

Entering Emerging Markets: A Dynamic Framework

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Abstract Entering emerging markets (EMs) is a huge opportunity and a risk for small and medium-sized enterprises (SMEs). This paper concentrates on the problems emerging from building a supply network in a target economic area. Cultural, legislative, and market factors make it a challenge, but SMEs also face diverse obstacles from side effects emerging from firm's internal decisions. Some of these obstacles are self-generated, and they arise from aggressive growth strategies in parallel with misunderstanding the dynamics of one's own firm—the unintended consequences of decisions. In this paper we will analyze the internal restrictions on Finnish SMEs or actions impeding or accelerating their growth in EMs. A conceptual system dynamics model is constructed so as to describe the challenges of entering EMs. The model is based on a literature review, VTT logistics experts, and interviews conducted with Finnish SMEs.

Keywords SMEs · Emerging markets · Dealers · Entry modes · System dynamics

Introduction

For many people, it has become clear that most of the growth in the near future will take place in emerging markets (EMs), and that, in order to take part in that growth, one needs to have some sort of local presence. We have, for several reasons, chosen a system's perspective in order to study the penetration of small and medium-sized

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enterprises (SMEs) into EMs. Firstly, the complexity of global value networks is not limited to the number of actors and stakeholders. Dynamic complexity does not require a large number of stakeholders; it can arise from seemingly simple combinations of feedbacks, time delays, and nonlinear interactions between parts of the system. Dynamic complexity means that the actions and their effects can be far apart in time and in space, and such systems are, therefore, extremely challenging to fully comprehend without suitable tools, for example, system dynamics. Secondly, a firm operating in a new market can be seen as an entity operating as part of a system, where the interactions of these parts determine the behavior of the whole system.

Forrester (1971) defines a system as a set of parts, that operates together toward a common purpose. When making decisions, firms have to incorporate the views and needs of production, R&D, logistics, marketing, sales, and the needs of suppliers, wholesalers, and customers. Often firms focus on optimizing their own performance, because that is something that they have control over. This can, however, lead to suboptimization of the supplier–wholesaler–customer system as a whole. The current management paradigm favors competition over cooperation. From a system theory point of view, firms are a part of the whole system, thus giving insight into how to operate in a way that does not compromise the other firms operating in the same ecosystem, this often requires cooperation.

The focus of this article is on the decision-making logic of managers trying to attain growth in EMs, for instance in deciding the size of the sales force, how the available time is allocated between different tasks, etc. System dynamics is a methodology dealing with systems; it tries to connect the structure (the theory) of a system with its behavior (Forrester 1971).

Many firms fail upon entering new markets, or even penetrating their main markets. A few different behavior modes are presented in Fig. 1: the sales grew as desired (Mode 1); the sales stagnated after promising growth at a low level (Mode 2); the sales collapsed after promising growth (Mode 3); and the sales started oscillating

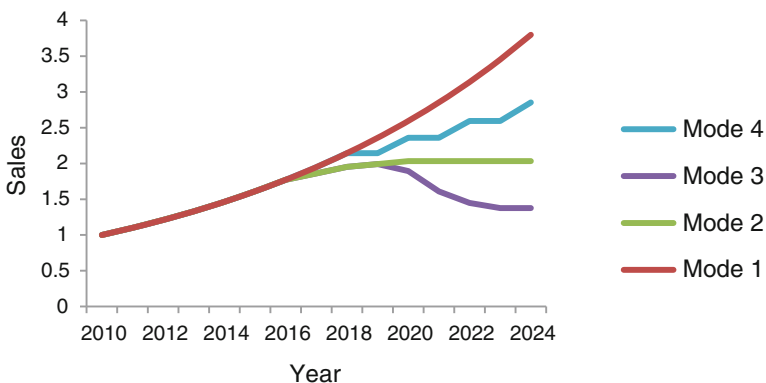


Fig. 1 Dynamic behavior modes

as growth continued (Mode 4). Understanding how to control the feedback loops leads to knowledge of how to make the system behave in a desirable way. Neither of these tasks is trivial, and in this paper we concentrate only on the former.

In this paper, we assume that the basic issues are in good enough condition, i.e., the product is good, the market segments the companies are penetrating are large enough, the timing is right, the customer needs are known, and there is already initial experience of the market. Market competition and product qualities are left outside the scope of this paper. Even if these basic issues are satisfied, there is a fair chance of failing. We also assume that the problem of penetrating into new markets cannot always be pinpointed to any particular place in the firm or in the market. If one part of the system does something, it affects the operations of other parts of the system. For example, if the sales force acquires a large number of new customers, then production and logistics may be in trouble keeping pace. This may lead to lower product quality and longer delivery times, which in turn will cause a hard time for the sales force in selling new products. The parts of the system are highly interconnected, even though in some situations it is very difficult to see that the problems we are facing now are the consequences of our own actions in the past.

A survey was conducted in order to understand the needs and difficulties that SMEs have in EMs. We will discuss the issues that were identified from the interviews and link them to the model. This shows how these issues can be dealt with in a systemic way, and how they affect the long-term development of the firm operating in EMs.

We concentrate on the strategy of building a dealer network, which is responsible for the actual sales to the customers, i.e., we approximate the sales with the number of dealers. In this case, the problem is limited to how to handle the dealer network, how the satisfaction of the dealer network affects the pressure to invest time in dealers and in the long term, how to develop the capability to satisfy dealers.

A reference mode shows how the problem developed and how it may evolve in the future and it tries to characterize the pattern of behavior over time. Generic reference modes are presented in Fig. 1. A reference mode is a helpful tool in understanding the dynamics of a problem. It leads to the structure that needs to be investigated in order to understand, what is happening to sales. We are trying to understand how the firm's own actions lead to its observed behavior, and under what conditions the desirable behavior mode is more likely than undesirable behavior.

The Model

Many firms go into new markets incrementally, so that they can learn the culture and acquire knowledge of the markets, which is also suggested as a good strategy by Johanson and Vahlne (1977). However, the company interviews suggest that the firms are implementing and preferring a more aggressive approach. Our framework tries to address some of the benefits and drawbacks of both strategies.

The example deals with a company with a relatively low unit price product and which desires a rapid growth in sales in the early years of the new venture. We have kept the framework quite general and as such it serves as a guideline to improve understanding the consequences of a firm's own actions. The unintended consequences and side effects arise, because there are only limited resources available at any given time.

The model we present here is based on variables identified from interviews conducted in six Finnish SMEs operating in EMs, at workshops held internally at VTT, and partly on literature. We have tried to concentrate on variables that are mainly controllable by the firm, for instance the size of its own sales force, the number of dealers it is recruiting, and the decisions it makes to channel the resources into developing its own capability. The aim is to identify heuristics that could help firms to react to forthcoming problems before they happen.

We started building the causal loop diagram from the perspective that a company entering EMs needs to increase its dealer network in order to achieve more sales leading to increasing revenue and profits. The structure is presented in Fig. 2. Notice the reinforcing feedback loop *Investing in New Dealers*, where the variable *Number of Dealers* describes the dealer network, that is, how many dealers the company has at the moment. This can be considered as a stock which accumulates over time. The *Number of New Dealers* is determined based on the *Number of Dealers*, *Desired Growth Rate of Dealers*, *Experience of the Sales Force*, *Average Number of Contacts a Sales Person Has*, and *Time Invested per New Dealer*. This loop is responsible for the exponential growth seen in the reference mode, see Fig. 2.

The balancing feedback loop *Limited Resources* can be responsible for the stagnation of the dealer network. When the *Number of Dealers* increases, the *Desired Number of Dealers* increases as well. In the long run, this leads to a situation in which the firm's time to invest per new dealer decreases, and therefore it becomes harder to recruit the desired number of new dealers.

In many EMs, for instance in China and Russia, the contacts play a significant role, when trying to initiate a new business deal. The need for existing contacts is highly culture-dependent. The recruiting process, i.e., finding a suitable candidate and making a contract, takes time. The time needed per new candidate depends on the *Experience of the Sales Force* and on the *Average Number of Contacts a Sales Person Has*. Also, the time taken by the recruiting process a new dealer goes through varies depending on the operating country.

On the other hand, the increasing *Number of Dealers* limits the *Time Spent per Dealer*, which leads to decreasing *Satisfaction of Dealers*. This is mainly because in many cases SMEs do not have extra resources that can be used, when needed and the increasing *Number of Dealers* puts pressure on the existing sales force, which will not have as much time to spend per dealer as they had earlier. Therefore, SMEs may easily face a situation in which they do not have the time to retain good relationships, to respond immediately to questions and support requests from the dealers, etc. Of course, the most important factor in keeping a dealer satisfied is the profits the dealer is making. We assume, that the dealer is making enough profits.

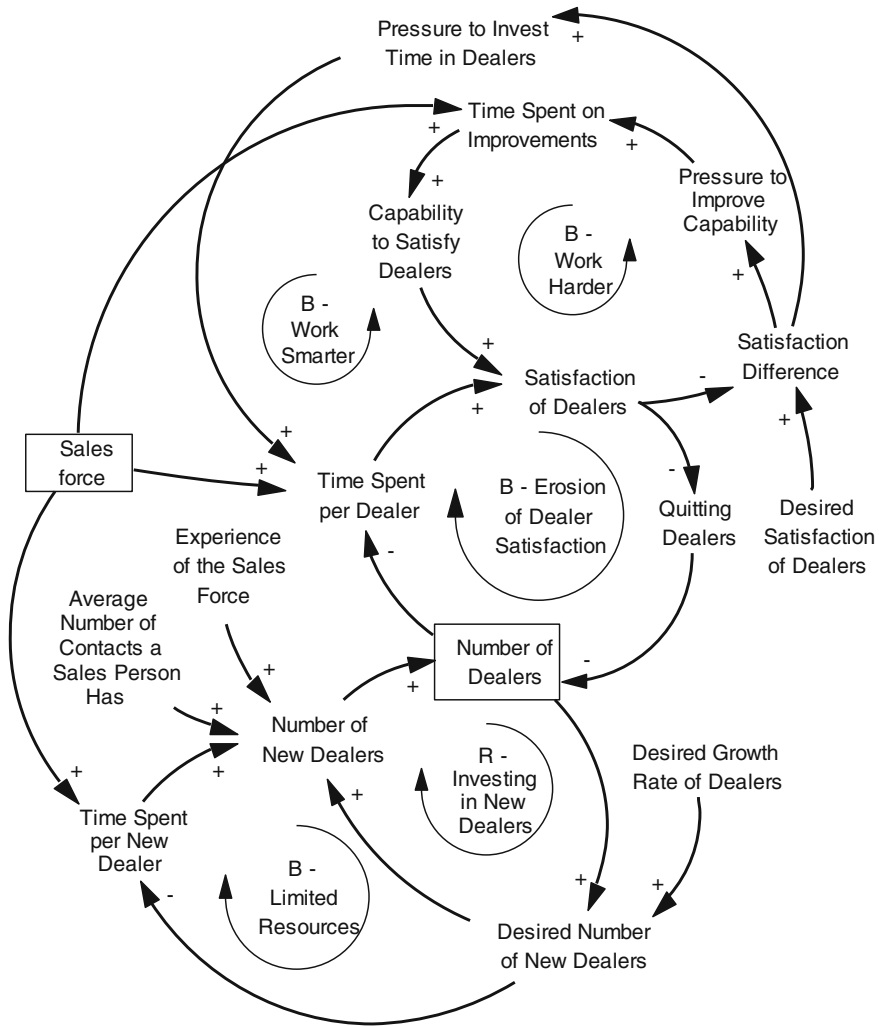


Fig. 2 A causal loop diagram presenting five feedback loops: *Investing in New Dealers*, *Limited Resources*, *Erosion of Dealer Satisfaction*, *Work Harder*, and *Work Smarter*

The decreasing *Satisfaction of Dealers* may cause an increase in the number of *Quitting Dealers* and therefore lead to lower growth or even a decline in the *Number of Dealers*. This balancing feedback loop is called *Erosion of Dealer Satisfaction*. The company interviews indicated that keeping the dealers motivated and having good personal relationships are very important. We see that this is especially important at the beginning of the relationship, i.e., before the satisfaction is supported by sufficiently large profits. This case is not trivial, as the firm may fight against its own actions. Trying desperately to increase the *Number of Dealers*

causes the number of *Quitting Dealers* to increase even further; at the same time, resources are used without gaining the anticipated results.

For the *Work Harder* and *Work Smarter* loops, see (Repenning and Sterman 2001; Repenning 2002; Sterman et al. 1997). In this setting, the *Capability to Satisfy Dealers* includes learning language, culture, business practices of the target country, developing their own after sales processes, Information and Communication Technology (ICT) systems, maintenance capacity, logistics, and other services, i.e., all capabilities the firm possesses in order to satisfy the dealers.

In case of a decreasing *Satisfaction of Dealers*, a firm has a few options of how to react, i.e., spend time directly satisfying the dealers (*Time Spent per Dealer*) or start improving the capability (*Time Spent on Improvements*) to satisfy the dealers, which will help the situation sometime in the future. If the firm is not able to satisfy the dealers, then the number of *Quitting Dealers* will increase. Thus the firm has an incentive to spend time directly on dealers, and consider hiring new people to help the situation in the future. It is possible that the firm is forcing itself into a “solution trap” where it is under constant pressure fighting against decreasing *Satisfaction of Dealers*. At the same time, the *Capability to Satisfy Dealers* is slowly eroding. In the long term, this leads to low capability, and therefore to decreasing satisfaction. The problem may be even trickier if dealer satisfaction is not easily measurable. If it is, how much delay is there, before the firm’s management receives information on the actual satisfaction level? Or, is the increasing rate of *Quitting Dealers* actually the only easily observed indication of low satisfaction level?

The other approach is to channel the limited resources into improving capability. In the short term, this leads to even lower dealer satisfaction, because the time used in improving capability is time not spent on dealers. However, in the long term this enables better satisfaction with the same amount of work, and therefore frees even more resources for further capability improvements. Freeman and Sandwell identified firms’ capabilities to be the key barriers to entering emerging markets for service firms; in particular, face-to-face communication, language, culture, daily work practices, and government regulations were seen to be difficult (Freeman and Sandwell 2008). The interviews show similar results. The study by Barkema et al. shows that firms entering new markets face cultural adjustment costs (Barkema et al. 1996). Johanson and Vahlne (1977) distinguish between objective knowledge, which can be taught, and experiential knowledge, which can only be learned through personal experience. They also distinguish general and market-specific knowledge, and because of the lack of the market-specific experimental knowledge from the new market, there are basically two options, to gain experience either from engaging in the markets or by hiring personnel with experience. Johanson and Vahlne state that lack of experience is an important reason for slow progress, when entering new markets and that acquiring experience takes a lot of time. Noticeable, as mentioned earlier, one interviewee stated that, when going into EMs one should go there aggressively. Even if the capability, for instance experience, to act in the new market is sufficient, an aggressive growth strategy may bring problems, if the capability of new personnel is unable to keep up with the pace and the balancing

feedback loops Limited Resources and Erosion of Dealer Satisfaction, that restrict the growth.

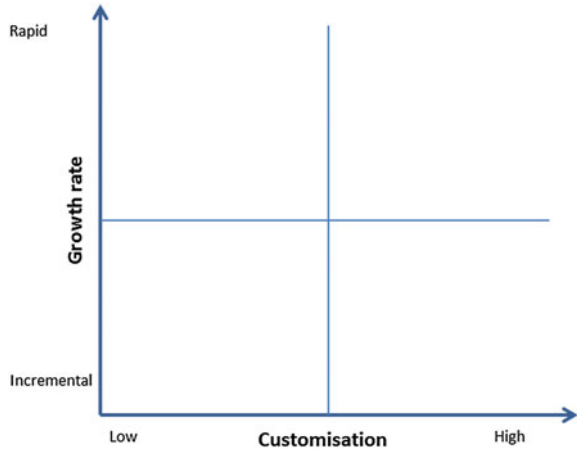
Now, at this point, we will not increase the complexity of the model presented here, even though there are various important aspects that could be included in the model, for example, the pressure on production and logistics causing longer delivery times and lower reliability. However, we will discuss one thing that cannot be excluded from the analysis and is strongly linked to the variables discussed earlier, i.e., the firm's own sales force. Firm resources and ability to invest in its sales force are strongly connected to the decision-making logic, when entering EMs. From the company interviews, a few important aspects were identified, for example, the importance of the firm's local workforce and how to commit them to remaining in the firm. This can be modeled with the same kind of structure as the number of dealers. An important question is, as the interviews show, how to commit the workforce to remain in the firm. This is challenging in some emerging economies, where the workforce is not as committed to the firm as the firm desires.

Frame for Classifying the SMEs

The next step is to develop a simulation model showing how firms incrementally shift from one domain to another. This shift can happen consciously or unconsciously. Continuous growth of customer base, for example, causes more demand for different products and features. Higher demand creates pressure on production and logistics, causing longer delivery times and lower reliability. In order to keep the same service level, firms need to increase their resources, so that longer delivery times and lower reliability do not create pressure to reduce the variability of the products. This may cause cyclical behavior, i.e., oscillation. We want to study how two dimensions, for example the customization and firm growth rate, endogenously change the domain in which the firm is operating. Our hypothesis is that these domains can be linked to the model and even nearer to the existence of different loops and loop dominances, which affect the daily operations of the company creating different problems from the same system structure. This framework may help firms identify the domain they fall into, the direction they are moving toward and what could be done to alter the direction and transition speed. This would help them to prepare for the possible problems in advance and decide to which domain they want to steer towards (Fig. 3).

In further research we will link the risk management tools, firms are using, to the different categories. Identifying when to move from one domain to another may be crucial for the firm's survival in new markets. Through understanding the transition one can anticipate the needs and start building required competences in advance.

Fig. 3 The diagram shows a division with two dimensions, i.e., value of the product and product customization



Conclusions and Future Directions of Research

The theory presented in this paper aids in an understanding, from the dealer network point of view, of why the firm's own actions may cause unintended consequences and side effects, even though the actions may seem reasonable. The causal loop diagrams presented here explain one possible structure that firms entering EMs may face. However, we have not yet built a functional simulation model that could verify that this structure can actually be responsible for the undesired behavior, and therefore we have not yet discussed the possible heuristics that could be used to avoid problems of this sort. The next steps are, therefore, to simulate the model and obtain insights and try different policies. Simulation is a powerful methodology for understanding a system's behavior.

The frame for classifying SMEs will be used to help SMEs to decide what is important now and what in near future. High growth rate, for instance, can cause pressure on production and logistics and lowering product or service customization might be the only way to handle the added pressure—especially when unable to make heavy investments. A systemic understanding is required for designing the correct market entry strategies, for instance, whether to focus on wholesalers or direct sales, accept a lower growth rate or lower customization. Simulation and systems modeling are useful tools in understanding the dynamics in entering EMs.

Future research will contain an analysis of the mainstream decision-making policies, when facing the restrictions presented in this paper, i.e., how time and resources are allocated between recruiting new dealers, working harder, and working smarter, and how decision-making can be improved. The question is a very significant one, in our opinion, because many SMEs have very limited resources available, and if going into new markets alone, they may be building a local presence for years before starting to have sales. This time spent in a new setting can be quite expensive. Thus, shortening the time needed to achieve success is crucial for SMEs.

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