Promoting Clusters and Networks for Small and Medium Enterprises to Economic Development in the Globalization Era

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Abstract
This research attempts to explore the importance of cluster-based systems in preparation for small and medium enterprises (SMEs) to go global, and it is an ongoing research. The findings of this research are aimed at providing insights to policymakers, academicians, and practitioners with the objective of creating initiatives, strategies, and policies, which reflect the primary aim of supporting SMEs in managing global challenges. SMEs that are cluster-based have the potential to facilitate the successful inclusion of SMEs in the growth of productivity and networks of global distribution. Most Asian developing countries are in the dark when it comes to this matter. The main purpose of this study is to investigate the relations between the capabilities of the networks and clusters in developing SMEs’ preparedness in facing business players in the global arena. This study’s scope includes specific Asian developing countries. Even though the issue of clusters in SMEs has been well researched in developed countries, such empirical studies are still lacking in the Asian region despite its prevalent collectivism practice. In the concluding analysis, the study intends to develop a model emphasizing the cluster-based industrial SMEs toward globalization.

Keywords
small and medium enterprises (SMEs), clusters, networks, globalization, competitiveness, Asian countries, global

Introduction
Small and medium-sized enterprises (SMEs) provide crucial industrial linkages to set off a chain reaction of broad-based industrial development. Without SMEs as subcontractors and suppliers of intermediate inputs to multinational enterprises (MNEs) and domestic large scale enterprises (LSEs), industrial growth in developing countries may not be able to sustain increasing domestic value, employment, productivity, and industrial linkages. Hence, growing competitiveness of SMEs becomes a critical issue. Competitiveness also increases the scope for success to reach global markets. It has been recognized in most of the Asian nations that SMEs play a crucial role in the support of development in the regional economy because it offers a way for the resources of a country to be mobilized which results in creating employment opportunities and income for the overall national economy (United Nations Industrial Development Organization [UNIDO], 2003).

Given the current era of a globalized and borderless world that is complemented by liberalization and regionalization, small and medium enterprises (SMEs) offer an essential source of local employment opportunities, control over the present economic turmoil, and the tool for domestic capacity development. As such, SMEs have a critical function in the development of a country’s economy (Lim, 2008). In the past decade, remarkable development in clusters has been linked to regional growth. SMEs in the global economy are being identified as having a critical function in the growth and sustainability of regional economy; however, research that investigates the SMEs’ process of clustering in Asian nations is still quite scarce (Braun, McRae-Williams, & Lowe, 2005).

Research shows the significance of clustering in the growth of SMEs (Hagen, Zucchella, Cerchiello, & De Giovanni, 2012; Nadvi & Barrientos, 2004; Smyth, 1992; Tambunan, 2008). According to Smyth (1992, 1990), the clustering of producers of rattan furniture had resulted in a whole village being absorbed and created many small-scaled satellite industries in nearby locations in Tegal Wangi, West
Java. Likewise, Schiller and Martin-Schiller (1997) offered proof of a similar occurrence in Jepara in Central Java among producers of wood furniture. Research by Zeinalnezhad, Mukhtar, and Sahran (2011) pointed out the significance of the development of policies for clusters among the SMEs and the way in which these could be introduced into Malaysian industries. Another example is that of the industry of local garment and knitwear in a small regionalized area involving knitting companies, dyeing, cloth finishing, printing, garment producers, exporters and buyers, and specialized producers including manufacturers of thread, zips, buttons, and even chemical treatments (Tambunan, 2005).

Sato (2000) proposed a successful case of developing SME clusters in metal and iron industry having no government support. She presents case of 300 SMEs in Ceper and indicated that subcontracting and combination with high market diversification were the main keys for clustering.

This article aims to observe cluster-based approach as one of the SME development policies, strategies, or tools in Asian countries regarding globalization. With the aim of providing a clear image of the effect of networking that facilitates SMEs in the process of globalization, this article finds it imperative to present brief overview of the SMEs’ definition, networks, and cluster description and globalization (Ghanatabadi, 2005).

Small and Medium-Sized Enterprises

In the literature review on definitions of SMEs, Loecher (2000) pointed out two sets of measures taken by most studies, namely, qualitative and quantitative.

The qualitative approach normally offers information about the nature of the SMEs based on the characteristic attributes. The relations between the “owner” and the “organization” in the “personal principal” and the “unity of the leadership and capital” models are advocated as the qualitative measures to distinguish between large organizations and SMEs. The “personal principal” refers to organization’s manager who carries out a central function in decision making in the business. The manager has a fundamental overview of all the organizational, administrative, and technical processes in the organization. The “unity of the leaderships and capital” refers to the fact that organization’s manager and the owner is the same person. The owner-manager is more independent and self-sufficient compared with the management team of large organizations who are usually contracted (Loecher, 2000).

The terminology of SMEs based on a quantitative view refers to organizations from all the sectors provided the set standard and criteria are not surpassed. Economy researchers have suggested indicators to be used in this context, including profits, total balance sheet, total capital, invested capital, earnings, market position, equity, production, sales volume, turnover, and number of employees. The “number of employees” and “turnover” are highly proposed as the most suitable quantitative measures given the simplicity, practical application, and compatibility. Quantitative measures are very applicable for identifying the SME as confirmed by researchers (Loecher, 2000).

In line with the measures suggested above, the European Union (EU) in 1996 established a ranked measurement for the definition of SME as follows: (a) lower than 250 employees, (b) annual turnover of 40 million Euros maximum, (c) annual total balance sheet of 27 million Euros maximum, (d) 75% minimum of company assets owned by the management, and (e) owner-managers or related families personally manage the business. Even though these criteria vary based on countries, they do offer a systematic approach to define SME. This study also utilized two main quantitative and qualitative criteria as basis for defining SMEs in Asian nations context.

It is essential to identify SMEs’ integral characteristics to elucidate their strategic roles in global economics. The company structure of SME is usually organic in comparison with the bureaucratic structure in large companies (Rao, Toledo, & Metts, 2003). Rao et al. suggest that SMEs are mainly identified based on the lack of standardized and formal working relation; they normally function based on a flat company structure with limited employees and development. However, these attributes enable SMEs to be more flexible to the changes in the environment, and studies show that smaller companies are normally regarded as being prominently more “flexible” compared with larger companies (Rao et al., 2003).

Clusters and Networks

Even though clusters and networks vary, however, both are observable and connected. The term “network” in this study is defined as the alliances belonging to group of companies that function together to achieve an economic objective and cooperate based on joint development projects while complementing one another and specializing to solve common challenges and reaching a collective efficient goal while conquering markets that would have been too difficult to reach on their own. These can be set among clustering firms and those that are present outside of these clusters. These networks can function vertically or horizontally (Ceglie & Dini, 1999).

- Networks that are horizontal are established among companies that are in competition for a similar market including groups of producers setting up joint retail shops.
- Networks that are vertical, on the contrary, specifically schemes on the development of suppliers, are allied between companies that belong to various levels of a similar value chain; for example, a buyer helping its suppliers to upgrade (http://www.unido.org/index.php?id=o4297).

Clusters refer to the agglomeration of the inter-related firms and the related institutions. Cluster is utilized to show
a geographical and a sectoral focus of firms which produce and sell a range of related or complementary goods and services, and normally experience the same challenges as well as opportunities. The clusters are assisted by a spectrum of supportive institutions situated within spatial proximity including business-related associations or technical or training service providers. Robust clusters are the home for companies focused on innovation that benefit from the integrated support system and a robust range of business networks (Ceglie & Dini, 1999).

First, these clusters facilitate the development of external economies such as the existence of unique raw materials and components, suppliers, or the growth of skill-sets, which are particularly needed in a sector. Second, they influence the development of unique services in administrational, financial, and technical processes. Clusters are suitable grounds for the growth of a network for private and public domestic institutions that support the local economy’s growth which promotes group learning and innovative behavior via coordination carried out both implicitly and explicitly (Humphrey & Schmitz, 1995).

Finally, the idea of networking is related to the general action of setting up of relationships that characterize clusters and the networks. Therefore, this study defines network development services to show services that are targeted at promoting the growth of networks and clusters (Ceglie & Dini, 1999).

Business networks and clusters are now important buzzwords in policy discussions in the area of development and industrialization among Asian nations. They are recognized as being methods of promoting poverty elimination and the growth of competing industries. Nevertheless, there are certain drawbacks that could hinder their success (http://www.unido.org/index.php?id=04297).

Globalization

Globalization (n.d.) is a worldwide movement toward economic, financial, trade, and communications integration. Globalization implies the opening of local and nationalistic perspectives to a broader outlook of an interconnected and interdependent world with free transfer of capital, goods and services across national frontiers. However, it does not include unhindered movement of labor and, as suggested by some economists, may hurt smaller or fragile economies if applied indiscriminately.

The term globalization in this study is referred to the widely accepted Hollensen (2013) definition that globalization reflects Globalization reflects the trend of firms buying, selling and distributing products and services in most countries and regions of the world. (Hollensen, 2013), to create competitive advantage and increase their market share (Zohari, 2008).

SMEs Globalization Challenges and Impacts

There are two main ways in which SMEs have been affected by globalization. First, globalization has facilitated the SME activities that are transnational in nature. These activities include exports, foreign direct investment, and participation in worldwide value chains that have become less complicated due to globalization. Second, the effect of globalization has shifted the competitive source to a more knowledge-based form of economic activity thus increasing the functions of the SMEs (Audretsch, 2003).

For SMEs in the Asian countries, economic globalization has created new opportunities for them as some of the Asian countries have become a hub for large enterprises (LEs), especially in low labor cost regions. If given sufficient incentives and opportunities, SMEs could better involve in innovations as well as access various markets and knowledge sources that could lead to sustainable competitive advantage. Competitiveness is one of the main factors in the process of SMEs globalization, and it has a key role in development of SMEs and facilitates the process of globalization. Both scale economies and research and development (R&D) have become more important instruments for competitiveness in the global economy. As SMEs find difficulty in achieving both these factors, it has been predicted failure of SME competitiveness as globalization increases. While many SMEs have indeed given way to decline of competitiveness, others have found ways to actually enhance their positions in the global markets. Therefore, for preventing SMEs fall as victim to globalization, like their larger counterparts, they should deploy strategies to maintain and enhance their competitiveness in a globalizing economy. Most Asian countries begin to realize that the comparative advantage in the 21st century relies on knowledge-based economic activities rather than traditional factors of mass production (Organisation for Economic Co-Operation and Development [OECD], 2000).

The Conceptual Framework of the Development of Clusters and Its Effects on SME Globalization

Clustering Approach

Clusters are defined by the UNIDO as the local conglomeration of companies that produce and sell a range of complementary or associated products in a certain sector or its related branch. In the conventional approach, clustering describes the processes whereby closely located producers, buyers, suppliers, and so on implement and improve collaboration with effects that are beneficial mutually. Nevertheless, in a further developed description, based on the widely known reference to Porter (2000), clusters include groups of inter-related companies and related institutions located in close proximity in a certain field, related through common
ground and complementary products and services. Given this definition, a cluster would encompass product suppliers as well as moving downstream to the common buyers or even exporters. This also involves business associations, government agencies, business service providers, and supporting agencies that offer services to the companies in the clusters in areas such as product development, process enhancements, technology improvement, marketing (new marketing concepts and designs), training, and so on.

The Effects of Developing Clusters on the Growth of SMEs

There are five key factors in the growth route of clusters among companies: (a) market size and nature of products, (b) economy of scale and scope, (c) upgrading rates, (d) supporting institutions and the roles they play, and (e) forms of collective success.

The market size is represented by the amount of participants and their location spread. The size of the market is a critical factor in the development of clusters as the scale of the demand for products establishes the producers’ rate of growth.

The product quality given to the end users has an important effect on the development of a cluster of SMEs. The conventional standard of measuring product quality is by using the value of the characteristics of the product. This means the functionality, reliability, and conforming to the specifications and products’ safety standards are regarded as critical standards. At present, this issue has moved from ensuring end-product quality to verifying the control process quality that is utilized as well as the value of quality engaged at every production stage.

It is essential for the dynamics of the SME clusters to be able to penetrate the wider market. The ability to reach a wider market will spur a similar growth in productivity and cause higher returns as well. The increase of returns is the effects of the economy of scales.

How Have SMEs in Developing Nations Strategically Encountered This New Reality?

Asian SMEs’ ability to develop, access, and market their knowledge in a global platform will be a crucial source of new area of competition in the globalized markets. In fact, the most drastic transformation in the economic outlook in the 21st century is the transfer of activities in the economy from a domestic or local arena to an international or global field. This is facilitated by the minimum cost and speed through which the transmission of information occurs globally, these days through the Internet, fax, and other electronic communications. The concept of “The Death of Distance” (Cairncross, 1995) critically challenges the global economic landscape (OECD, 2000).

Hollensen (2013) has listed “insufficient knowledge” as one of the number of primarily internal barriers that may discourage internationalization of SMEs (Zohari, 2008). One of the arguably complementary perspectives of the low export involvement of SMEs in Asian countries is the problem of environmental complexity. The power of SMEs’ managerial and technical ability becomes relatively weak, including internal shortcomings in technological capabilities, SMEs-specific learning, productivity, technical efficiency, and entrepreneurial skills (Ibeh, 2004). Thus, SMEs’ readiness to absorb specific learning and knowledge appears vital if SMEs were to engage in globalization.

Cluster Benefits—Implementation in Asian Countries

Iran

The preparedness of Iran for the globalized era can be observed through its implementation of the Business Information Networks. SME clusters’ development, design, execution, and guidance in several sectors of industry reveal the efforts that Iran has taken in overcoming the critical issues of transparency in competition, the rights of intellectual property, assessments, commitment, and social responsibility of organizations based on globalization (UNIDO, 2003).

Vietnam

Economies in transition such as Vietnam has to utilize resources efficiently and undertake several critical steps to develop conditions that are encouraging to entrepreneurs and for SMEs to seek out opportunities to improve and develop in various economic sectors and to form industrial clusters that would use these resources efficiently. This means that given the lack of strong forces of market in the economy of Vietnam that is at a transitional phase, the nation has to take on a decisive role to develop these conditions. Moreover, the culture is also an influential factor in creating entrepreneurs and related activities particularly in developing an industrial cluster, links, and networks for utilization of resources and cooperation.

Failing to identify these essential factors would be detrimental to the development of SME growth and the formation of clusters for industries in Vietnam (Nguyen, Alam, & Prajogo, 2008).

Indonesia

In most instances, the development policies have not been able to achieve success in accessing growing markets both locally and internationally. Essentially, many of these drawbacks are due to the fact that the essential factors of a successful cluster development for SMEs were not placed or not established in a proper manner. A major factor of failure is
the lack of attention on the linkage of clusters to markets. A prerequisite for the establishment of a successful cluster is the potential for the cluster to have access to growing markets both locally and internationally (Tambunan, 2005).

Japan and Korea

*Promoting the innovation-diffusion of knowledge.* The establishment of industry clusters is the most highly effective approach to foster innovation. Knowledge diffusion is a specifically essential determinant. Governments are required to set up a group of companies and systems that are able to speed up the diffusion and development of knowledge, while promoting healthy interactions among industries, research institutions, and universities at the same time. Japan and Korea have both concentrated on promoting the relationship between the individual regional innovation systems’ members to change the innovation systems into a holistic, comprehensive, and operational block. This will in turn speed up the effect of knowledge diffusion by offering support toward innovation and assisting in motivating value-added creations (Small and Medium Enterprise Administration, Ministry of Economic Affairs, 2008).

*Japan: Virtuous circle.* The industry cluster development planning of Japan depends on the allocation of clarified roles to the industries, governments, and universities and the distribution of the required resources so as to allow the industry cluster systems to develop outside the government’s direct control. The cooperation and mutually supportive roles between the regional clusters assist in ensuring efficient usage of human talent, technology, and other resources simultaneously. Finally, the relations between large companies and SMEs require strengthening as well as working to motivate the setup of new start-ups and branching out of new companies from current companies. Through this approach, a “virtuous circle” of business development is set in motion (Small and Medium Enterprise Administration, Ministry of Economic Affairs, 2008).

*South Korea: Strengthening the innovation role.* The main determinant in the South Korean development strategy of industry clusters has been the effective development of open networks related to industries, governments, universities, and research institutions, and the setting up of “micro-clusters” that integrate these various sectors for the purpose of strengthening innovation. These micro-clusters result in a glaring gap between the successful clusters and the other not as successful industry clusters (Small and Medium Enterprise Administration, Ministry of Economic Affairs, 2008).

Taiwan

*Improving competences and creating competitive advantages.* Taiwan’s industry clusters are mainly represented by SMEs. In this regard, Taiwan is quite similar to South Korea and Japan. Even though several of these clusters continuously experience a competitive advantage, however, in most situations, the effect of severe price rivalry resulting from the emerging nations has pushed manufacturers to re-locate their productions overseas or to lower their operational scale resulting in the fall of their profit margins. In addition, the SME Administration under the Ministry of Economic Affairs has started to introduce the strategy for provisioning integrated services to support the SME sector clusters’ innovation to induce cluster development of major industries, by promoting the integration of industry cluster innovation and by building up a service network of an industry cluster. This has resulted in 1,800 SMEs transforming into service providers that are knowledge-intensive, with 40 examples of successful integration of resources and investment boosts (Small and Medium Enterprise Administration, Ministry of Economic Affairs, 2008).

There are several other advantages and benefits that can be derived from networks and clusters including obtaining knowledge, trust, national and regional economic development, supply pool for raw materials and equipment, specialized labor forces and services, and reduced transaction and production costs as observed in many Asian nations involved in networking (Lin & Wei, 2009).

The previous studies (Ramayah et al., 2016; Tambunan 2005, 2008; Zhang, Ma, Wang, Li, & Huo, 2016) demonstrated benefits of establishing clusters as an efficient tool for improvement, as there is strong evidence that joining forces into clusters brings additional advantages for SMEs. The benefits of clustering in improving SMEs efficiency are summarized by Zeinalnezhad (2011) as follows:

- Access knowledge and information resource and creation of knowledge
- Enhance competences and create competitive advantages, create synergies, and lower production cost
- Enhancing organizational performance and innovation, regional and national economic development
- A pool of suppliers of raw material, equipment, and specialized services, a pool of specialized labor
- Low-transaction costs, formation of local supporting institutions
- Establish co-operative linkages between companies, higher specialization

**Discussion**

In terms of best practices for different forms of economies such as developing, developed, and one in transition, a sustainable and growing SME industry sector can only by achieved if proper support structures are in place for the SMEs as a key business environment. These include services related to business advice and providing information, training, financial services, and so on, and these components are
all part of the responsibilities of the private sector as well as the government. The government would need to focus on the formation of policies that create a conducive environment for the development of businesses while the private sector would be required to grow and reinforce the capacities of the SMEs to improve their level of competitiveness which could lead to the development of their organizations, improve exports of their products, and globalize their reach (UNIDO, 2003).

The growth of new and present export markets is viewed as strong strategic mechanism to promote globalization among SMEs. Moreover, SMEs have been proven to have flexibility and are innovative. SMEs in many sectors possess quite a lot of comparative advantages compared with larger companies that allows them to react effectively and fast to increasing changes in global trends (UNIDO, 2003). Hence, developing a group of diverse and competitive SMEs is a central theme toward achieving sustainable economic growth in Asian countries.

Owing to the increased competition in the worldwide market (Villa & Taurino, 2011), SMEs competitiveness becomes a central issue for economic developments of Asian countries. But SMEs face many barriers in terms of competitiveness and be globalized. Many of those barriers influence SMEs because of the size of companies. They often find it more difficult to gather adequate resources to allocate to the various tasks required for expansion into a new market (Zohari, 2008). Nevertheless, SMEs can greatly benefit by being associated with networks and value chains of companies locally, regionally, and globally. This will allow them to solve the problem of the inherent limitation related to the economies of scope and scale caused by their usual isolation and size (UNIDO, 2003). Some SMEs that operate in similar industries have reached an understanding to collaborate on their strategies for marketing in both the procurement of raw materials and in the delivery of their final products. Thus, being a partner in a cluster or SME network would be beneficial to the respective companies (Villa & Taurino, 2011). In addition, networks that are diverse geographically are able to contribute to performance that is much superior (Musteen, Francis, & Datta, 2010).

In addition, to overcome the constraint of credit, investment cost in the production technology may be less costly than that claimed in related literatures due in part to the effect of the production clustering. Clustering is able to reduce the entry barriers caused by the lack of capital by dividing related processes of production into several gradually increasing steps thus allowing a higher number of entrepreneurs to take part in nonfarming productions. A higher labor division reduces the entry barriers caused by capital within the clusters in the industry. Having a close distance is also an added advantage for companies in a cluster that allows the provision of trade credit among the companies less complicated with more inter-company credits which in turn lowers the requirement for the working capital. These two methods assist in reducing the entry barriers into certain industries thus spurring a healthy level of competition and improving the productivity levels. In addition, with a lower dependence on external finances, smaller companies are able to develop within the clusters resulting in higher export levels as well as higher total productivity levels due to the strong competition levels (Long & Zhang, 2011).

Therefore, clusters and networks have essential role in generating SMEs competitiveness in global markets (Audretsch, 2003). Main input to improve the enabling environment for developing competitiveness, that is a requirement for globalization, are clusters and networks because they create a conducive economic climate for SMEs. Benefits of cluster development enhance SME competitiveness. In addition to the three main determinants of human capital, partnership networks, and innovative technology, an effective industry cluster development needs facilitators who can properly manage the generation of incentives and distribution of shared resources (Small and Medium Enterprise Administration, Ministry of Economic Affairs, 2008).

In today’s globalization era, more firms are striving to have an international presence, even though they face many challenges. Liability of smallness and newness would be decreased partly by suitable strategies such as local networking and global networking. SMEs must invest in global networking activities to ensure that the appropriate resources and knowledge are accumulated to provide a suitable platform for globalization. This marks a shift in R&D policy from the one that focuses on transactions into the one that focuses on global collaboration, as needed for joint development in the global marketplace. Besides, the competitive conditions of creative products push SMEs to choose an early entry into the developed market even from the time business starts (Lee, 2014).

Therefore, SMEs can work on their process of going international by utilizing their relationships in their networks. The process of internalization of companies in a network is triggered and motivated by the relationships in the network that have an effect on their market election decision and the decisions on mode of entry, assisting in gaining credibility to conduct business initially, allowing access to more relations and reputable channels, assisting in reducing risk and cost, and affecting their pace and pattern of internalization (Zain & Ng, 2006).

In the same way, creative economy and economic development require globalization of SMEs to grow beyond current levels. One of key drivers for realizing the creative economy and economic development is innovative, competitive, and global market–oriented SMEs (Lee, 2014). Based on discussion above, the relationship between competitiveness, economic development, and involving clusters has been displayed in the conceptual model in Figure 1. As Figure 1 shows, SMEs competitiveness, economic development, and networking including clusters and networks are closely interlinked. In this globalized era, the survival of SMEs depends largely on being competitive. In addition,
being involved in networks and clusters is recognized as an
effective approach for SMEs to maintain their competitiveness particularly in times of business turmoil and to improve
innovation in the SMEs. Likewise, clusters in industries are
largely regarded as industrial systems that are based on
networks that assist companies to adapt to the rapidly developing technologies and markets in a holistic and organized manner (Niu, 2010; Saxenian, 1994).

**Recommendation and Future Research**

Several studies have covered research on issues related to
clusters and many of them focus on issues of industrialized
nations where clusters have been proven to bring about positive
impacts. In reality, for transitioning countries, there are
not many strong empirical proofs showing that clusters bring
about added positive effects to current SME policies (Karaev,
Koh, & Szamosi, 2007). Many studies only propose the use
of cluster strategy as a beneficial tool or policy. These effects
have not been studied from the perspective of the SMEs that
are major players in the process of cluster development
particularly based on whether participation in clusters results
in the improvement of performance. A related gap in literature
is that even though the competition among clusters and its
members has been researched widely, the competition among
enterprises that have decided to maintain outside of any
cluster, or the noncluster members, has not been researched in
the mentioned literature. It is yet to be proven whether SMEs
experience any drawback by remaining outside of specific
cluster or whether there are any types of “knock-on” effects.
Given the lack of evidence in the relationship between clusters and competitiveness, particularly based on the viewpoint of the major cluster players, namely, the SMEs, who are
apparently the key beneficiaries of clusters, academic research is required to study this matter further (Karaev,
Koh, & Szamosi, 2007).

In this study, we have reviewed several definitions of
SMEs, clusters, and globalization. It was identified that the
benefits of involving clusters is the one of the main sources
of SMEs’ competitiveness. In an era where globalization
affects the world and local economy, for SMEs to sustain
competitive advantage, clusters are very important for SMEs.
Therefore, a benchmarking framework focusing on clusters
needs to be developed to aid in the increment of improve-
ment, to strengthen the competitive positions of SMEs in
general. This study presented discussion on foundation for
an empirical research in these matters (Lin & Wei, 2009) and
proposed a conceptual model called “influence of cluster and
network involvement on SMEs competitiveness and develop-
ment economic in the age of globalization” for SMEs in
developing countries to utilize and benefit from clusters,
while achieving SMEs development in terms of globalization
based on competitiveness. Policy makers, managers, and
executives may appreciate creating and managing healthy
networks that serve global market requirements in the major
industrial sectors. This would enable SMEs to increase net-
work performance and get the opportunity for further devel-
opment (Villa & Taurino, 2011). Future research could carry
out the case study and apply interview techniques and survey
selected SMEs that are already in cluster to investigate based
on proposed conceptual model (Chung & Tibben, 2006).

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