orientation	−	Indicator variable indicating the extent to which family involve in the organization with a four item scale, including item on family relation and family influence

TABLE III: DESCRIPTION STATISTICS FOR DIMENSIONS

Dimensions	Number of item	Mean	Item to total Correlation	Cronbach's Alpha
OL	3	13.12	0.575	0.811
CS	8	32.76	0.552	0.878
FO	3	11.33	0.574	0.837
KMC	9	30.08	0.580	0.908
OP	6	25.90	0.631	0.868

Note that three factor of organizational performance were omitted in the regression analysis. All of them are from financial performance perspective, particularly in term of ratio (liquidity, leverage, and return on assets). It seems that most of managers (respondent) didn't know these factors; but they are familiar with other financial performance (cash flow, sales, and profit).

IV. RESULT

Test of hypotheses 1-4 is reported in table IV. Variance inflation factor (VIF) scores are computed for the regression analysis and the scores range from 1.892 to 7.124. A common cutoff threshold is a tolerance value of 0.10; therefore $VIF = 1/0.10 = 10$ [9]. Since the VIF score not exceed tolerance value of 0.10; none of variables are omitted from this regression. The variables of OL, competitive strategy (innovation, market, and competitor orientation), and family orientation are significant at $p < 0,000$. Therefore hypotheses 1-3 are supported. Indicator variable of KM capability is significant at $p < 0,000$, indicating that hypothesis 4 is also supported.

TABLE IV: REGRESSION RESULT FOR THE HYPOTHESIZED MODEL

Explanatory variables	Hypothesized Model		
	β value	t-value	Sig.
Constant	0.112		
OL	0.214**	3.013	0.003
Competitive Strategy			
- Innovation orientation	0.484**	10.853	0.000
- Market orientation	0.129*	2.437	0.016
- Competitor orientation	0.451**	12.784	0.000
Family orientation	−0.347**	−5.565	0.000
R square	0.781	F ratio	
Adjusted R square	0.776	161.526	0.000
Constant	1.408		
KM capability	0.716**	14.317	0.000
R square	0.470	F ratio	
Adjusted R square	0.468	204.991	0.000

*$p<0.05$; **$p<0.01$; two tailed test of sign

Table IV shows that there is a significant and positive coefficient for OL, innovation orientation, market orientation, and competitor orientation ($p < 0.05$) as predicted in hypotheses 1 – 2. Result also shows a significant and negative coefficient for family orientation ($β= –0.347; p < 0.01$) as stated in hypothesis 3, that predict a negative relationship between family orientation and KM capability.

Hypotheses 4 predict a positive relationship between KM capability and organizational performance. The result shows that KM capability ($β=0.716; p<0.01$) has a significant positive contribution to organizational performance.

Analysis of frequency (table V) is performed to understand the behavior pattern of SMEs in terms of implementation of organization learning, competitive strategy, family orientation and KM capability.

V. DISCUSSION

First hypothesis was supported with a positive correlation between OL and KM capability. It means that the more OL presents in SMEs, the better their KM capability. This result supports previous research both in SMEs and in large companies [4], [17], [29]. People on SMEs mainly manage their OL by the frequency management consults employees to discuss new development and employees are encouraged to come up with new ideas and other improvements for the business. Both have a frequency of 51.5 percent. Past research indicated that the key elements that enable learning are a high level of commitment to the entire organizations [12] and channel of communication that encourage individuals to use knowledge and generated in work activity [8].

All the second hypotheses were supported with a positive correlation between competitive strategy and KM capability. Past research support this result that implement innovation,

market, and competitor strategy in the firm will enhance their KM capability [7], [29]. Innovation in SMEs mostly developed from gaining idea from existing and new customer (the frequency is 49.9 percent). As mentioned in the introduction, SMEs tend to have a very close relationship with their customers [24]; therefore they knew immediately what the customer needs. Market orientation strategy presents in the form of double employee's activities (49.8 percent). Employees—including managers or owners—not only work on marketing activities but also work on their own daily task. Competitor orientation strategy mainly presents in the form that employees regularly exchange information regarding competitor's strategy within the firm (48.6 percent).

TABLE V: FREQUENCY ANALYSIS

Dimensions	Factors	Frequency (%)
OL	Employees coming up with new idea	51.1
	Management discuss new development with employees	51.1
	Employees share knowledge by talking to each other	45.9
Strategy: Innovation orientation	Firms emphasizes renewal of product, service, and process	41.6
	Firms will invest in new product in the next 12 month	38.2
	Employees constantly think about new product	47.6
	Firms emphasizes bringing in new customer with new needs	49.9
Market orientation	Firms emphasizes marketing to improve sales	46.4
	Employees and owner work on marketing activities	49.8
Competitor orientation	Within firms, people informed on competitor's strategy	48.6
	Management discuss strength of competitor	45.1
Family orientation	The owner related to the family	38.6
	Family member determine strategy	40.8
	Firms is a family business	40.0
	KM capability:	
Acquisition	Firms collaborate with other organization through alliances	47.6
	Employees was encouraged to join network outside firms	41.3
	Sending employees to exhibition and the like	47.2
	Staying in touch with expert or professionals	45.8
	Hires new employee with particular expertise	45.0
Sharing	Work in team to learn to each other	49.8
	Share the best practice within the firm	55.0
Storing	Knowledge gained is stored in repositories	49.8
	Employees have access to data base	44.6

Third hypothesis was supported with a negative correlation between family orientation and KM capability. This consistent with expectation from past research [29] that more family oriented firms are less likely to report using KM practices and in turn will influence KM capability. Most SMEs perceived family oriented firms as the extent to which member of the family determine the firm's strategy (40.8 percent).

Finally, fourth hypothesis was also supported with a positive correlation between KM capability and

organizational performance as in [17]. KM capability in SMEs mostly acquire by networking with other organization –companies, universities, technical colleges, and government agencies—through alliances (47.6 percent).The majority of SMEs have more than one type of strategic alliance. The important types of strategic alliances are long—term deal in marketing (marketing, distribution, and production), buyer—supplier alliances, and cooperation in technology. In terms of the types of assistance obtained by SMEs from their strategic alliance's partners, technology, market information, and skills training of workers is the most important. Within the organization, SMEs pay a lot of attention to sharing best practice (55 percent) and knowledge gain is frequently stored in formal repositories namely written notebook (49.8 percent).

Based on the result of this research, two practical implications can be drawn. First, there are several ways for SMEs to enhance their KM capability through OL and competitive strategy. OL relies on individuals due to their limited resources. Employees and managers of SMEs seem to want to try to seek information from outside the firms, so that they can grow and compete in the global market competition. Thus, types of assistance that SMEs needed are information technology, quality assurance, marketing, distribution, and training for workers. Alternatively, since individuals (people) play an important role in KM capability (knowledge is managed based on people-oriented approach), owners can create a learning culture by stipulating individual learning, open communication between managers-employees and employees-employees of new knowledge, creating an environment for informal discussion, and providing opportunities to access external resources. Second, SMEs performance can be maintained or even enhanced through increased in KM capability. Since SMEs play an important role in local and regional economy, it is expected that SMEs will grow into big companies and eventually to expand to global market. Strategies to go global can be done not only through alliances with big companies in Indonesia, but also with multi-national and international corporations. Alliances may be done through subcontracting or collaboration with big companies, involvement in global value-chain, developed a niche-market, and networking.

VI. CONCLUSION

The result shows that knowledge is managed on people-based-approach in SMEs. Given SMEs characteristics –mainly owned by local people, labor intensive, workers and entrepreneurs are low educated, and financing their operations from personal savings – acquisition of knowledge in SMEs are mainly achieved by networking with other organization such as companies, universities, technical colleges, and government agencies through alliances. Using OL, competitive strategy, and family orientation as variables influencing KM capability, this study findings that OL and competitive strategy have positive correlation with KM while family orientation has a negative correlation. It means that the lower the family orientation, the more they open to other knowledge to improve company's performance. This study also indicates that KM has effected on SMEs performance and most of the managers optimistic on their company's

future. These findings have some similarities with the study of KM in large companies although they have different characteristic in nature and in managing knowledge.

Even though the empirical result of this study support the current model. At least four limitations should be carefully considered. First, the data were collected only in Surabaya city; the characteristic of these firms surveyed might be different from those in other areas or countries. SMEs in Indonesia are generally engaged in agricultural business, especially in rural areas, while most SMEs in Surabaya are engaged in trade, services and manufacturing industry. Hence, the present result should not be assumed to represent the general case. However, it may provide a fundamental reference for SMEs whose environment and type of industries are similar to those in Surabaya City. Second, since individual informant provide the empirical data, possible biases or preferences (e.g. learning styles, communication methods, social preferences, etc) may exist due to different personal experiences, family, or educational background. Third, this study didn't control for other variables (e.g. firm's size, firm's age, firm's sector, type of SMEs, etc) that may influence the relationship between OL, competitive strategy, family orientation, KM capability, and organizational performance. Finally, this study use regression analysis to test hypotheses, with a high variance inflation factor (even though it was still under tolerance of 0.10). This condition has to be considered carefully in explaining the result. Future research may conduct the same research with KM capability as a mediate variable and use other analysis like structural equation model.

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