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**Research Articles**

***Explaining Small-Business Development: A Small-Business  
Development Model Combining the Maslow  
and the Hayes and Wheelwright Models\****

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**ABSTRACT**

This paper looks at small-business management from the standpoint of Maslow's hierarchy of needs and Hayes and Wheelwright's four-stage model. The paper adapts Maslow's hierarchy of needs model to small-business development and evolution. Additionally, Hayes and Wheelwright's four-stage model is combined with the adapted Maslow small-business development model. The implications of the new model on the development of small businesses and future research are discussed.

**KEY WORDS** Maslow's Hierarchy of Needs; Hayes and Wheelwright; Small Business

Small business organizations are an important part of the economy. Small businesses employ half of the nation's private workforce and comprise 99.7 percent of all employers nationally. Additionally, since 1995, 65 percent of new jobs in America have come from small businesses (Nazar 2013). With such a large portion of the economy in the United States tied to small businesses, it is important to understand the development

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and evolution of these organizations, but unfortunately, little information exists on small businesses because most academic research focuses on large organizations. Much of the existing literature assumes that small businesses behave and perform the same as larger organizations, but in some cases, substantial differences exist between large and small organizations.

Small-business owners often do not have time for activities beyond the day-to-day running of the organization, and as a result, planning activities suffer. In addition, many small-business owner-managers tend to be risk averse and to avoid making major changes to their organizations, but owners of small businesses often have an implicit strategy that is not formally communicated to other members of the organization (Levy and Powell 2000). Because most small businesses have informal, implicit business strategies developed by the owner-managers, different types of strategy models need to be developed.

Much of existing small-business research has focused on owner-managers' characteristics in understanding the growth and performance of these organizations (Blackburn, Hart, and Wainwright 2013). Storey (1994) presents a framework of three spheres: (1) the entrepreneur, (2) business strategy, and (3) the firm for business growth. Many researchers have indicated that owner-managers are the most important resource to a small business organization (Hansen and Hamilton 2011; Mazzarol and Reboud 2009; Smallbone, Leigh, and North 1995).

Because the small-business strategy is developed from the perceptions of the owner-manager, Maslow's hierarchy of needs would be a good model for explaining the motivations of small businesses. The authors have modified this model to reflect the needs of small businesses at each level.

This paper proposes that where small businesses fall on the hierarchy of needs determines the management focus of the organization. The next section of this paper will discuss the differences between large and small business organizations. Next, Maslow's hierarchy of needs will be discussed and a model of small-business hierarchy of needs combined with Hayes and Wheelwright's four-stage model will be presented. The traits of small businesses at each level of the model and the implications on the organizations will be addressed.

## **DIFFERENCES IN SMALL AND LARGE BUSINESSES**

Small business organizations are different from large organizations in that they are run primarily by owner-managers, whereas large businesses are almost exclusively public corporations run by professional managers. The main focus of small-business management is survival in a highly competitive environment. As a result, small business organizations are driven by operational requirements, as opposed to long-term strategic focuses (Levy, Powell, and Galliers 1999). Small businesses generally have flexible organizations that allow them to respond quickly to market changes, and they tend to have informal management structures that are built around small management teams. A

major difference between large organizations and small businesses is that, often, small businesses do not have explicit business strategies (Levy and Powell 2000). Many smaller businesses do not develop business plans, and those that do often fail to adjust their plans or to use those plans as benchmarking tools. Proper business planning takes a backseat to technical issues in small business organizations. A major impediment to using leading-edge management processes is that small-business managers often fail to understand how such tools will increase the organization's bottom line (Monk 2000).

Small businesses face limited resources such as capital, management time, experience, and information systems. A key difference between large organizations and small businesses is the combination of functional roles in a smaller organization. Small-business managers often lack specialized skills in many functional areas and become more specialized as the firm grows. As a firm grows in size and complexity, the organization specializes in the areas that are the dominant problems for management at that time (Hanks and Chandler 1994). A major factor for the high failure rates of new small businesses is the fact that these organizations often lack the expertise and the management systems that larger organizations possess (Levy, Powell, and Galliers 1999).

Many small-business owner-managers do not have the time to devote to long-term planning, and many small-business strategies are marginal at best and, in some cases, nonexistent (Chapman 1999). Sometimes, small businesses are dominated by their environments and have minimal, if any, emphasis on strategy. In these cases, it may be meaningless to discuss strategy in regard to small businesses because there is often no choice in strategy. With small businesses, what exists instead of strategy are common patterns of behavior in relation to the organization size and the industry sector (Chapman 1999). Strategic planning in small businesses is likely to be characterized by intuitive speculation based on the owner's experience. The owner-operator has minimal time, resources, and skills to engage in sophisticated forecasting. Furthermore, the owner has molded his (or her) decision-making activity through repeated crisis management, focusing on day-to-day decisions with relatively short time spans (Robinson 1995).

### **APPLYING MASLOW'S HIERARCHY OF NEEDS TO SMALL BUSINESS ORGANIZATIONS**

As discussed previously, many differences exist between large and small businesses, and many models designed to explain phenomena in large businesses might not be appropriate to small businesses. Small businesses do not have the advantages of size and resources that larger organizations possess; therefore, strategies that capitalize on applying greater size and resources are often ineffective when implemented by small businesses (Dean, Brown, and Bamford 1998).

A major difference is that small businesses are almost exclusively run by owner-managers. These owner/managers set the strategies and make major decisions for the organizations. Small-business research by Blackburn, Hart, and Wainwright (2013) focused on owner-managers' characteristics in explaining the growth and performance of

their businesses. Research has indicated that owner-managers are the most important assets of small businesses (Hansen and Hamilton 2011; Mazzarol et al. 2009; Smallbone et al. 1995). Storey (1994) presents a model in which the entrepreneur is a major factor in small-business growth. This research shows that owner-managers are a key factor in understanding the performance of small business organizations, so Maslow's hierarchy of needs may be a good way of explaining the motivations of owner-managers.

The following sections will discuss the adaptation of Maslow's hierarchy of needs to small businesses. Small business organizations are different from large organizations in that they are primarily run by owner-managers. Because owner-managers are an important factor in the performance of small businesses, Maslow's hierarchy of needs offers a good way of understanding the outlook of a small business organization. A review of the Maslow's hierarchy of needs is provided, as well as the proposed adaptation layered with Hayes and Wheelwright's four stages for small businesses.

## **MASLOW'S ORIGINAL HIERARCHY OF NEEDS**

Abraham Maslow's 1943 article "A Theory of Human Motivation" presents a hierarchy of needs that is widely accepted as a motivational theory and has been utilized for more than seven decades. Maslow's original hierarchy of needs was aimed at individual motivation and includes five levels of needs: physical, safety, social, esteem, and self-actualization. Each need must be met before the individual moves to the next level. Moreover, the individual is motivated in very different ways in each level of need.

To better understand how to apply Maslow's hierarchy of needs to small businesses, we must understand each level in the original model.

### *Physical Needs*

The first step in the hierarchy is physical needs, including food, water, and shelter. Though Maslow (1943) deems it impossible to make a list of fundamental physiological needs because of the sheer number and form in which they could present themselves, the basic argument is that until physical needs are well gratified, physical needs will dominate all other needs (Matterson and Ivancevich 1999). For example, if someone is hungry, the person's hunger will override the need for safety. This may mean that the person turns to stealing, not being concerned with the danger of being punished for the theft. As Maslow indicates, however, once the individual's physical needs are met, a new need arises, and thus the hierarchy of needs.

### *Safety Needs*

After the physical needs are gratified, next in the hierarchy are safety needs. Individuals have an inherent need to be safe once their physical needs are met. Although his article

deals with adult behavior, to better describe this need, Maslow describes an infant's need for a rhythm or routine as an indication of a need for safety.

Maslow's description of the safety needs also indicates that if the individual's safety needs are not met, the individual may utilize the safety need to organize behavior because once the physical needs are met, safety needs can become underestimated (Maslow 1943; Matterson and Ivancevich 1999). Maslow also states that in a well-run, peaceful society, members can normally feel safe and thus gratify their need for safety, but crime, disease outbreak, and similar issues can bring the need for safety to the forefront in an individual's behavior. If both the physical and safety needs of an individual are met, however, the individual can move to the next step in the hierarchy.

### *Love (Social) Needs*

Once physical and safety needs are met, love needs are next in the hierarchy. This need can be gratified by affection or belongingness (Maslow 1943; Matterson and Ivancevich 1999). Maslow's argument in the realm of love needs is that if both the physical and safety needs are sufficiently satisfied, an individual will want friends.

An individual will look to satisfy the need for love by belonging to a group. Once again, if both the physical and safety needs are gratified, the need for love can almost exclusively drive behavior. Maslow (1943) states that a person who once, when hungry, sneered at love may later find that the need for love is a very pressing need driving behavior.

Once the love need is met, the need for esteem presents itself (Matterson and Ivancevich 1999).

### *Esteem Needs*

Once the individual's physical, safety, and love needs are met, esteem needs become the driver of behavior. People who have gratified the three previous needs will have the need to feel good about themselves.

Maslow (1943) breaks esteem needs into two subsidiary sets. The first subset is the need for independence, strength, and achievement (Maslow 1943; Matterson and Ivancevich 1999). The second subset is the need for reputation, appreciation, and/or prestige. Not achieving esteem needs can lead to detrimental effects, such as weakness and feeling inferior to others. Once the esteem need is met, the final need of Maslow's hierarchy can be achieved.

### *Self-Actualization*

Maslow's (1943) contention is that once all of the previous needs on the hierarchy (physical, safety, love, and esteem) are met, individuals can still find themselves striving for more. Self-actualization occurs when individuals reach their potential. As an example of self-actualization, Maslow describes a musician who must make music. In Maslow's

own words, to achieve self-actualization, “what a man *can* be, he *must* be” (Matterson and Ivancevich 1999:267). Once a person has met all of the previous needs in the hierarchy, the person will therefore then strive to achieve full potential.

### **HAYES AND WHEELWRIGHT’S FOUR-STAGE MODEL**

Where Maslow’s hierarchy of needs provides a framework for viewing motivation for individuals, Hayes and Wheelwright (1984) have developed a model for a manufacturer’s development from an organization that is struggling into an organization that is thriving. The Hayes and Wheelwright model depicts four stages in the contribution of operations to the performance of the business organization. The model states that these four stages can be identified in the form of a progression of increasing contribution to firm success or goal achievement.

- *At stage 1 (internal neutral)*, the function is continually managing crises. Management is forced to use a reactive, inward-looking and mistake-avoiding approach, with no time to focus on a consistent set of objectives. The function is seen by other functions as a drag on development of competitive advantage.
- *At stage 2 (external neutral)*, the firm is establishing performance-monitoring systems, is trying to emulate competitors, and may use benchmarking to seek to copy best practices in its industry, but there is a lag in implementing best practices, and the best result is performance equal to that of competitors. Practices are not directly linked to business strategies, and no competitive advantage is achieved.
- *At stage 3 (internal supportive)*, performance-monitoring systems are used as a basis for improvement, and functional strategies are linked to and derived from business strategies of the firm and support corporate strategies. Industry best practices are implemented. The possibility of competitive advantage exists, but it is only a possibility.
- *At stage 4 (external supportive)*, the firm is practicing continuous improvement and has a long-term perspective. The organization develops new capabilities that will enable it to compete in the future as well as explores new ways of developing internal and external relationships that will satisfy customers. The firm makes the most of available resources and analyzes customer and supplier functions to improve internal and external relationships. Function plays a leading role in the development of best practices in the organization’s industry.

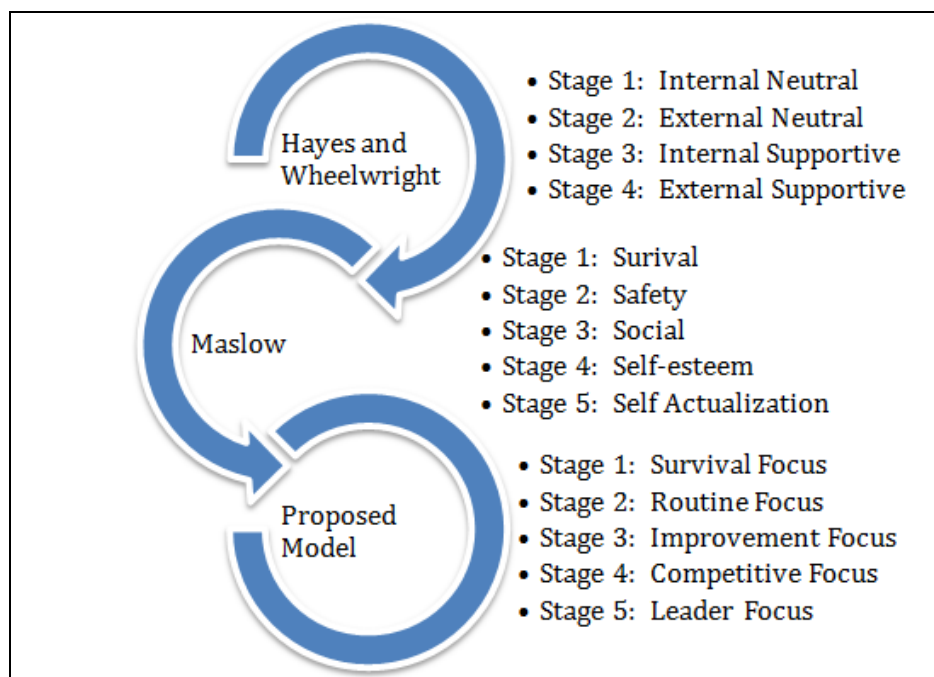
### **MASLOW LAYERED WITH HAYES AND WHEELWRIGHT**

A new description of the hierarchy of needs as it pertains to a small business’s motivation for development and evolution, a new five-stage model, can be developed

by layering Maslow's classic theory of human motivation with Hayes and Wheelwright's four-stage model. Extrapolating the layered model to a small business specifically can be a challenge, but with small businesses representing such a large portion of the economy in the United States, developing a better understanding of small-business motivation is warranted.

This section provides a description of the five stages as the two models are merged, which is the first time for these two models to be analyzed together. As indicated in Figure 1, the five stages are survival focus, improvement focus, routine focus, competitive focus, and leader focus.

**Figure 1. Proposed Model for a Small-Business Development Model Combining the Maslow and the Hayes and Wheelwright Models**



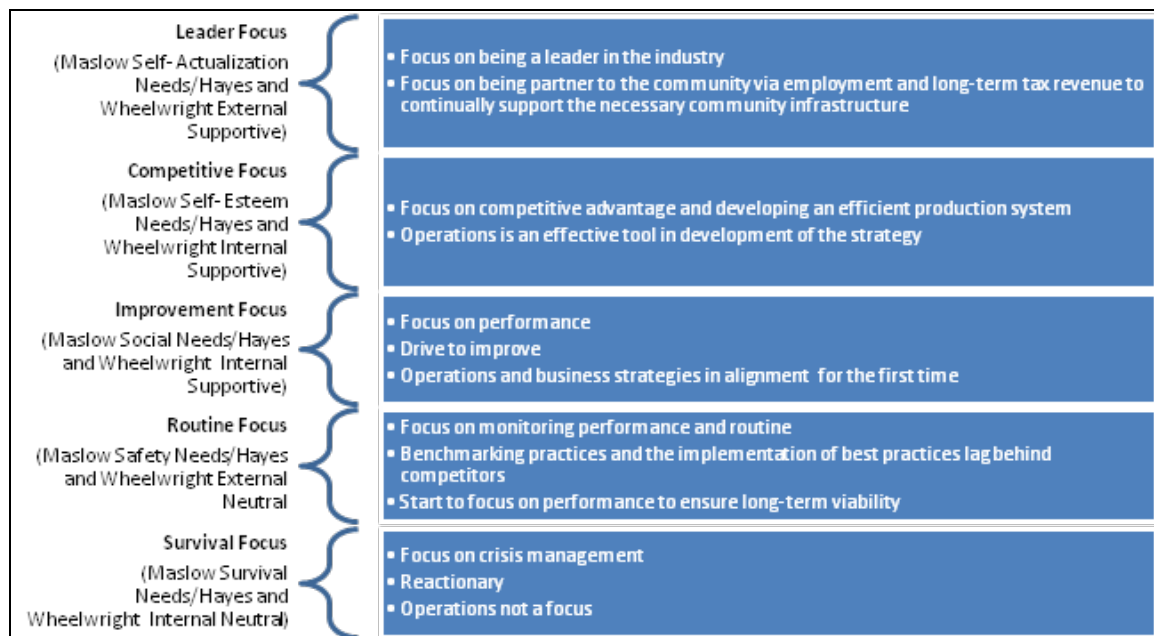
*Stage 1 (Survival Focus)*

When a small business is at the lower stage of the hierarchy of needs and the Hayes and Wheelwrights model, it operates much the same as an individual who is at the initial stage; survival is the key. As indicated in Figure 2, a small business at this stage is constantly in crisis-management mode and managers are very reactionary. Managers spend their days reacting to constant problems, doing only what is required to survive, without concern of continually improving or planning for the long term. Long-term plans are outside of the realm of understanding for a small business at the initial stage of the hierarchy because the need for survival has not yet been met. Furthermore, a



small business at the initial stage may also see its operational department as a drag. This may be especially common when the entrepreneur concentrates more on the development of new ideas and products than on the development of operational systems to efficiently and effectively serve the customer. If a small business can gratify the initial stage of survival, however, it can move to the next step in the hierarchy of needs: routine focus.

**Figure 2. Small-Business Development Model Overview**



*Stage 2 (Routine Focus)*

The focus in the second stage is on how to monitor performance and focus on a routine, which is in parallel with the safety needs originally postulated by Maslow and is still in the second stage, external neutral, of Hayes and Wheelwright’s model. For a small business, developing metrics is a way to measure progress and to attempt to emulate competitors. It is also a safety mechanism for a small business to begin to focus on its performance to ensure the long-term viability of the business, as indicated in Figure 2; however, at this stage of the hierarchical process, these metrics are not necessarily linked to performance, in that they are a baseline and likely do not match the business objectives, being too vague or too detailed to provide the small business with a good view of the state of operational performance. Furthermore, at this stage of the hierarchy, the benchmarking practices and the implementation of best practices lag behind those of competitors. When the performance metrics are correctly identified, benchmarking and

best practices accelerate and this need can be gratified. Once the need is gratified, the small business can move to the next step in the hierarchy.

### *Stage 3 (Improvement Focus)*

After the first two steps in the hierarchy for small businesses have been gratified, the small business can focus on performance, which parallels the love needs of the individual and stage three, internal supportive, of Hayes and Wheelwright's model, as illustrated in Figure 2. The improvement-focus stage of the hierarchy is when small businesses are driven to improve their business. Once the first two basic hierarchy needs are met, the driving motivation for behavior in a small business is to continually improve. It is at this stage when a small business actively pursues improvement activities. This stage represents a time when a small business begins to implement strategies such as Lean Manufacturing, Six Sigma, and Statistical Process Control (SPC). Operational excellence and business strategies become linked at this stage in the hierarchy. At this stage of development, a competitive advantage may begin to exist, but it is not fully mature.

Once the improvement stage of development has been gratified, the next stage of the hierarchy begins to drive the behavior of a small business. This next step in the hierarchy for the individual would be esteem needs, but for a small business, it is the competitive-focus level.

### *Stage 4 (Competitive Focus)*

Utilizing the successful implementation of programs that resulted in the gratification of the improvement-focus stage develops a competitive advantage in the competitive-focus stage. This falls into the fourth level (esteem needs) of Maslow's hierarchy of needs and is still in the third stage (internal supportive) of Hayes and Wheelwright's model. At this stage of development, success in developing an efficient production system plays a lead role in the development of a business strategy. At the beginning of a small business's development, the operational department is seen as a necessary but unimportant part of the business. At this fourth stage, however, operations is seen not only as an important asset but also as an effective tool in the development of the strategy.

Once the competitive-focus stage has been gratified, the next step of the hierarchy can drive behavior. For small businesses, this final stage of the hierarchy is the leader focus.

### *Stage 5 (Leader Focus)*

At this stage of the hierarchy, a small business strives to become the leader in its industry, parallel with the fifth level of Maslow's hierarchy of needs (self-actualization) and with stage four (external supportive), of Hayes and Wheelwright's model. Effectively, gratifying the previous four hierarchical needs has provided the small business with the

confidence and operational effectiveness to strive to be the leader in its industry. Furthermore, at this stage, the small business sees itself not only as a leader in the industry but also as a partner to the community. This feeling can present itself in many different ways, such as donations to the community, community partnerships, sponsorships of various community projects, and more. At the leader-focus stage, the small business becomes a positive influence in the community, providing employment for the community and long-term tax revenue to continually support necessary community infrastructure, including police, fire departments, and schools. This, in turn, helps the individuals in the community to develop beyond the first two steps of Maslow's original hierarchy for the individual (physical and safety needs). When a small business can reach its potential, this is a positive situation for all involved. For this concept of a hierarchy of needs to become actionable, however, further research is required.

### **RECOMMENDATIONS FOR FUTURE RESEARCH**

The model developed in this paper will be useful for small businesses as well as other stakeholders. It is necessary for future research to be conducted to test the proposed model. First and foremost, the authors plan to perform multiple case studies of small businesses in Central Indiana. To further verify the results, we want to replicate this study in additional geographical areas.

Moreover, research needs to be conducted on the percentages of small businesses within each level of the proposed levels of the model. Additionally, the percentages of small businesses at the higher level of Hayes and Wheelwright's operation model need to be addressed. Another area of research that should be investigated in the future is whether small businesses at high levels of the model are statistically more likely to be at high levels of Hayes and Wheelwright's model. Once the proposed model has been tested domestically, the model needs to be tested on small businesses in other countries. Further investigation into this topic could focus on small businesses in various industries and how they vary with regard to the proposed model.

### **CONCLUSION**

With more than half of the United States' private workforce employed by small businesses and nearly two-thirds of jobs in America coming from the small-business sector, there is no doubt that small businesses are an essential ingredient for the economy of the United States, yet half of new small-business start-ups fail during the first few years (Nazar 2013). One of the main reasons for these failures is the lack of management expertise that large companies have. In this paper, the authors proposed a multidimensional model combining Maslow's and Hayes and Wheelwright's models in order to provide a foundation of knowledge on the stages of development of strategy for small businesses over time. This paper posits that where a small business falls on the model determines the primary management focus of the organization. The benefit of this

model is that it allows small businesses to see where they fall on the development scale and, from this, to work to move toward higher levels of development.

## REFERENCES

- Blackburn, R., M. Hart, and T. Wainwright. 2013. "Small Business Performance: Business, Strategy and Owner-Manager Characteristics." *Journal of Small Business and Enterprise Development* 20(1):8–27.
- Chapman, P. 1999. "Managerial Control Strategies in Small Firms." *International Small Business Journal* 17(2):75–82.
- Dean, T., R. Brown, and C. Bamford. 1998. "Differences in Small and Large Firm Responses." *Strategic Management Journal* 19:709–28.
- Hanks, S. and G. Chandler. 1994. "Patterns of Functional Specialization in Emerging High Tech Firms." *Journal of Small Business Management* 32(2):23–36.
- Hansen, B. and R. Hamilton. 2011. "Factors Distinguishing Small Firm Growers and Non-Growers." *International Small Business Journal* 29(3):278–94.
- Hayes, R. H. and S. C. Wheelwright. 1984. *Restoring Our Competitive Edge: Competing through Manufacturing*. New York: John Wiley.
- Levy, M. and P. Powell. 2000. "Information Systems Strategy for Small and Medium Sized Enterprises: An Organizational Perspective." *Journal of Strategic Information Systems* 9:63–84.
- Levy, M., P. Powell, and R. Galliers. 1999. "Assessing Information Systems Strategy Development Frameworks in SMEs." *Information & Management* 36:247–61.
- Maslow, A. H. 1943. "A Theory of Human Motivation." *Psychological Review* 50(4):370–96.
- Matterson, M. and J. Ivancevich. 1999. *Management & Organizational Behavior Classics*. Boston: Irwin McGraw-Hill.
- Mazzarol, Tim and Sophie Reboud. 2009. *The Strategy of Small Firms: Strategic Management and Innovation in the Small Firm*. Northampton, MA: Edward Elgar Publishing.
- Monk, R. 2000. "Why Small Businesses Fail." *CMA Management* 74(6):12–13.
- Nazar, J. 2013. "16 Surprising Statistics about Small Businesses." *Forbes*, September 9. Retrieved (<http://www.forbes.com/sites/jasonnazar/2013/09/09/16-surprising-statistics-about-small-businesses/>).
- Robinson, R. 1995. "Forecasting and Small Business: A Study of the Strategic Planning Process." *Journal of Small Business Management* 17(3):19–27.
- Smallbone, D., R. Leigh, and D. North. 1995. "The Characteristics and Strategies of High Growth Firms." *International Journal of Entrepreneurial Behavior and Research* 1(3):44–62.
- Storey, D. 1994. *Understanding the Small Business Sector*. London: Routledge.