Improving the Survival Rate of Small Firms in Latin America: A case study in Aguascalientes, Mexico

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Summary: The focus of this research is to identify the critical Business and Supply Chain practices that improve micro and small firms’ survival rate considering the managerial qualities involved in the development of the firm. Within the context of Aguascalientes, Mexico, we developed a model to categorize firms in Survival or Success Stage. This model was used as a framework to extend the study to previous data collected of small firms in Bolivia, Colombia and Peru. Based on further analysis, we identified Financial Planning and Operations Management as the critical practices with the highest gap of adoption (15%) compared to firms in Success Stage.

Introduction
Micro and Small Firms represent 99% of the businesses operating in Latin America (OECD-ECLAC 2012). However, nearly one (1) out of four (4) of these micro and small firms fail to develop into a high-growth firm every year mainly due to lack of proper practices (OECD-ECLAC 2012). It has already become one of the critical bottlenecks to Latin America's economy growth. In order to address this issue, this research aims to identity the most important business and supply chain practices to improve small firms’ survival rate in LATAM, with a tailored case study in Aguascalientes, Mexico.

Methodology
The methodology is composed of major five (5) segments: Stage Analysis Modelling, Existing Data Screening Analysis, Small Firms Interview & Deep Dive, Additional Data Collection & Resource Engagement, and a Tailored Case Study in Aguascalientes, Mexico.

We developed a stage analysis model to determine whether a firm was in Survival or Success Stage. This model classifies companies based on the...
delegation level of the organization, main challenge of the firm, and the main activity driver for managers based on the research of Churchill and Lewis (1983) about the *Five Stages of Small Business Growth*.

Later, the existing data screening analysis was performed across different countries in Latin America such as Bolivia, Colombia, Peru to identify the critical supply chain and business practices. The analysis on the percentage of adoption of these practices was performed based on the comparison between firms in Survival and Success Stage, this last one being the benchmark for best practices.

In parallel, we conducted workshops and firm interviews in Aguascalientes, MX to further engage with the local business owners in order to understand to detail the context of the region. The final result and recommendation was provided specifically for the industry context they operated.

**Results**

Considering the model developed, we analyze 10 firms within the context of Aguascalientes, MX. As results, 8 companies (80%) are categorized in Survival Stage, while only 2 companies (20%) are classified in a Success Stage (Figure 1). Thus, we conclude that most of the companies of this sample are in the Survival Stage. Moreover, we also conclude that years of existence is not enough to identify a firm as surviving or succeeding.

To continue our research, we analyzed the existing data from small firms in Bolivia, Colombia, and Peru collected by the Center of Transportation and Logistics by applying the modified version of our first model to identify the critical practices.

When studying the Business Practices for this firms, we observed that companies in Survival Stage lack Marketing (4%) and Financial Practices (15%) this last one having the highest gap and overall lowest percentage of adoption among every Business Practice (Figure 2). Thus, most companies in Survival Stage lack:

- Annual profit and loss statement
- Annual statement of cash flow
- Annual income/expenditure sheet
- Monthly comparison of sales achieved against their target

![Figure 1. Comparison of firms in Survival or Success Stage in Aguascalientes, MX](image1)

**Figure 1. Comparison of firms in Survival or Success Stage in Aguascalientes, MX**

**Figure 2. Business Practices comparison between companies in Survival and Success**

![Figure 2. Business Practices comparison between companies in Survival and Success](image2)
Regarding Supply Chain practices, we observe a lower percentage of adoption in Customer Relationship Management (10%), Operations Management (15%), and Planning and Business Processes Practices (6%) in Figure 3.

Customer Relationship Management practices are related to firms not having a process description on the delivery of the products or services they offer. Moreover, companies tend to not define rules for customer prioritization, nor criteria to accept or reject a customer’s order. These missing practices can be related to lack of Demand Planning Practices that would let them predict the future sales.

Operations Management are the practices with the highest gap between firms in Success Stage (15%). Thus, most companies in Survival Stage lack:

- Knowledge about the lead time of their suppliers
- Appropriate conditions for storing the products
- Delivery records of their clientele
- Demand planning to forecast future demand

On the other hand, Planning and Business Processes are the practices with the lowest gap between firms in Success Stage. This result confirms that managers do not set time for most planning activities that should be incorporated in their day to day as observed in the visits to the companies.

We developed a heat map that classifies practices in critical, important, and not critical groups. The most critical practices are mostly identified as Financial Planning and Operations Management practices. In order of importance, these practices are as follows:

- Steps definition to make product
- Annual income/expenditure sheet
- Supplier lead time knowledge
- Delivery process description
- Appropriate conditions for inventory holding
- Annual profit and loss statement
- Annual statement of cash flow
- Delivery information registration for customers.

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Conclusions

The proposed research identifies Financial Planning and Operations Management as the most critical practices to develop within small firms in Survival Stage for companies in Bolivia, Colombia, and Peru. The 15% gap between companies in Success Stage...
makes it both the highest gap for all the practices evaluated.
The model used to identify the Stage of the firm is developed within the context of Aguascalientes, MX identifying most of the firms as in Survival Stage.

The criteria for the model are based on the research from Churchill and Lewis (1983) where managerial qualities and delegation have a strong impact on the development of the firm as we observed this pattern in the visits and interviews with different small firms in Aguascalientes, MX.

This research would benefit from further study to extend the model developed to fit the entire region of Latin America. Moreover, the addition of an educational tool to empower managers of small firms with the knowledge to establish critical practices (Financial Planning and Operations Management) as well as the managerial qualities required for the growth of the firm.