

## **An Effective Approach for Managing the Growth of Homebuilding Firms in Saudi Arabia**

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**Abstract.** Small volume homebuilding firms construct a high percentage of homes in Saudi Arabia. The majority of these firms are sole proprietorships, owned by individuals coming from diverse backgrounds. Very few of these individuals are trained to cope with the wide variety of problems and situations that exist in the homebuilding industry. Most follow a crisis management approach, which negates most of their hard efforts that, goes into building their firms. This paper first discusses a theoretically sound management framework that can be used to manage the homebuilding firm more effectively. Secondly, the paper goes on to present a conceptual management growth model which can be used to describe the various stages of growth which can be experienced by a homebuilding firm as its management systems, techniques, educational attitude and organizational structure evolve overtime. Management can use this conceptual model to determine which management level is most appropriate and effective for the homebuilding firm. In order to achieve desired level of effectiveness, the model has to be viewed not so much as a methodological management procedure but more an outline of the many critical tasks that has to be kept under control in the process of managing the homebuilding firm.

**Keywords:** Management framework, Homebuilding firms

### **Introduction**

Based on the number of total construction permits issued by Ministry of Municipalities and Rural Affairs (MOMRA), residential construction in Saudi Arabia represented approximately 72% of total construction activity during the last decade [1]. Small-volume building contractors are responsible for most of this activity and the majority of these small firms are owned individually by entrepreneurs who are largely responsible for managing the business as well. These homebuilders are managing their businesses with more sophistication today than was done in the recent past. This is primarily due to the fact that most of these firms are established and managed more increasingly by Saudi graduates with university-level architecture and engineering background. However management problems and outdated practices are still causing high attrition and entry-exit rates among these firms. Most of these firms are still plagued with the same

problems related to how the firm is managed when compared to past periods. This is confirmed by a direct comparison between the results of a cross-sectional survey of workers in residential construction firms carried out in the mid-eighties [2], and a more recent one performed during the last six months. The first survey showed that 84.8 percent of surveyed firms suffered management incompetence and leadership problems, while the latter survey showed that the figure has dropped to 63.2 percent. Surveyed workers, in the second survey still attributed most of the problems in their firms to the lack of facilitating leadership traits, and improper management practices. The trend of residential construction firms in the Saudi market being owned and managed by highly educated professionals is on the rise, however leadership and management problems will continue to persist unless management principles are understood and applied within the context of the homebuilding firm operating in the Saudi market.

### **Management of the Homebuilding Firm**

The term “homebuilding firm” is very loosely used here because any business entity that builds houses can be classified as a homebuilding firm. From highly organized firms specialized in house construction to individual contractors who build multi-story apartments, the term “homebuilding firm” can be applied. In order to properly illustrate how these firms should be effectively organized and managed, an adequate framework of management theory must be first established which is appropriate to an industry that predominantly consists of small size firms. The framework to be discussed draws upon three proven sources of management theory, which can be related to the unique situation of the homebuilding firm. These are: the evolutionary stage of leadership within the firm which span from the natural leadership stage to the management leadership stage [3]; the type and characteristics of managerial work typically performed by managers in such firms [4]; and a system approach to management which transforms inputs into the firm into appropriate outputs [5]. These stages are discussed in the following sections.

#### **The evolution of leadership in the homebuilding firm**

Analysis of the relationship between a leader and the group, which is being led, describes three basic stages of leadership in business firms [6]: The natural leadership stage, the transition stage, and the management leadership stage. The first stage occurs when an individual first assumes a leadership position in a young firm (just starting out) and most probably be the owner of the firm. This leader generally exhibits a tendency toward intuitive action since he is dealing with workers who give high priority to their own needs rather to the needs of the young firm or the group as a whole. In the Saudi market this situation is reinforced by the fact that most workers are expatriates and accordingly, such situation usually requires a natural leader who displays the following characteristics:

1. Promotion of personal interests (firm's interests)
2. Centralization of decision-making (little delegation of authority)
3. Intuitive actions (using wisdom)
4. Personalized organization (one-to-one relation with workers)
5. One-way communication (top-down approach)
6. Control of work quality by inspection

These characteristics provide a close parallel between a natural leader and a typical small homebuilding firm owner in the Saudi residential construction market. The second stage takes place as the firm grows. Its members become more confident as they mature and better understand the objectives of the firm and they demand more freedom to make and implement their own decisions. At this stage, most successful natural leaders tend to be very resistant to change. Since the success of the firm has been due to the natural leader's own effort and ability, it is difficult for him to accept the fact that the firm has outgrown him. Symptoms of dissatisfaction that typically appear in the firm during this stage generally include unsatisfied workers, decreased innovation, lower productivity, and creation of bureaucracy in the firm by the leader (owner or his executive manager).

As the workers become more proficient, a shift must occur to the third stage or phase of management leadership as a result of the continued pressure for a new style of leadership. This stage in the firm is typically characterized by a management emphasis, decentralized and more participative decision-making approach, two-way communication, and logical action and planning by management.

An understanding of the three stages of leadership can allow homebuilding firms owners to make important changes as their firm evolves. In a situation of growth, it is important to realize that not wanting to 'let go' of the natural leadership phase and move into the management phase can seriously jeopardize the survival of the firm.

### **Managerial work**

Mintzberg [7] identified the following characteristics of managers regardless of their level in the organizational structure or the industry within which they work:

1. Unrelenting pace- managers work long hours with virtually no break in the constant stream of activities and duties they must or want to fulfill
2. Preference for live action- managers prefer specific and concrete activities rather than general activities such as long-range planning
3. Communication link- managers serve as the fundamental communication link between the firm and outsiders
4. Control of activities- managers try to control their activities and use them to their advantage

5. Variety and fragmentation-managers spend short periods of time on each activity and must rapidly change their frame of mind and attitude during the day.

A manager by the very nature of the position held, has formal authority and status granted by the firm. As a result of this authority and status, Mintzberg [7] identified the following roles that effective managers typically perform in all levels of an organization:

1. Interpersonal roles as a figurehead, a leader, a liaison
2. Information roles as a monitor, a disseminator of information and as spokesperson for the firm
3. Decisional roles as an entrepreneur, a conflict resolver, a resource allocator, and a negotiator.

The importance of the preceding discussion to small home building firms managers reside in the fact that many face major problems in playing out these different roles at the same time. There is never enough time because of their unrelenting pace and the need to constantly change focus from dealing with the various participants in the house building project. They need to deal with the client, getting to the materials supplier and making sure the material delivered is according to specs and timely, or contacting subcontractors. There is also the added responsibility to deal with his own workers. Often the managers/owners are unable to properly carry out all of the roles discussed, particularly if they also get involved in more than one project. Recognition of the environment in which these small homebuilding firms operate and the type of roles that must be performed, should provide the basis for changing priorities if that is deemed necessary in order to carry out the projects successively and survive in the field.

### **A system approach to management**

A generalized systems approach to management is presented in Fig. 1. Firms receive inputs and then transform them into outputs for use by the environment. The inputs form the external environment consists of human, capital, management and technology resources needed to produce the end products. The external environment consists of market opportunities, and constraints.

The manager must be aware of the inputs and be able to transform them in an effective and efficient manner to produce outputs. The transformation process consists of five major functions: planning, organizing, staffing, leading, and controlling [8]. The outputs of the firm consist of products, services, satisfaction, and profits. Satisfaction must be an output if the firm hopes to motivate its workers.

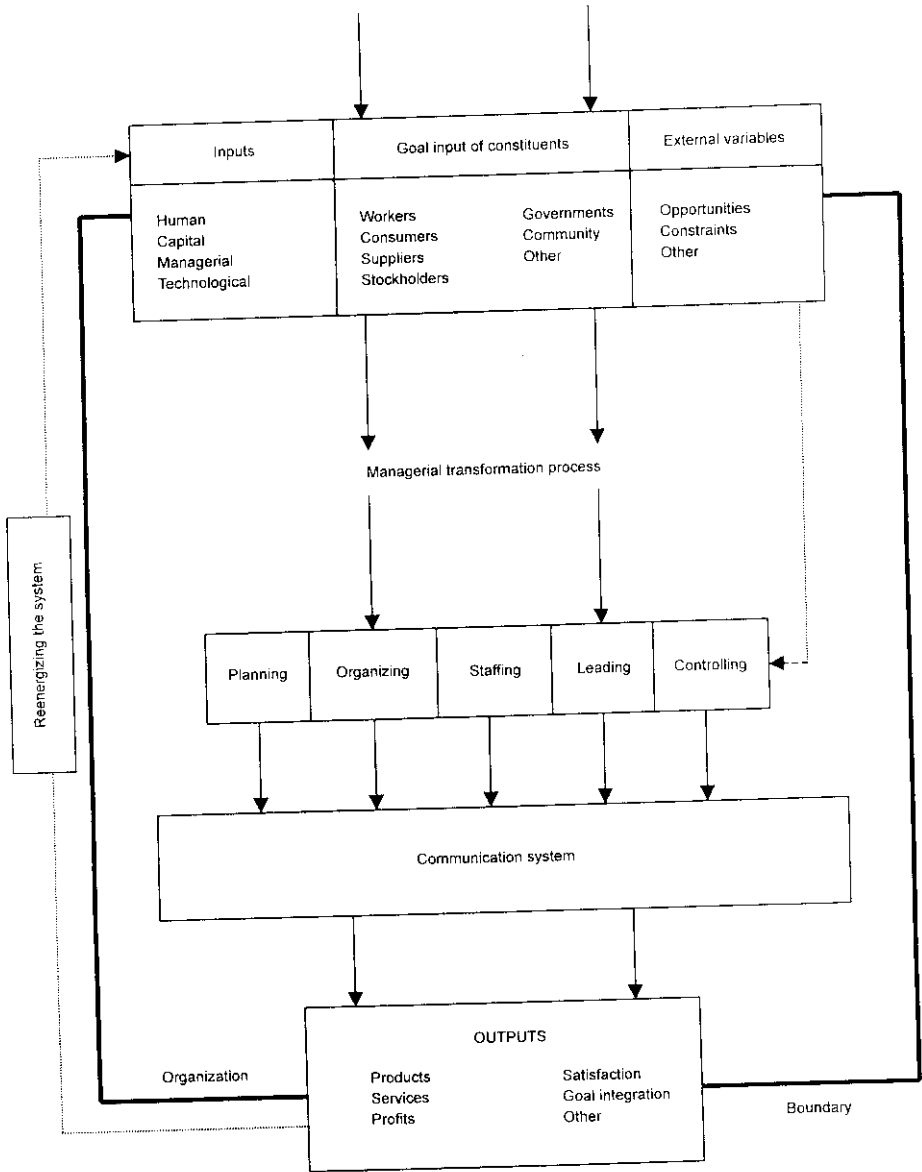


Fig. 1. A Generalized systems approach to management.

Source: Adapted from Nadler, D. *et al. Organizational Architecture: Designs for Changing Organizations.* Jossey-Bass Publishers, Inc. 1992. p. 54

The systems approach provides a systems framework, which include the major management functions that can be used by homebuilding firms managers to systematically manage their firms. For them the task of managing can seem very difficult, however these functions must be performed by all managers in all sizes and varieties of situations. The small homebuilding firms cannot take advantage of the economics of scale available to large firms who often have different and separate department to carry out each of these functions. As a result, small homebuilding firms are forced to approach management in one of two ways:

1. They can choose to practise all of the functions of management in a superficial manner, thus risking poor performance, losing profits and threatening their own survival
2. They can selectively emphasize the most important function and as a result, influence the other functions in a satisfactory manner.

It is believed that the keystone function, which should receive the greatest emphasis, is planning [9]. This is because it is the catalyst that drives the other functions as shown in Fig. 1. Proper planning is not only the keystone to complete management philosophy, it also reduces the unwanted consequences of the typical small homebuilding firm owner/manager crisis management approach. Crisis management is exhibited through making instantaneous decisions without any prior planning or strategy. Too often, due consideration is not given to long-range effects resulting from the crisis management decisions that result in the need to make more decisions that produce very high risks for the home builder firm. Homebuilding firms in the Saudi market generally suffer from this since a large percentage of managers follow this type of approach in their decision making process [2].

As seen from Fig. 1 the homebuilding firm interpersonal behavior provides a frame around the five functions of management. This behavior describes those ill defined activities and relationships that one person in the firm has with another. These are reflected in the tone of voice, facial expressions, words that are used, mannerisms, sensitivity to other, needs and motivation (work culture and organizational climate). It is crucial for any firm to encourage and maintain a positive work climate and strong organizational culture in order to succeed. The influence of these two variables on the overall functioning of the firm is major and all five functions of management would suffer greatly if the firm fails to promote proper work climate and create conducive organizational culture. Strengthening organizational culture and improving work climate must be high on the priority list of firms operating in the Saudi market since the majority of workers are overworked and underpaid in a consistent manner by management [2].

### **Management Growth Model for Homebuilding Firms**

In terms of growth, a crucial set of questions must be asked to uncover the pattern of growth for these firms. What characteristics will be required if a firm desires to grow from being small-volume, building between a single or a few units per year, to a much larger volume home building activity? Are there commonly held managerial

characteristics among homebuilding firms with similar annual construction volumes? Also, are these managerial characteristics distinctly different from those found in firms with dissimilar annual construction volumes?

Answers to these questions provide valuable information to a homebuilding firm wishing to expand. These answers can be provided within the framework of a Management Growth Model, which assumes that a homebuilding firm is not constrained with regard to growth by the external environment, that is, society's requirements. A constraint occurs because of the homebuilding firm manager inability to manage more than the firm's present volume of work.

This research assumes a growth process for a homebuilding firm that consists of the various stages of management evolution. The stages in the evolution of management in homebuilding firms are shown in Fig. 2. The figure implies that there are different levels of management skills, techniques, and awareness that are required to achieve different levels of construction output (measured in number of units built per year, annual business volume). Construction output is a term used to reflect various levels of production, which can be applied uniformly to all types of homebuilding firms. In order to grow, it is assumed that the homebuilding firm must increase output in order to increase profits (assuming that the firm is running a cost-efficient operation). It is proposed that an increase in output is a function of two internal variables. The first variable represents the effort that must be expanded in order to increase volume, and the second can be represented by the term managerial proficiency.

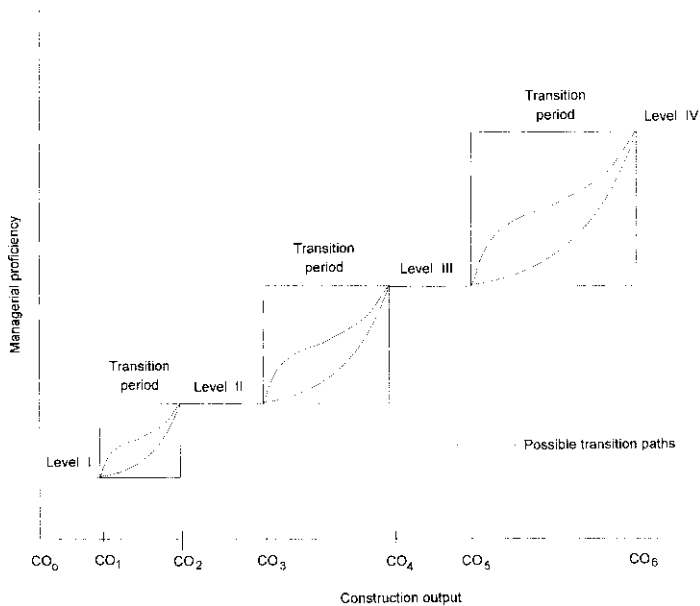


Fig. 2. Stages in the evolution of management in homebuilding firms.

**Work effort**

Effort can be defined as the amount of work required to increase the number of units constructed at the same level of managerial proficiency. It is simply any valid work method used by the homebuilding firm to increase volume. It entails working longer hours, with more workers or subcontractors, more days per week, bigger machines. Effort is limited by the endurance possessed by the homebuilding firm.

**Managerial proficiency**

Managerial proficiency can be thought of as the set of management characteristics, when refined and developed, would enable the homebuilding firm to increase construction output. It represents doing the work more effectively and efficiently with moderate increases in the energy expended. An increase in managerial proficiency is assumed to be limited only by the homebuilding firm training, expertise, and willingness to innovate. Managerial proficiency can be discussed in terms of four characteristics that are readily identifiable within any homebuilding firm, regardless of the number of units constructed. It is hypothesized that individually each of the characteristics goes through an evolutionary process which, when considered collectively, determine the evolution of managerial proficiency. These characteristics are (1) management systems, (2) management techniques, (3) educational attitudes, and (4) organizational structure.

**Management systems**

Management systems provide the tools that are used to manipulate internal and external information in order to develop firm's strategy, plan firm's activities, perform required tasks, control schedules, costs, and quality of performed tasks, forecast relative future events, and ensure survival of firm. Homebuilding firms require a set of management subsystems that are suitable to their current level of construction output. In light of all recently emergent management principles such as Total Quality Management (TQM), management systems for homebuilding firms can be divided into ten key subsystems that are critical to the effective and efficient management of homebuilding firms [9]. These are: (1) Business Strategy and Planning, (2) Office & Labor Management, (3) Estimating, (4) Cost Accounting, (5) Cost Control, (6) Scheduling, (7) Subcontracting, (8) Quality Management, (9) Customer Service, (10) Safety.

Homebuilding firms can use a number of approaches to implement and model each one of these ten subsystems in a sound and effective manner, and their discussion is beyond the scope of this work.

**Management techniques**

There are many techniques that can be associated directly with the way homebuilding firms are managed. The first of these is the relationship between the amount of time a manager of a homebuilding firm spends performing *managing work* compared to the amount of time that is spent performing the *operating work*. Another characteristic is the amount of personal control a homebuilding firm manager exerts on

the construction process. Is he constantly present on the projects, continually making all the decisions, or does he simply monitor the progress of each project on a weekly or biweekly basis, thus allowing subordinates to make decisions concerning their own individual areas or responsibility?

A third management technique is associated with the relative amount of intuitive versus deductive decision making practiced by management of the homebuilding firm. In other words, how many decisions are based on guess and feelings as opposed to those based on data collection and analyses?

In general, a mix of all these management techniques is recommended for the effective manager of a homebuilding firm and its level is determined by the specific circumstances of that homebuilding firm.

#### **Educational attitude**

Experience indicates that there is a wide variation in the attitude of homebuilding firms toward the importance of specialized and advanced education in the homebuilding industry. Most Saudi homebuilding firms feel that practical "hands-on" experience is more critical to the success of the firm than employing people with education. Such an attitude seriously affects the homebuilding firm's ability to successfully and efficiently expand its operations into new and more challenging areas. This situation is reinforced in the case of homebuilding firms operating in the Saudi market, since most practice importing cheap uneducated labor from abroad. Therefore firms' attitude towards employing uneducated and unskilled labor must be changed in order to enhance and expand operations. Alongside intensive on-the-job training programs for educated local labor, the industry recruitment policies should also be formulated and controlled in such a way to import only workers with proven track of experience, skills, and qualifications. The positive improvement in productivity will definitely outweigh any wage increases incurred by the firms in the long run.

#### **Organizational structure**

Organizational structure in a typical homebuilding firm defines work positions relationships within the firm, the responsibilities associated with each position, the amount of authority and accountability associated with the assigned responsibilities, and the specialization of each position within the firm.

It can be assumed that a higher level of managerial proficiency can be attained in an organization with specialized functions than in an organization in which the owner of the firm assumes the "do-it everything" approach [11]. It is not to be implied that an extensive organization is required in order to be successful. It is only proposed that the owner of a homebuilding firm cannot personally perform all the tasks and still expect to achieve higher levels of construction output.

### **Model's Management Plateaus/ Transitional Periods**

The growth can be divided to four management plateaus or levels, which are separated by transition periods as shown by Fig. 2. The importance of these levels is that they represent the range of construction outputs that can be achieved at the various levels of managerial proficiency. These levels can be viewed as stability zones where construction output matches the effort exerted and the management proficiency achieved. These are also the periods during which the homebuilding firm must consciously plan the modifications to current management practices if the firm is to successfully experience the subsequent transition period to the next plateau level in the least disruptive way possible and also achieve the next desired increase in construction output.

The transitional period occurs when a homebuilding firm makes a conscious decision to increase construction output by increasing firm's managerial proficiency. This increase is the result of an iterative process of learning through personal experience and also adapting the most valuable ideas of other homebuilding firms in similar situations. Each time an attempt is made to increase output in an efficient and profitable manner, lessons are learned that make the next attempt less traumatic.

The transition period often results in an uncomfortable experience for the individuals within the firm. It generally causes interpersonal conflicts because of new expectations and higher anticipated efficiencies. Workers are usually being asked to step out of their personal comfort zones and work hard to meet the new challenges.

The four components of management proficiency discussed in the preceding section- management systems, management techniques, educational attitudes, and organizational structure- have unique developmental characteristics at the four levels shown in Fig. 2. For example, management techniques probably evolve from a fairly crude and unstructured process in Level (I) to a sophisticated set of management principles in Level (IV). When the management techniques component of managerial proficiency is displayed at each level in conjunction with each of the other components at that level, an evolutionary process for managerial proficiency results.

As shown in Fig. 2, at managerial proficiency Level (I) a manager of homebuilding firm is most likely to be a person with traditional skills gained from experience as a worker in one of the construction trades or crafts. He has no expertise in the management of the homebuilding process. The organization is an extension of the homebuilder's (owner/manager) personality. All functions of management are probably centralized and authoritative in nature.

A Level (II) homebuilding firm continues to strongly reflect the personality of the homebuilder (owner/manager). Control still is authoritative in nature but is less centralized due the increased construction output. A need for structured management systems has been realized and they are, for the most part, manually implemented. For example, accounting and payroll might be recorded manually in ledger books.

A Level (III) organization has evolved into a well-defined group of specialists in functional areas such as planning, accounting, and construction supervision. The homebuilder (owner/manager) has surrendered control of routine activities and is primarily concerned with long-range or strategic planning. A structured management information system is used extensively. The firm now has a "corporate identity" that is not nearly as dependent on the personal mannerism of the homebuilder. Homebuilding firms operating at the fourth level (Level IV) typically do not focus their major attention on the daily operations of the firm; these concerns are the responsibility of the subordinates. There is generally a great deal of depth in the organization, and personnel are imported into the firm for their particular skills and experience. It generally can be said that these organizations represent the top firms in the local residential construction industry.

Although each of the four components of managerial proficiency (i.e., management systems, management techniques, educational attitudes, and organizational structure) are important, the one which is probably most useful to the homebuilding firm is the "management systems" component. If the homebuilding firms compare the management systems presently implemented in their firms with the characteristics of the same management system which a Level I, Level II, etc. builder should have, then it is fairly simple to identify their current managerial level.

As noted earlier, ten key management subsystems are considered to be critical for effective and efficient management of the homebuilding firm. These subsystems can be classified into three major categories as follows:

1. Planning systems
  - Business planning (Strength, Weakness, Opportunities, Threats)
  - Office management
2. Control Systems
  - Estimating
  - Cost accounting
  - Cost control
  - Scheduling
  - Subcontracting
3. Service Systems
  - Quality management
  - Customer service
  - Safety

A graphical representation of one of the management subsystems, business planning is presented in Fig. 3. Information of the type shown in the figure will allow the homebuilding firm manager to answer questions such as "Where am I now?" and "What do I need to do in order to improve and grow?" The answers will enable homebuilding

firms to evaluate their current management systems. For example when it comes to market planning, the manager needs to find out the level of strength, weakness, opportunities, and threats (SWOT) analysis being conducted by the firm. If the firm carries out a thorough market analysis, and firm's goals and objectives are clearly defined, strategies are well developed and evaluated, then the firm is at level four. If not, then at what level is the firm operating and what does the firm need to do to improve and grow.

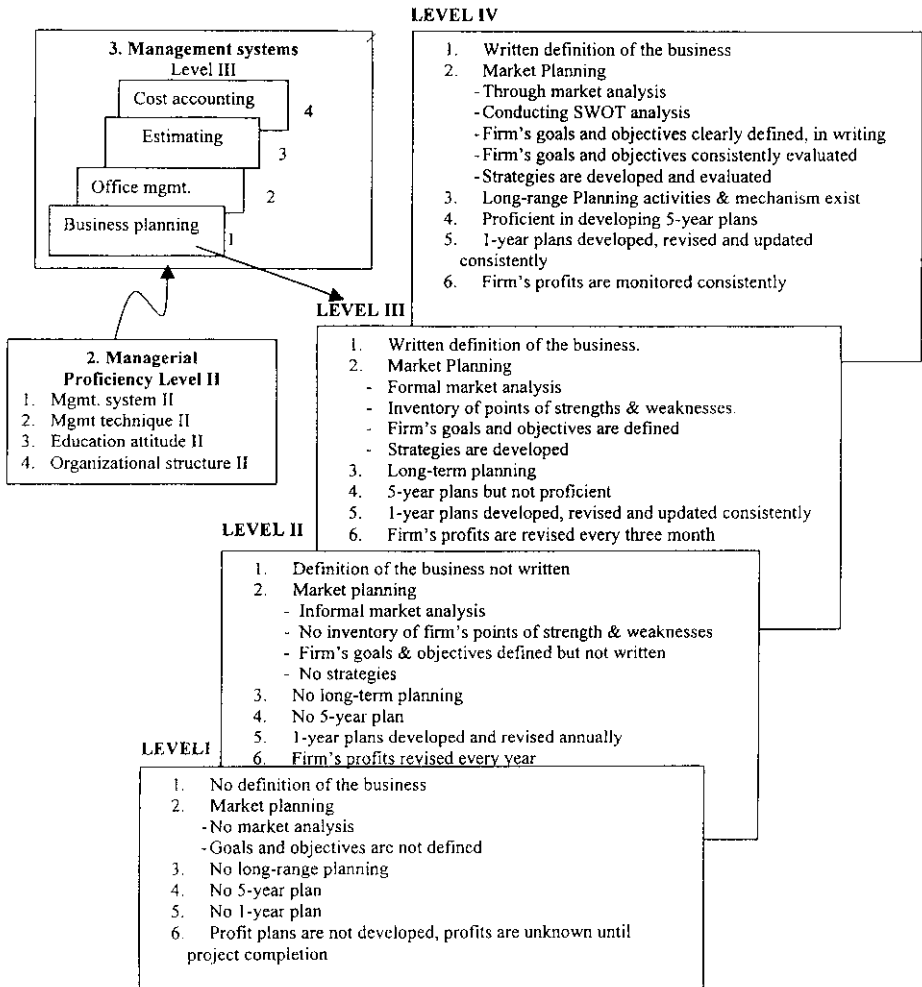


Fig. 3. Management systems: Business planning.

Details of the levels will transmit information about the management systems of homebuilding firms that currently are at higher level of managerial proficiency. Each level is characterized in terms of business planning and the homebuilder can categorize his firm accordingly. Is the firm operating according to level (I), (II), (III) or (IV)? Homebuilding firms, who wish to improve their managerial proficiency, as well as their ability to increase construction output, will understand which is required to achieve the next higher level.

It is further anticipated that this insight will provide homebuilders with an understanding of how to successfully run their companies for their own benefit, for the benefit of their workers, and for the benefits of all those who need housing in the future.

As changes to the various management subsystems are made, it is felt that the homebuilding firms' current approaches to the management techniques, educational attitudes, and organizational structural components of managerial proficiency will also naturally be modified.

### Summary

The primary objective of this paper was to provide management framework about the basic concepts of management and a growth model which when understood can increase the effectiveness of homebuilding firms as they apply their technical expertise to the homebuilding process in the Saudi market.

The management framework for homebuilding firms, which is presented, drew upon three credible sources of management theory which can be related to the unique situation of the homebuilding firm. This framework requires an understanding of: (1) the evolutionary stages of leadership which span from the natural leadership stage to the management leadership stage, (2) the type and characteristics of management work typically performed by managers, and (3) a systems approach to management which transforms inputs into appropriate outputs.

The paper also presented a management growth model, which can be used to describe the various stages of growth which can be experienced by a homebuilding firm as its (1) management systems, (2) management techniques, (3) educational attitude, and (4) organizational structure evolve over time. This conceptual model can be used by a homebuilding firm to determine which management level is most appropriate for the firm. An example of how the model can be applied to the business planning function is also presented to aid in the understanding of the model.

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## نهج فعال لإدارة نمو مؤسسات بناء المسكن في المملكة العربية السعودية

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(قدم للنشر في ١٦/٧/١٤٢٠هـ؛ وقبل للنشر في ٤/٨/١٤٢١هـ)

**ملخص البحث.** يتم تشييد نسبة كبيرة من البيوت في المملكة العربية السعودية بواسطة مؤسسات بناء المسكن الصغيرة الحجم والتي تكون غالبيتها مملوكة بشكل فردي من قبل أفراد ذوي خلفيات وخبرات متنوعة، وفي الواقع أن قليل من هؤلاء الأفراد يكونون مؤهلين ومدربين بشكل سليم، أو لديهم الخبرة العملية الكافية للتعامل مع المشاكل أو الظروف الغير مناسبة التي تطرأ على صناعة بناء المسكن، وبالتالي نجد أن الغالبية العظمى من هؤلاء الأفراد تلجأ وبصورة دائمة أحياناً إلى إتباع أسلوب إدارة الأزمات الذي في أغلب الأحيان يؤدي إلى تحجيم وإفشال فعالية الجهود المكلفة التي تبذل في بناء هذه المؤسسات.

يناقش في هذه الورقة أولاً إطار إداري محكم نظرياً يمكن للمالكين مؤسسات بناء المسكن استعماله لإدارة مؤسساتهم بفعالية أكثر. ثانياً يقدم في الورقة أنموذج مبدئي للتطور والنمو الإداري يمكن استخدامه لوصف مراحل النمو المختلفة التي تمر بها إدارة مؤسسة بناء المسكن طبقاً للتطور الزمني للنظم الإدارية والهيكل الإداري لها والنظرة الإدارية حيال تعليم العاملين وأساليب العمل المنتجة مؤسسات بناء المسكن. هذا الأنموذج يتيح للمؤسسات بناء المسكن تحديد المستوى الإداري المناسب والأكثر فعالية لها، ويجب أن لا تعتبر هذه المؤسسات الأنموذج، كأنه خطوات عملية بحتة مطروحة للتطبيق بخلافه؛ لأجل الوصول إلى مستوى الفعالية المطلوب بل يجسب اعتباره كموذج يُلخص المهام الخرجة العديدة التي يلزم مراقبتها والتحكم بها أثناء عملية إدارة مؤسسة بناء المسكن.