

## MANAGEMENT INFORMATION SYSTEMS ON SMALL BUSINESS STARTUPS AND THEIR STRATEGY AND PERFORMANCE

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### Abstract

Management Information System (MIS) is an information system intended for use by the management of an organization. MIS generally collects summary data from various departments or subsystems of an organization and presents it in a form that helps management make better decisions. The meaning of MIS is represented by three things. “Management” – information systems are built for management and not for operational staff. “Information System” – information systems that deal with the sourcing, organizing, and managing of required data and presenting it in a desired format that is useful for a purpose.

### 1. MIS data sources

MIS data is generally summarized from the organization's daily operational data. Most MIS databases are collected from various subsystems of the organization. These subsystems can be Human Resource Systems, Production Management Systems, Financial Systems, Sales Management Systems, Project Management Systems.

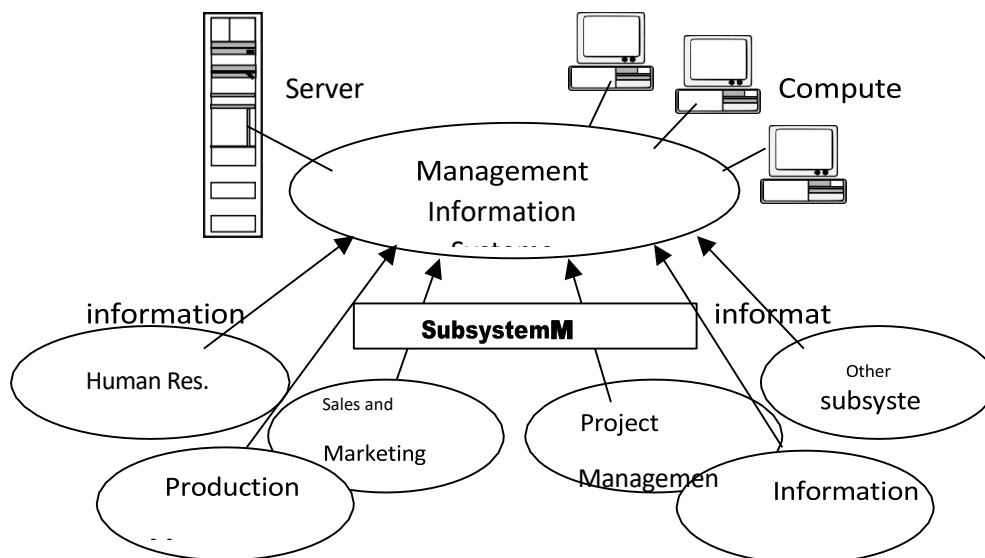
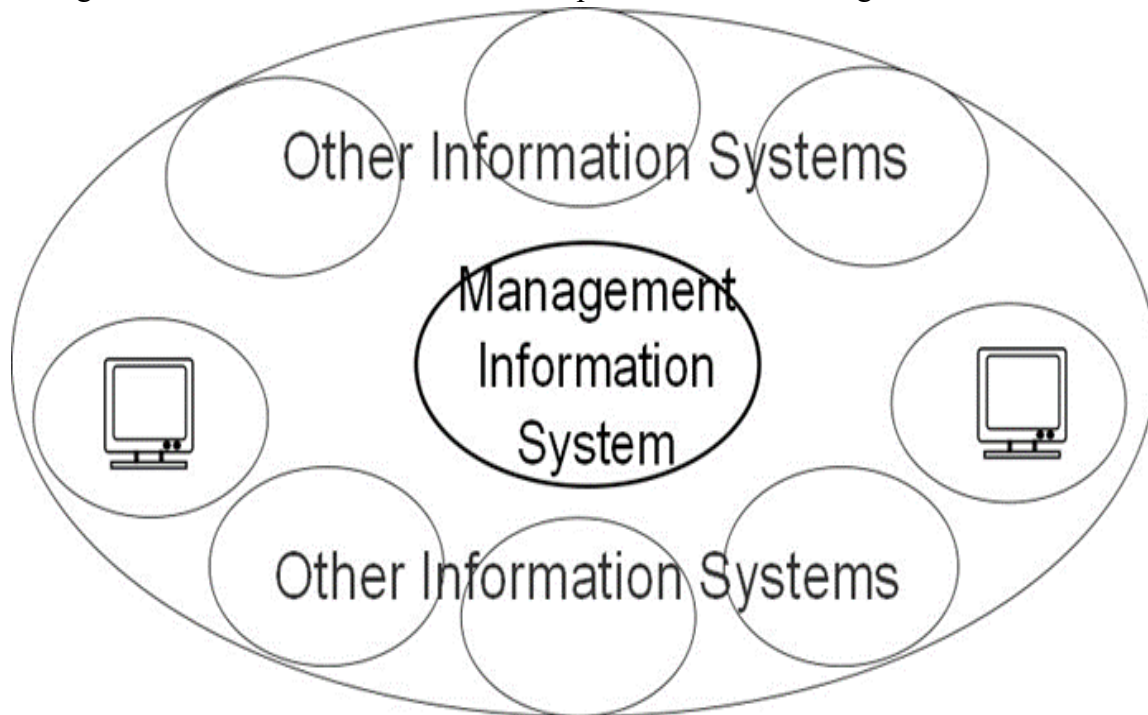


Figure 1.

The illustration above shows how management information flowing from each organizational unit to the management information system.

Some types of MIS data are also collected from sources external to the organization, such as competitor data, which may be obtained from various websites on the Internet.

Management Information System refers to the system of managing information. Although by definition Information System is not required to adopt computerization of data, with the advancement of computing industry and the popularity of computers, Computerization has become an integral part of every information management system. While “management information” can be used for any purpose, MIS is only intended for top-level managers. Therefore, in one sense, MIS is a part or subset of an organization’s information system.



The information system  
of an organization

An organization’s information system may contain other information systems such as financial information systems (such as payroll), sales information systems (such as daily sales). In that sense, routine financial transactions, sales transactions, etc. are not MIS. They fall under the category of “transaction processing systems”.

## 2. Characteristics of MIS

- MIS is business related and is intended for the upper management of an organization. MIS is different from operational information which is related to day-to-day business activities.
- The structure of MIS depends on the structure of the organization. Every organization may not have the same concept of sales, clients, or projects. The MIS system depends on the nature of the organization or business. Since projects, activities, and targets may differ for each organization, the structure and output of MIS may vary as well.
- In general, the volume of data in MIS is smaller compared to other information systems in the organization. MIS data input is obtained from various subsystems in the organization.

### **3. Benefits of MIS**

Information is the key to decision making. Just as a manager is needed to run a business or organization, MIS is also necessary for managers. Managers can take the right decisions only if the right information is available to them. If important information is not available or is available in a confusing format, then managers may fail to take the right decisions at the right time. Thus, a well-organized MIS has the following benefits.

- Facilitates easy access to important data frequently used in management. Since the required information is well organized and quickly available to management, it increases the potential for management decision making.
- The availability of up-to-date information quickly facilitates better planning, monitoring and communication. This not only helps in quick short-term decision making but also helps in long-term decision making and strategic planning.
- Helps in standardization - Since MIS is extracted from various divisions of the organization, any discrepancies that may be found in various formats/procedures will be abstracted. Low-level operational data discrepancies will be aggregated and standardized in MIS.
- A good Management Information System clearly improves management efficiency, operational efficiency, employee productivity, project performance, and customer satisfaction. More effective management results in better competitive advantage.

### **4. STRATEGY AND PERFORMANCE OF SMALL BUSINESS STARTUP**

Given the dominant influence of the business founder, we argue that how a start-up entrepreneur goes about things can be considered his or her business strategy (Section 1). The personal strategy he or she uses affects the performance of his or her firm. In turn, performance inevitably affects the use of strategies (Section 2). The use of strategies is not only determined by psychological factors, but is also influenced by the environment in which the business operates. To characterize the environment, we have chosen the concept of environmental uncertainty, which we believe is fundamental to the study of entrepreneurship (Section 3). The business environment is operationalized by distinguishing between different forms of environmental uncertainty (Section 4) that have consequences for the strategies chosen (Section 5).

#### **4.1 Psychological Strategies in Entrepreneurship**

Most research on strategy has focused on organizational strategy (Hart & Banbury, 1994). This has been criticized as being biased. For example, Rajagopalan, Rasheed, and Datta (1993) suggest looking at the individual and psychological aspects as well. The founders' enormous influence on their firms, and their dominance in decision making, are an analysis of individuals rather than organizations alone (Dickson & Weaver, 1997).

At the individual level, strategy is considered as a plan of action for how we do something (Hacker, 1989). When faced with a situation, they follow a strategy of action, regardless of its level of rationality and clarity. Strategy in psychology is a series of ways to achieve a goal (Miller, Galanter, & Pribram, 1960). The function of a strategy is to deal with and help overcome the limitations of the processing capacity of the human mind (Frese & Zapf, 1994; Hacker, 1989; Kahneman, 1973). This psychological process is not the same as personality variables and is not entirely determined by the situation. People use different strategies and are appropriate for different situations. However, people have preferences for certain strategies.

The concept of strategy emphasizes how an entrepreneur tries to achieve a goal, and therefore takes a strategic approach (Austin & Vancouver, 1996; Dess, Lumpkin & Covin, 1997; Hart, 1992; Olson & Bokor, 1995;

Rajagopalan et al, 1993). In doing so, we ignore the strategy, such as low cost, differentiation or niche (Porter, 1980). Instead we focus on how one formulates and implements the strategy. There are four important differences.

First, this concept of strategy applies a different time frame when compared to what is called management strategy. In this study of business owner strategy, with very short (finding customers in a matter of days) In contrast, strategic management is usually primarily concerned with the long-term orientation of the business. Second In strategic management, strategy is usually understood as the result of a choice. A company has a strategy and has made a decision. a decision about which goals to pursue. In psychological terms, it is impossible not to have a strategy. For example, in the case where there is no plan about what to do on Sunday, just thinking about going out to eat is already a basic strategy in this sense. In this sense, every goal-directed behavior is connected to a strategy (Miller et al., 1960).

Third, the concept of strategy is not always related to the issue of value or interest. Whether a goal is important or not, in the psychological sense a strategy is always used. In the sense of strategic management, strategy is only about important and fundamental goals.

Fourth, strategy in the strategic sense of Management is usually externalized in a written plan. According to psychology, strategy is a written or unwritten plan that is followed that is in the mind of the business owner. In fact, he may not realize that there is a certain strategy underlying his behavior.

By using psychological processes, we hope to learn more about the strategy processes of small business founders, which leads to the process of developing micro-organizational strategies (Rajagopalan et al., 1993).

#### **4.2 Psychological strategies and their relationship to performance**

Cognitive theory has distinguished strategies (Hacker, 1986; Hayes-Roth & Hayes-Roth, 1979; Zempel, 1994): Reactive, Planning, Opportunistic, and Critical Point Strategies. Reactive strategies imply that a person is driven by the situation but does not use information proactively and performs unplanned actions. In contrast, a person uses a planning strategy that is, planning everything ahead and actively preparing to deal with various situations. Thus, planning strategies imply a comprehensive representation of the process, a long time frame for planning ahead, clear knowledge and anticipation of errors in various situations (Frese & Zapf, 1994; Hacker, 1986).

Opportunistic strategies begin with basic planning. People who use opportunistic strategies simply act when opportunities arise (Hayes-Roth & Hayes-Roth, 1979; Palatano & Seifert, 1997). Plans are continually being adjusted. Thus, these strategies are not systematic. Opportunistic strategies are not as situationally driven as Reactive Strategies.

The critical point strategy (Zempel, 1994) starts with the most difficult, the least obvious, and the most important and this plan starts from the main point without any other planning. Only after completing the critical point can the next step be taken. Thus, one has a clear goal and concentrates on the main issues.

The four strategies - Reactive, Opportunistic, Complete Planning and Critical Point - are different to the situation or goals of a person (Frese, Stewart & Hannover, 1987). If one is situation oriented, one can be reactive to the situation (Reactive Strategy) or one can have a multi-plan with an emphasis on proactively exploiting opportunities sought (Opportunistic Strategy). If one is goal oriented, one can have a top-down approach using a well-thought-out plan (Complete Planning Strategy) or one can also plan for things that are very important (Critical Point Strategy).

Strategy is associated with the success of small business entrepreneurs. Frese, van Gelderen and Ombach (2000) found that Critical Point Strategy is positively related to performance. also this relationship by the life

cycle situation (Kimberly & Miles, 1980) of a company. Complete Planning Strategy and Critical Point Strategy have an emphasis on structure and goal setting. However, for start-up companies, the first years are usually with the challenges of uncertainty and the need to make quick decisions (Bhide, 1994). Therefore, Critical Point Strategy will be useful especially in the early stages of business when entrepreneurs continue to work at a high processing level. Lumpkin & Dess (1996) argue Similarly for the advantages of simple strategies for start-up companies. In this period Planning contains costs because it takes time and effort to plan for all possibilities (Bhide, 1994). Then, the advantage in using Complete Planning Strategy, because it helps to handle more complex organizations.

Opportunistic Strategy is useful in the early stages of one's career as a small business owner. Here it is important to be sensitive to opportunities. However, many small businesses are forced to make some kind of plan to get financing from the bank. Therefore, opportunistic strategy can actually be used before borrowing money. In the later phase acting in a proactive way towards opportunities can also be a good strategy. However, Opportunistic Strategy carries the risk of losing sight of the goal if one jumps from one opportunity to another. Therefore, it is difficult to develop a relationship between Opportunistic Strategy and company performance.

Reactive Strategy is the least effective strategy experienced by a business. Here people do not choose a plan of action and do not have a clear plan but rely on the situation without anticipating it (Hacker, 1992).

People sometimes just rely on their routines without a clear plan. Therefore, adding routines or Habits as a fifth category. This category refers to standard approaches that have been developed in the environment. There is little learning, because basically a person does everything “the same way as always”. (Frese & Zapf, 1994). Strategy development over time is complex. Differences in strategy effectiveness depend on the stage of the business. Failure can lead to reactive strategies, as crises put pressure on the decision-making process. This causes one to simply react to situational demands. Similarly, success can lead to increased use of Planning Strategies because of the need to develop more sophisticated management and control (Ketchen, Thomas & McDaniel, 1996).

## **5.METHOD**

Our sample consists of small business founders around the UTM campus. We focus on start-ups because they are usually small and have high owner influence. We selected a sample of business owners with no employees and who have founded their business within the past year. This selection was made from a random list. We did not distinguish between “entrepreneurs” and “shop owners” (Carland, Hoy, Boulton & Carland, 1984), because the sample was selected without regard to growth orientation. However, we did not exclude retail, repair shops, bars, and restaurants, because we selected businesses that provide high freedom of maneuver and are of medium to high complexity. This resulted in a sample of 25 founders. In addition, we excluded 20 individuals who were not founders, had no employees, or had just founded their business. Our sample was mostly male, had a high school education or equivalent, and started with little initial capital.

## **6. DISCUSSION**

The results of the study indicate that the strategy process will be able to predict business success. In line with that, the results show that Reactivity is related to failure. This supports the hypothesis of Miles & Snow (1978) that reactivity is the least successful strategy (Doty, Glick & Huber, 1993). This strengthens the argument that some form of planning is necessary for success.

We found a positive and significant relationship between Critical Point strategies and success. We found no significant relationship between success and Complete Planning. Schwenk & Shrader (1993) and Miller & Cardinal (1994) showed that the relationship between strategic planning and success is as expected. Our more nuanced conceptualization of what planning means may prove useful. This can be explained by distinguishing between three forms of planning: Complete Planning Planning Strategy that attempts to use a top-down approach; Critical Point also implies some level of planning, although only for major issues; and Opportunistic Strategy that uses planning for opportunities only. The results show a cyclical pattern of success, where Critical Strategy is associated with success in the early stages. Success in turn can lead to the need to use a more structured and top-down planning approach (Complete Planning). The use of this approach helps to increase success. Opportunism is considered an important strategy (Hayes-Roth & Hayes-Roth, 1979), but it does not seem to be so clearly related to success. One reason may be that although it has many advantages, it makes one lose focus on the goal.

Entrepreneurship is related to uncertainty. On the one hand, entrepreneurs work with uncertain income; entrepreneurs will try to minimize uncertainty. The results show that uncertainty will be handled in different ways, depending on its type. In a changing environment, the Complete Planning Strategy is not very useful. In a complex environment, entrepreneurs tend to use the Complete Planning Strategy but do not use the Critical Strategy. In an environment with many competitors and few resources, one finds it difficult to plan and the Reactive Strategy will be used more often.

That niche strategy should be planned formally using Complete Planning or Critical Point Strategy, while if customer-oriented it can work better in opportunistic strategy. Practically, it shows that top-down planning should be modified. Reactive Strategy - turned out to be bad in our study, in contrast to planning can produce different results at different points along the life cycle of a company.

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