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Mental innovation space of Vietnamese agro-food firms

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Abstract

Purpose – Vietnamese agro-food firms are often small and have short value chains. They are facing increasing competition from multinationals to serve the consumers of the rising middle class. It is assumed that co-creation or open-innovation can be a competitive innovation strategy for the Vietnamese firms. Therefore, the purpose of this paper is to understand whether the agro-food firms have the “mental space” or an according mindset to innovate with their customers.

Design/methodology/approach – A three dimensional model of “mental innovation space” (MIS) was developed, comprising of the: focus of innovation, level of innovation and degree of collaboration. A total of 14 Vietnamese agro-food companies agreed to embark on a process of problem definition for innovation according to these three dimensions. This process creates a deeper understanding of the firms’ fuzzy front end of innovation and results in less hypothetical findings, compared with traditional interviews.

Findings – The results show that the Vietnamese agro-food firms have a rather small MIS. They are inexperienced with innovation in new product development and are even more unfamiliar with co-creation. However, the firms recognise the need for innovation and are enthusiastic about the use of co-creation. The applications of co-creation firms foresee are close to the market, motivated by meeting customer demand and keeping up with competitors.

Originality/value – The characteristics and willingness of the Vietnamese agro-food firms make that it is believed an open atmosphere can be created. Then, co-creation can foster innovation in order to strengthen their competitive position.

Keywords New product development, Co-creation, Co-design, Mindset, Fuzzy front end, Open-innovation

Paper type Research paper

Introduction

This paper presents insights into the “mental innovation space” (MIS) (operationalised later) of the Vietnamese agro-food firms and their readiness to include customers in the innovation process.

The collaboration of employees and customers in innovation processes is often referred to as co-creation, open-innovation or co-design. In the West co-creation or open-innovation strategies are gaining ground, but in Vietnam this is unheard of. First, this study aims at investigating if and how agro-food firms currently involve their customers in their innovation process. Second, whether they have the “mental space” and according mindset to co-create with their customers.

Specifically, this study explores the direction and possibilities companies see prior to an open-innovation workshop with their customers. A problem definition process for open-innovation was executed with 14 agro-food firms. They were willing to analyse possibilities and define potential workshop outlines. In other words: they agreed to embark on the fuzzy front end of innovation. The fuzzy front end is defined by Joore and Brezet (2014, p. 4) as “the phase that describes the early stages of the innovation process where ideas form, be it often in an unstructured manner”. Sanders and Simons (2009, p. 31) explains that the goal

of the fuzzy front-end exploration is “to define the fundamental problems and opportunities and to determine what is to be, or should not be, designed and manufactured”. Not problem solving but problem definition is the driver of this process (Sanders and Simons, 2009, p. 31).

Vietnamese agro-food firms are often small enterprises and have short value chains, similar to other developing or emerging economies (Caiazza and Volpe, 2012; Folke *et al.*, 2010). The short value chains make that a close relation between the consumer and producer can exist. Therefore, it is assumed that co-creation, with the strong tie and short value chains, can be a promising strategy for innovation.

The 14 companies went through processes of problem definition for open-innovation, which provided insight into the “MIS” of the Vietnamese agro-food firms and their willingness to open up their innovation process to their customers.

Background

Co-creation, co-design and open-innovation

The very literal meaning of co-creation is: together (co) make or produce something (new) to exist (creation). Co-creation is often seen as part of a larger movement of open-innovation; basically opening up the process of innovation (Huizingh, 2011). A definition of open-innovation most often used is: “the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and to expand the markets for external use of innovation, respectively” (Chesbrough *et al.*, 2006, p. 1).

Co-creation finds its origin in co-production where consumer participation was introduced in the supply chain. At first it was introduced to achieve cost minimisation (e.g. IKEA) but in John Czepiel (1990) introduced the idea that customer participation may lead to greater satisfaction. Now it is generally understood that co-creation can create benefits such as increased speed to market, reduced risk and increased customer loyalty (Auh *et al.*, 2007). Furthermore, it is believed that it can lead to greater satisfaction and commitment due to participation or co-operation (Bettencourt, 1997; Dong *et al.*, 2008; Hoyer *et al.*, 2010) and that the likelihood of positive word-of-mouth is higher with higher levels of customer participation (File *et al.*, 1992; Hoyer *et al.*, 2010).

Co-creation is often classified in five different types: personal offering, real-time self-service, mass-customization, co-design and community design. This shows co-design as a subordinate of co-creation but the terms are often tangled (Mattelmäki and Sleeswijk-Visser, 2011). In this study the focus has been on customer co-design specifically within the spectrum of co-creation and open-innovation. Sanders and Simons (2009, p. 1) define co-creation and co-design as follows:

The concept of co-design is directly related to co-creation. By co-design we refer to collective creativity as it is applied across the whole span of a design process. By these definitions, co-design is a specific instance of co-creation.

MIS

This paper investigates the MIS of the local agro-food firms. We define MIS as “the firm’s perception of boundaries and possibilities for innovation and collaboration in new product development”. The unique aspect of this model is that it combines two more traditional innovation dimensions with the collaborative dimension of open-innovation. This combination follows the idea that companies innovate in a context as network-stakeholder-combinations. MIS is not identical to an innovation mindset; the word “space” is used deliberately. A mindset is “an established set of attitudes” (Oxford English Dictionary, 2002). MIS however, is used to indicate a dynamic

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set of attitudes towards innovation but also the way this is applied to the innovation process and how broad this is seen. We operationalized MIS by three dimensions: the focus of innovation, the level of innovation and the level of collaboration. This is visualised in Figure 1.

The first dimension, the focus of innovation, identifies how many parts of their business companies would want to open up to which stage of innovation. In other words, if companies only want to focus on few parts of their business close to the market or if companies would be willing to look for innovations in all parts of their business also further away from the market. The dimension is operationalized by the four phases of Cooper's (1990) stage gate model: ideation, conceptualization, testing or market launch. In combination with four parts of business: packaging, product, branding or service. These are based on the four agro-food chain innovation activities of Caiazza *et al.* (2014, p. 5) and correspond to buyer driven or product driven and technical or non-technical innovations. The second dimension, the level of innovation, is operationalized by the diversification matrix (Ansoff, 1957); ranging from incremental to radical innovation. Last, the level of collaboration dimension refers to the openness and amount of collaboration that is employed in the innovation process. Where a high level of collaboration is shown by extensive collaboration and openness with different stakeholders during the process:

- 1A: Focus of innovation A: the stage of innovation the companies would want focus on: ideation, conceptualization, testing, or market launch.
- 1B: Focus of innovation B: the parts of their organisation companies would be willing to innovate: product, packaging, branding, or service.
- 2: Level of innovation: the level of innovation the companies are interested in: adjustment, re-design, new products, or radical innovation.
- 3: Level of collaboration: the amount of collaboration and exchange the companies would like with their customers.

Figure 1.
The three
dimensions of mental
innovation space

Source: Developed by the authors

If a firm has a large MIS, it means that the firm is: first, willing to innovate in new product development from the beginning on different parts of their business; second, willing to radically innovate and focus beyond current boundaries; and third, willing to employ a high level of collaboration in the innovation process. If a firm has a small MIS it means that their envisioned innovations are only towards the end of the NPD process, incremental and that the process is closed and internal until the end. These differences are visualised in Figure 2.

Actors in the Vietnamese agro-food value chain

Vietnam is a large producer of agro-food products, both for export and local consumption. Rice-based agriculture dominates but Vietnam also produces sugar cane, cassava, coffee, meat (especially pork but also chicken), fish and a wide variety of vegetables and fruits (FAOSTAT, 2013). In this paper the focus is on the agro-food value-chains for local consumption. In order to apprehend innovation in this field, an understanding of the different actors is needed.

Vietnam has transformed from one of the poorest countries 25 years ago to a lower-middle income country in 2009 (World Bank, 2012). The middle class is rising (De Koning *et al.*, 2015) and consumers have more to spend. This is reflected in their purchasing decisions on agricultural products: people buy more meat, processed food, fruits and sweets (General Statistics Office (GSO), 2012, pp. 268-271). Many families are still self-employed farmers. However, this is becoming less common: the percentage of the population that are a self-employed farmer dropped from 53.1 per cent in 2002 to 41.7 per cent in 2012 (GSO, 2012, p. 110).

The penetration of supermarkets in the urban areas has also increased. In 1995 the first ten supermarkets arrived in Vietnam and in less than ten years, there were over 200 supermarkets in 30 cities (Nhieu *et al.*, 2005). The offering of agro-food products by multinationals increased accordingly. These international brands are highly valued by Vietnam's middle class (Nguyen, 2003; KPMG, 2012). Reardon *et al.* (2012) found that the sales of the leading modern retail chains that sell food in Vietnam increased from 100 million USD in 2001 to two billion USD in 2009. Multinationals operating in developing countries, seldom engage directly in the production of crops or agricultural commodities (Bijman, 2008).

Source: Developed by the authors

Figure 2.
Visualisations of a
limited (left) and a
large (right) mental
innovation space

On the other hand, agro-food products in Vietnam are still mainly bought on the so-called “wet-markets”, especially fruit and vegetables. Wertheim-Heck *et al.* (2014) find that in Hanoi over 95 per cent of the vegetables are still being purchased on these markets. Wet-markets are open-air markets, where consumers buy products directly from farmers on a daily basis. These short value chains, with direct contact between consumer and farmer, often rely on family labour. These small-scale farming units dominate agriculture in Vietnam (Tisdell, 2009; Arita and Dyck, 2014). The downside of their products is the repeating recordings of abundant chemical use or other “unsafe” practices (Normile, 2013; Wertheim-Heck *et al.*, 2014; Dinham, 2003). This causes consumers to seek alternative sources of “safe food”.

So, the farmers have the advantage of very short value chains and no middleman. This makes that their prices are low and the contact with the customer intense. The multinationals on the other hand benefit from long-term experience and brand recognition. An overview of the different type of players is captured in Figure 3.

The need for innovation and the Vietnamese agro-food firms

Vietnamese agro-food firms are sandwiched in between the farmers and multinationals and also competing for a place in the rapidly changing market arena. Caiazza *et al.* (2014)

Figure 3.
Agro-food
consumers and
producers in
Vietnam

found that more than half of the European agro-food firms in their study, realized or were planning technical innovations and non-technical innovations. The latter to reinforce their marketing to be able to enter new markets, among them Southeast Asia. They also found that many of the European firms saw non-technical innovations, involving inter-organisational relations and marketing activities, as the only way to introduce products in new markets that are significantly different from their domestic market. Since these international players are planning both technical and non-technical innovations, the local players also need to focus on both technical product/process innovation (product driven) and non-technical marketing/organisation innovation (buyer driven). The Vietnamese firms will need to strengthen their position to be able to keep on serving the rising middle class, for example by employing customer centric innovation.

However, the unique position and characteristics of the agro-food firms give them three advantages over the other players. First, the (perceived) quality of the products is often higher than that of the products sold on the wet-markets (De Koning *et al.*, 2015). Second, these local players have short value chains and this can be a competitive advantage (Kottila and Rönkä, 2008) because all innovation actors are within or related to one firm. The Vietnamese agro-food firms often cover the whole agro-food system within one organisational entity. An agro-food system as defined by Caiazza and Volpe (2012) is the “interdependent set of institutions, activities and enterprises which collectively develop and deliver material inputs to the farming sector, produce primary commodities, and subsequently handle, process, transport, market and distribute food and other agro-based products to consumers”. Third, they are close to the local Vietnamese population, not only geographically closer but also mentally more alike because employees and customers are from the same cultural background. Having the customer at arm’s length, means there is more ground for mutual understanding and this is an advantage over the international players.

Open-innovation, or specifically co-design, is believed to make use of these three advantages because it is based on close customer contact and mutual understanding. Therefore, this study investigates the fuzzy front end of innovation and whether these firms are willing to include their employees and customers in innovation and design processes.

Methodology

This paper is set out to explore the MIS according to the developed model of Vietnamese agro-food firms operating on the local market.

In total, 14 SMEs were selected for this study, based on varieties in product category (vegetables and fruits, meat and fish, coffee and tea or processed food products); their high willingness to innovate; and their focus on the consumers of the Vietnamese middle class. The SMEs were based in North (three), South (nine) and Central (two) Vietnam. An overview of the 14 companies (two companies were used as a pilot) can be found in Figure 4. The companies have been kept anonymous and are referred to in numbers based on the order of the interviews. The cases A and B represent the pilot cases.

The initial contact with the companies and funding for the activities was provided by the Get Green Vietnam project, funded by the EU SWITCH-ASIA programme. The companies were contacted with the question if they would be interested in organising an open-innovation and co-design activity. If they were interested, a meeting was scheduled for an interview to discuss and define the problem definition for such an activity. In other words: embark on the fuzzy front end of innovation. It is important to

Figure 4.
Companies involved
in the study and
the sector they
operate in

note that this process was not hypothetical but that the outcomes were used to organise an actual co-creation workshop for innovation later on.

The problem definition interviews were executed between February 2014 and June 2015. They lasted between two and three hours and were audio recorded and transcribed afterwards. During the interviews, one to two representatives of the companies were present. The CEO, founder or managing director was always one of them. The interviews were executed in English but a Vietnamese translator was always present for the clarification of terms, questions or concepts that were not clear.

The topics discussed during the interviews were the origin of the firm, their new product development process, current involvement with the customers, what they expected from a co-design workshop and the three dimensions of the MIS model. In order to be able to discuss the dimensions of the model it was required to connect basic theory to intuitively understandable concepts in the interviews. This was needed because the companies were less familiar with the theoretical concepts of innovation. Therefore, four models were used as a visual aid to discuss the three dimensions of the MIS model (see Figure 5).

The four models guided the interview and the process of defining the innovation problem that could be a starting point for a co-design workshop. Each of these visual models was brought on an A4 to the interviews. The discussion of these models results in the necessary insight into the MIS of the selected companies. In the week after the interview the problem definition and innovation focus for the co-design workshop were sent to the companies for one last round of feedback.

Results

The results are presented in three parts. First, the focus of innovation of the companies is presented according to the stage gate model and the business unit model as used

Figure 5.
The four visuals as
used during
the interviews

during the interviews. Second, the level of innovation is presented according to the Ansoff matrix. Third, the level of collaboration and co-design opportunities that the companies envisioned are presented. Each paragraph starts with a short summary for each dimension.

Focus of innovation

Each company indicated one or two areas on both focus of innovation models. The total number of choices can be found in Figures 6 and 7. Overall, companies were most interested in only buyer driven and non-technical innovations of “packaging” and “brand story”. They felt this was important because it could help their current products to stand out among (international) competition. Companies wanted to work on these innovations during the phases of testing and product launch. Ideation and concept development were less popular choices for innovation and customer involvement because companies have little experience with this. This shows a relatively small MIS.

The idea that customers would be involved in the ideation of new products or service ideas was often hard to understand for the companies. They mostly believed

Figure 6.
Focus of innovation
1, combined view of
all companies

Figure 7.
Focus of innovation
2, combined view of
all companies

that the product needed to be perfect first. Company 03 said: “There is not much we changed because of what consumers said. We are still coming up with new product ideas and still testing”. This shows that ideation or concept development and customer involvement are seen as different processes. This also shows from another quote by Company 03: “At this time we put more weight on the farmers then the consumers. We want to have the product first and then we help the consumer”.

Often the idea to found the company originated from a technical innovation or copies of technical innovations from abroad. For example Company 04: “I (founder) have a friend from Israel; he gave the idea and the technical details on how to grow guava”. Or Company 14: “My company was founded in Vietnam but the idea comes from Japan. They developed a technology after the Fukushima disaster to grow clean vegetables in the city locally”. Or Company 12: “15 years ago I was an exporter of food stuff to Germany. Export of tropical fruits. After that I realized we import most “functional” food from overseas. In Vietnam we have a lot of herbs and leaves, so why don’t we not produce it ourselves?” These quotes show that companies often did not develop their production method or business model themselves. They did not perform a process of ideation, therefore it is understandable companies find it hard to imagine going through such a process with their customers.

Many companies said their future goal and challenge was to expand by selling more of their already developed products. Therefore the companies often wanted to focus on improving the packaging and the brand story and formulated very general problem

definition. Such as: “How can we make people choose our chicken in the supermarket?” (Company 07) or “How to show from the packaging that this is a very high quality product?” (Company 05).

The companies said they wanted to stand out with their product but find this difficult with all the other offerings in supermarkets. This shows that the local agro-food firms are indeed in a difficult position with the international players growing on the Vietnamese market. An employee from Company 1 said: “I think marketing is very important in showing that the quality is very pure. But how can customers know about this, how can we make customers to buy it. Because in the supermarket, there are so many products”. A smaller budget for advertising and a smaller product portfolio compared to the international players, were also mentioned as barriers: “I cannot afford the advertising budget and we only have one product (4 other teas will come later) so it is hard to get in the supermarket” (CEO, Company 12).

Level of innovation

Each company selected one or two directions for innovation on the Ansoff Matrix. The total number of choices can be found in Figure 8. Overall, the level of innovation the companies selected most was that of improvement and re-design. This shows that companies do not aspire radical innovation and that their MIS for this dimension is rather small. This is often a result from the limited experiences with new product development, the short-term planning for the future and the perceived limitations of a small advertising budget.

The focus on improvement and re-design were most popular, this is a focus on existing customers and existing products. Most companies do not have a clear new product development process. Improvements are thought of “on the go” and small innovations happen to be ad hoc. This ad hoc process facilitates incremental and not so much radical innovation. Company 3 was very straightforward about their strategy of incremental innovation: “The ideas for the products are not radical new ideas but existing products in the market and we copy”.

Figure 8.
Level of innovation,
combined view of all
companies

Many companies thought their default choice was to focus on existing customers due to their limited advertising budget. Company 14, for example said they wanted more of the same customers: "We want more customers. We want to target more of these people. We have limited resources so we first only want to target these customers and not others".

Company 12 was one of the companies in the process of developing new products: four new types of tea for their existing customers. They were also limited in their advertising budget but looked for ways around it: "For the 4 new products we do not use big channels on TV because we do not have much money. So we sponsor a good event, or a street fair. That is a good way to get the product to the target consumers".

A limited planning for the future also shows that companies do not plan for radical innovations. For example, Company 1 answered the question of where they would be in five years with: "Still confused. We will be thinking about fish sauce for children. With a different kind of fish, with anchovies which is very good for the development of the brain". They gave the same answer to the question where they would be in one year.

Level of collaboration and co-creation

The level of collaboration and possible co-creation was discussed according to all three previous models in combination with the collaboration figurines from Figure 8. Overall, the companies regarded co-creation as a promising method for innovation. This shows a slightly larger MIS than on the other two dimensions. Collaboration for innovation with customers was a new concept for all companies, and co-creation even more so. None of the 14 companies employed such an activity before. However, close contact and personal contact with customers is highly valued in Vietnam and this made that the possibilities of involving customers in a creative innovation workshop were generally enthusiastic.

Currently, if companies are in contact with their customers, it is in the testing phase but predominantly during and after product launch. Traditional ways of testing are employed, such as inviting test panels and doing market surveys. During product launch companies, for example organise tastings introductions in supermarkets. They also use social media, direct e-mail and telephone to get feedback after product launch: "I have 7,000 Facebook friends so I got feedback from them but also via telephone, e-mail and then I know what they liked and preferred. Then I changed the flavour" (CEO, Company 1). However, some companies do not involve customers in any of their activities, such as Company 3: "To try we ask the team and it is a team evaluation. The employees somehow are all customers too".

One other remarkable finding was that many of the companies organise tours and excursions to their farms to connect to their customer. They organise these activities because they want to show the superiority of their products over the products sold on the wet-markets. By being transparent about their production processes the companies want to show that their products are "safe": "We want to make a farm tour for the customer and then we can show how it is grown from the seed and show the process in our farm" (Manager, Company 2) or "The regular customers, all of them visited our farm, that is why they trust our product" (CEO, Company 1).

All companies believed direct contact to be the most effective way of knowing what customers want and finding out how to improve their products (incremental innovations). Company 2, for example: "We try step by step to improve and always talk with the customer when they come. We mostly always have one person that stays in the shop there just to talk to the customers".

However, companies see the limitations in their current methods and would like to try other ways:

We hired a marketing agency to do a survey but they always say only positive things and that there is a huge market with a lot of interest. But then, when we introduce it to the people on the market we also get many negative feedbacks. So we want to understand the real desire (Manager, Company 5).

Somehow we want to get the feedback of the consumer, but actually not in the survey way. There people just tick yes/no. No one wants to spend time to actually write more. Also, when we do the co-creation we can get the feedback of the consumer and they can discuss with the R&D and the marketing, and not just taste the tea (CEO, Company 12).

One of the foreseen barriers for co-creation was that some companies were afraid of revealing their secrets. Since many companies owe their existence to copying someone else this is not remarkable. For example:

Now we just brought the product to only a few customers, because we still want to patent it and not that it appears somewhere else. Maybe after we got the license of the department then we can ask for feedback from customers (CEO, Company 12).

Some companies brought another barrier to the table. They would like to get suggestions during a co-creation activity but were afraid not having enough staff to implement these changes after. Company 2, for example: "Because I also get ideas like this from the supplier but the problem is we do not have a person to do this. We do not have the staff to make it".

Although the companies never did activities similar to co-creation, the overall reaction of the companies was enthusiastic. They viewed co-creation as a promising method for innovation. This shows a slightly larger MIS than on the other two dimensions:

By meeting users, we can get to know what customers comment about our products so that we can improve our products. Besides that, we also get some new ideas from people. It is a very good way to make our products better (employee, Company 1).

Get the opportunity to contact and connect with the customers, make them know well about product's value and listen to them. I believe that way is effective to better our product (CEO, Company 14).

Why get involved in co-creation? To make a better future plan; to know what people think about the design; to get ideas for new flavours (CEO, Company 6).

Discussion

This study was set-up to explore the "MIS" of the agro-food firms in Vietnam and their willingness to involve customers in their innovation process, or co-design. The discussion is presented in four parts. First the limitations are discussed. The following three parts correspond to the three parts of the results section and the axes of the MIS model.

Limitations

Unfamiliarity of the companies with the terms and theory of innovation and abstract concepts called for more explanation, this directed the study towards a qualitative approach. This showed to give rich insights and deep understanding but it also limited the number of cases. Additional quantitative data of a larger sample could have strengthened the conclusions.

Next to that, the problem definition interviews were executed in English. The interviewees were proficient in English but some nuance could have been lost. However, a Vietnamese translator was always present to resolve issues of possible ambiguous understanding, this mostly reduced the loss of nuance. Next to that, the visual models helped to discuss more difficult and abstract terms.

Last, the pilot study did not cover the entire range of food product categories. However, this did not cause trouble in the main study and the pilot study proved to be a valuable preparation.

Focus of innovation

The focus of innovation of the companies envisioned was mostly on packaging or branding and correspondingly to testing or product launch. This shows that companies were focused on the buyer driven and non-technical innovations. They felt this focus was important because it could help their current products to stand out among (international) competition. The focus was more on innovative ways of selling their product than innovating their product. This does not show a wide focus: they are willing to rethink only a small part of their business and not embark on a full innovation cycle. The latter also comes from never having embarked on ideation or conceptualization processes before which are typically part of product innovation processes. In Vietnam the understanding and importance of the value of product innovation in the value chain is limited (Jin, 2015, p. 20). The results also showed that often the originating ideas and sometimes even the concepts for founding the companies came from outsiders.

Level of innovation

The level of innovation companies envisioned was not radical. The firms did not see beyond improvements of current design because they had not much experience with NPD and because they felt they had an insufficient marketing budget to engage more customers and innovate. Caiazza *et al.* (2014) also find that high barriers for innovation in, for example the Italian agro-food value chain are the costs of the process and the lack of sufficient information, knowledge and experience to implement internally. However, the need to innovate was recognised by many of the companies.

Planning for the future is necessary for innovation (Poolton and Barclay, 1998) and radical innovations are critical for the long-term success of a company (McDermott and O'Connor, 2002). Most companies however did not have a long-term planning, for all of them five years was too far away to envision a future and for some even one year was too far ahead.

Level of collaboration

Co-design was suggested to the companies as a strategy for innovation and this was received with enthusiasm. Outsider input can help to broaden the current narrow MIS of the companies. Customers are not limited by the companies' boundaries but because the customers are geographically close to these companies they share the same cultural background. This makes the mutual understanding high, higher than for international companies. Also, trust and transparency in the agro-food sector in Vietnam is a key issue (De Koning *et al.*, 2015). Opening up the innovation process and involving customers could aid the companies in establishing trust and transparency with their Vietnamese customers. The companies also foresaw increased transparency to be a benefit or outcome of co-creation. Motives for engaging in open-innovation activities

were on topics close to the market such as meeting customer demands or keeping up with competitors. Van de Vrande *et al.* (2009) find the same for SMEs in the Netherlands.

To summarise, the envisioned innovation topics were often improvements or adjustments (low level), preferably of a non-technical nature, close to the market (narrow focus) but with customer involvement at the end of the innovation or new product development process (somewhat collaborative).

Conclusions

To conclude, it is believed that the characteristics and willingness of the local agro-food firms can create an open atmosphere in which co-creation can foster innovation in order to strengthen the competitive position of the local agro-food firms. The enthusiasm of the companies is promising but the lack of skills and experience with innovation limiting. Companies received support from outside when they founded their business and likewise they will need support for innovation and new product development in the future. In subsequent steps outsiders must help companies to familiarise with innovation and ideation. The focus in the interviews has much been on co-design activities where the level of creativity is high. Since the companies are not familiar with expressing creativity, co-design might be a hefty first step to take. Therefore, as a concrete first step, farm visits could be used to intensify mutual exchange between the employees and the customers. These are a good starting point because transparency is one of the goals on these trips. If on these farm trips, more interaction and two way information exchange would take place, it could start to break open the current boundaries for innovation and broaden the horizon. In other words, it could enlarge the companies' MIS.

Overall, the MIS of the companies in this study is rather small but the potential value of co-design to boost innovation is acknowledged by many. The combined MIS of the 14 companies is pictured in Figure 9.

Source: Developed by the authors

Figure 9.
Mental innovation
space of 14
Vietnamese
agro-food firms

Also, the government should stimulate a focus on local market. Now international markets and export are often seen as the Holy Grail because of potential higher profits. However, a striving local market can ensure a more stable and more independent economy, which will aid Vietnam in elevating its population.

Finally, the MIS model proved to be helpful in understanding companies and their capabilities to think about innovation. The unique combination of the collaborative aspect of open-innovation with more traditional innovation theory was able to give insight in the potential of hybrid partnerships of the company, customers and outside design- or innovation-consultants. The collaborative dimension was the one that captured the higher innovation capacities of the companies and the other two dimensions showed the gaps that needed to be bridged. This enabled identification of a starting point for innovation strategies for the local agro-food firms.

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