A Case Study on the Capacity and Competitiveness of Small-Sized Contractors on the Central Coast of California

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The market conditions in which small-sized construction firms in California compete can be significantly influenced by the regional location of their projects. This research paper reviews a qualitative case study executed through semi-structured interviews with two construction firms on the Central Coast of California. Through gaining the perspectives of two companies, one that recently grew into a medium sized company and one that is small-sized, this case study aims to identify market characteristics that influence small-sized companies’ abilities to compete on the Central Coast. The case study indicates that competition between existing companies, the threat of new arrivals, the cost of labor and rate of growth influence both companies’ competitiveness most significantly. These forces rely on the state of preexisting relationships with clients, the level of process differentiation, the number of firms in their markets, and each company’s ability to control fixed costs and rate of growth.

Key Words: Competitiveness, capacity, small-sized contractors

Introduction

Construction in California

The characteristics of California’s construction sector offer important context for the case study. First of all, construction’s contribution to California’s economy is notable. According to the Associated General Contractors of America (2020a), the construction industry’s portion of California’s total gross domestic product (GDP) is around $118.1 billion, or 3.8% of California’s total GDP. This market is upheld by a sizable labor force. California employs more people in the construction industry than any other state, making up 11.8% of total construction employment in the US (AGC, 2020b). These construction employees in California are dispersed across a plethora of employers. About 73,600 construction firms operate in California, making up approximately 10.4% of the total number of contractors in the US (AGC, 2020a; United States Census Bureau, 2020b). Comparing the number of construction firms to the data of other states provided by the USCB, this figure amounts to over 20,900 more firms than any other state, the second largest amount being located in Florida (2020b). Therefore, California hosts arguably one of the most active construction sectors in the US.

Small-Sized Construction Firms in California

Relative to other construction firm sizes, small firms make up the vast majority of the construction market. Of California’s construction firms, about 64% operate at an employment size under five people, a considerably low level of employment (USCB, 2020b). However, the Small Business Administration (SBA) defines small businesses upon additional criteria in compliance with the North
American Industry Classification System (NAICS) codes. In Sector 23 of the small business size standards by the NAICS industry, annual receipts are used to determine the size of construction companies rather than the number of employees (Electronic Code of Federal Regulations, 2020). Additionally, the annual receipt threshold for small-business consideration varies between types of construction. The range of annual receipts that are affiliated with small companies has a low of $16.5 million for specialty trade contractors and a high of $39.5 million for building construction and most heavy civil engineering construction (ECFR, 2020).

Table 1

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>NAICS US Industry Title</th>
<th>Size Standards in Millions of Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Sector 23–Construction</strong></td>
<td></td>
</tr>
<tr>
<td>236115</td>
<td>New Single-Family Housing Construction (Except For-Sale Builders)</td>
<td>$39.5</td>
</tr>
<tr>
<td>236116</td>
<td>New Multifamily Housing Construction (except For-Sale Builders)</td>
<td>$39.5</td>
</tr>
<tr>
<td>236116</td>
<td>New Housing For-Sale Builders</td>
<td>$39.5</td>
</tr>
<tr>
<td>236118</td>
<td>Residential Remodelers</td>
<td>$39.5</td>
</tr>
<tr>
<td>236210</td>
<td>Industrial Building Construction</td>
<td>$39.5</td>
</tr>
<tr>
<td>236220</td>
<td>Commercial and Institutional Building Construction</td>
<td>$39.5</td>
</tr>
<tr>
<td></td>
<td><strong>Subsector 236–Construction of Buildings</strong></td>
<td></td>
</tr>
<tr>
<td>237110</td>
<td>Water and Sewer Line and Related Structures Construction</td>
<td>$39.5</td>
</tr>
<tr>
<td>237120</td>
<td>Oil and Gas Pipeline and Related Structures Construction</td>
<td>$39.5</td>
</tr>
<tr>
<td>237130</td>
<td>Power and Communication Line and Related Structures Construction</td>
<td>$39.5</td>
</tr>
<tr>
<td>237210</td>
<td>Land Subdivision</td>
<td>$30.0</td>
</tr>
<tr>
<td>237310</td>
<td>Highway, Street, and Bridge Construction</td>
<td>$39.5</td>
</tr>
<tr>
<td>237990</td>
<td>Other Heavy and Civil Engineering Construction</td>
<td>$39.5</td>
</tr>
<tr>
<td>237990</td>
<td>Dredging and Surface Cleanup Activities</td>
<td>$30.0</td>
</tr>
<tr>
<td></td>
<td><strong>Subsector 237–Heavy Civil Engineering Construction</strong></td>
<td></td>
</tr>
<tr>
<td>238110</td>
<td>Poured Concrete Foundation and Structure Contractors</td>
<td>$16.5</td>
</tr>
<tr>
<td>238120</td>
<td>Structural Steel and Precast Concrete Contractors</td>
<td>$16.5</td>
</tr>
<tr>
<td>238130</td>
<td>Framing Contractors</td>
<td>$16.5</td>
</tr>
<tr>
<td>238140</td>
<td>Masonry Contractors</td>
<td>$16.5</td>
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<tr>
<td>238150</td>
<td>Glass and Glazing Contractors</td>
<td>$16.5</td>
</tr>
<tr>
<td>238160</td>
<td>Roofing Contractors</td>
<td>$16.5</td>
</tr>
<tr>
<td>238170</td>
<td>Siding Contractors</td>
<td>$16.5</td>
</tr>
<tr>
<td>238190</td>
<td>Other Foundation, Structure, and Building Exterior Contractors</td>
<td>$16.5</td>
</tr>
<tr>
<td>238210</td>
<td>Electrical Contractors and Other Wiring Installation Contractors</td>
<td>$16.5</td>
</tr>
<tr>
<td>238220</td>
<td>Plumbing, Heating, and Air-Conditioning Contractors</td>
<td>$16.5</td>
</tr>
<tr>
<td>238290</td>
<td>Other Building Equipment Contractors</td>
<td>$16.5</td>
</tr>
<tr>
<td>238310</td>
<td>Drywall and Insulation Contractors</td>
<td>$16.5</td>
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<tr>
<td>238320</td>
<td>Painting and Wall Covering Contractors</td>
<td>$16.5</td>
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<tr>
<td>238330</td>
<td>Flooring Contractors</td>
<td>$16.5</td>
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<tr>
<td>238340</td>
<td>Tile and Terrazzo Contractors</td>
<td>$16.5</td>
</tr>
<tr>
<td>238350</td>
<td>Finish Carpentry Contractors</td>
<td>$16.5</td>
</tr>
<tr>
<td>238390</td>
<td>Other BuildingFinishing Contractors</td>
<td>$16.5</td>
</tr>
<tr>
<td>238910</td>
<td>Site Preparation Contractors</td>
<td>$16.5</td>
</tr>
<tr>
<td>238990</td>
<td>All Other Specialty Trade Contractors</td>
<td>$16.5</td>
</tr>
<tr>
<td>238990</td>
<td>Building and Property Specialty Trade Services</td>
<td>$16.5</td>
</tr>
</tbody>
</table>
Considering the relatively small margins of profit in competitive construction markets, construction firms in California can reach a number of employees significantly higher than five before disqualifying as small-sized businesses depending on the NAICS code in which they are categorized. Therefore, the percentage of total construction firms in California that are small-sized may be even greater than 64%. Data comparing the number of firms at different levels of employment by county remains unavailable, making it difficult to assess the level of competitiveness among small construction firms directly within the Central Coast. However, across all industries, about 83% of the 7,485 total firms in San Luis Obispo have less than 20 employees, about 9% have 20 to 99 employees, about 2% have 100 to 499 employees, and about 5% have over 500 employees (USCB, 2020a). Overall, based on the numerous small construction firms offering similar services at similar prices across California, the markets for small-sized contractors are extremely competitive.

![Bar Chart showing the distribution of construction firms in California by number of employees](image)

**Figure 1. Construction firms in California with various levels of employment**

### Methodology

The methodology chosen for this case study was qualitative. An explanatory case study approach was applied through semi-structured interviews that were conducted with management executives from two different companies. The participants in this case study were from Specialty Construction, Inc. (SCI) and McCall Plumbing and Mechanical, Inc. (MPMI). Interviews were primarily guided by the research of Abduh, Prabowo and Maisarah (2019), which compared the impact of Porter’s Five Forces on the competitiveness of markets with consideration for various contributing factors of each force that were identified through Yazıcı and Emrah’s research (2006). However, the semi-structured style of interviews was implemented in this case study through the use of an established questionnaire, allowing contractors the freedom to disregard or identify existing or new forces and factors. After management executives analyzed their companies’ competitiveness, their perspectives were separated with consideration for Porter’s five forces, each force’s respective contributing factor, and newly suggested forces.

Given the feedback of each participant, an outline of subjects discussed was created:

1) The threat of new arrivals
   a) Contributing factors
      i) Economies of scale
      ii) Government regulation
iii) Capital investment requirements
iv) Relationships between existing business entity and clients

2) Suppliers’ bargaining power
   a) Contributing factors
      i) Cost difference between alternative suppliers

3) Clients’ bargaining power
   a) Contributing factors
      i) Cost difference between alternative contractors

4) Competition between existing companies
   a) Contributing factors
      i) Number of competitors
      ii) Exit barriers
      iii) Product differentiation

5) Substitute of product or service

6) Rate of growth

7) The cost of labor

The objective of the case study was to evaluate the importance of various characteristics of the construction market impacting small firms’ abilities to compete on the Central Coast. Also, the case study sought to identify any additional factors that were not addressed by Porter’s Five Forces or Yazıcı and Emrah’s contributing factors. In order to accomplish these objectives, the management executives’ evaluations of the impact that each force and contributing factor had on their company’s competitiveness was categorized as either “little to no”, “low”, “moderate” or “high”.

Case Study

SCI was founded in 1991 in San Luis Obispo, California and has operated in Santa Barbara for about 15 years. The construction firm consists of general, civil and telecommunication divisions working primarily throughout the central coast region of California. SCI is a mid-sized construction firm, operating with 109 employees and annual receipts above the standards for small commercial and heavy civil engineering firms. Their project portfolio encompasses work ranging from the construction of entire buildings such as hotels, offices and wineries to expansions and tenant improvement. Jeff Martin, Senior Vice President and Director of General Construction, participated in this case study on behalf of SCI.

MPMI is a family business that was established in 1984 in Grover Beach, California. The firm is a small sized specialty contractor that offers plumbing, heating, ventilation, and air conditioning service for multiple market sectors. Some of the main market sectors that MPMI serves includes hospitals, clinical living, wineries, and schools. Though the company consists of 40 employees, they still operate below the level of annual receipts required by the SBA to be considered a small-sized specialty construction firm. Most of the company’s work is within the region between the hills of Santa Barbara to San Miguel on the Central Coast, according to one of MPMI’s owners and participant in this case study, Chris McCall.

Results and Discussion
The results of the case study were achieved through interviews that identified the views of each respective contractor. The aim of this research was to learn about the level of competition in each firm’s market and how it is influenced by various factors as perceived by the two different types of contractors on the Central Coast.

**Threat of New Arrivals**

Martin and McCall consider the threat of new arrivals to have a moderate impact on the level of competition in their markets. Both share the belief that the influence of economies of scale is more relevant than government regulation and capital investment requirements when considering the impact that new arrivals have on the competitiveness in their markets. Relationships between existing business entities and clients is the main contributing factor, according to both companies, that reduces the threat of new entrants. Overall, both companies believe the threat of new arrivals poses a considerable impact on the level of competitiveness in their market.

**Economies of Scale**

Martin claims that, with respect to the effect of economies of scale, new arrivals in SCI’s market have an advantage of lower costs of business as smaller companies for a period of time. The burden that SCI experiences from this factor is not extreme, however, because new arrivals eventually need to hire more employees to meet the demands of larger projects. Even for small firms, according to McCall, there are “small, medium and large companies.” MPMI aims to remain at a capacity where they do not have to compete with smaller companies for jobs. Nevertheless, their smaller size is a factor can work to their advantage, as well. Staying as the smaller specialty contractor in their market, MPMI can “handle large, complex work that takes bonding, financial capacity and expertise to do . . . at a cheaper cost,” argues McCall. Therefore, both participants reason that economies of scale is fairly applicable to the threat of new arrivals.

**Government Regulation & Capital Investment Requirements**

Both contractors do not consider government regulation nor capital investment requirements to be major contributing factors to the threat of new entrants in their markets. SCI perceives the effect of government regulation on contractors to be relatively equal because they face the same rules and laws as new arrivals. Additionally, capital investment requirements do not seem to hinder a new entrants’ competitiveness because most new entrants are small operations, according to Martin. On the other hand, in MPMI’s experience as a smaller contractor, capital investment requirements can be difficult to meet. A challenging situation in the past for MPMI was lacking a bank that was willing to underwrite a loan for a business of their size as they pursued larger plumbing or mechanical jobs. Given the amount of experience that their company has on the Central Coast, however, this no longer poses a significant burden on their competitiveness. In effect, SCI and MPMI agreed that government regulation and capital resource requirements are not the primary influences on the threat of new arrivals.

**Relationships with Existing Clients**

Martin and McCall emphasize that relationships with existing clients significantly reduces the threat of new arrivals. Reflecting upon SCI’s experience with opening a new office in Santa Barbara, Martin admits that it takes a long time to get a community to believe in the performance of their company. SCI cannot not develop relationships with clients until there is a certain level of trust established in
the product that their company offers. Building trust is a slow process because opportunities for establishing a reputation are lost on the premise that a company lacks a reputation. Concerning MPMI’s experience on the Central Coast, “relationships… get rewarded work” and “the only way to build a reputation is years of experience.” MPMI seeks reoccurring work more than they seek new clients. According to McCall, the threat of new entrants in their market is mitigated by the positive relationship between MPMI and their existing clients, who are willing to pay more for the experience of working with MPMI. Furthermore, relationships with existing clients are the main factors that mitigate the threat of new arrivals for each company’s respective market.

Suppliers’ Bargaining Power

Cost Difference Between Existing Suppliers

With respect to the bargaining power of suppliers, the interviews with SCI and MPMI reflect that this force has low impact on the competitiveness of their companies. First and foremost, SCI argues, suppliers have to be competitive. Yet, Martin points out, “it’s a kind of dance on the Central Coast. It’s not true economics.” There is minimum cost difference between suppliers, but SCI typically chooses the one with which they have developed a positive relationship and who they trust to deliver high quality products. Nevertheless, Martin believes it is still necessary to keep other suppliers in the lineup, though SCI may not have as much confidence in their quality. From McCall’s perspective, most construction commodities have been fairly stable in price for a long time. Recently, MPMI has experienced more pressure than usual to procure materials and lock pricing with vendors early in projects but not to a very extreme measure. Additionally, throughout a year, McCall claimed, MPMI may work with over 100 vendors. Suppliers face a high level of competition in earning MPMI’s business. Furthermore, the overall impact of supplier bargaining power is not significant on either of the construction firms.

Clients’ Bargaining Power

Cost Difference Between Alternative Contractors

SCI and MPMI consider their clients’ bargaining power to have low influence on the level of competitiveness in their markets. The cost difference between different contractors in their markets is minimal, effectively reducing each company’s profits. However, for SCI, Martin suggests that, in the long run, their competitiveness is impaired when they promise more than they can deliver: “I’m a competitive person by nature, so I can get talked into those things. But what I [have] learned over the last five to ten years is [that] it was taking a toll on my team.” Though clients have the leverage to drive down prices, SCI emphasizes the importance of holding boundaries in negotiation because their leniency will affect the success of their company in the long run. From McCall’s perspective, reliable subcontractors like MPMI are in high demand: “It’s hard to get a really good sub. . . . People start getting picky with their specialty trades.” Most of MPMI’s clients have seen projects suffer significantly due to the poor performance of specialty trade contractors on the Central Coast. As a result, MPMI’s positive record of past performance typically allows them to win jobs even when their bid is higher than their competitors’ bids. In summary, a client’s bargaining power typically has low negative impact on the competitiveness of SCI and MPMI.

Competition Between Existing Companies
Existing competitors highly influence the overall level of competition that SCI and MPMI experience in their markets. Both companies agree that the number of competitors and process differentiation in a particular affect the impact of competition between existing competitors, while exit barriers are not as relevant.

The Number of Competitors

The number of competitors in SCI and MPMI’s markets is a key factor in each company’s competitiveness. The level of priority that SCI and MPMI give to each project, to a great extent, depends on the likelihood of winning the job. Preferable projects for both SCI and MPMI consist primarily of those with two or three competitors. Martin contends that, even for projects with five competitors, sometimes SCI would rather not have to provide a bid. SCI and MPMI must counteract the negative effect of having a large number of competitors by pursing clients that offer opportunities to negotiate contracts. Martin suggests that their best projects happen after they have the opportunity to coach their clients during the bidding process “... not in a rude or condescending way, but rather [by] saying ‘We realize that you are building this project. Here is what we really advise you do if you want some level of competition.’” This approach nullifies the impact of the number of competitors in their market to a certain extent because it builds the credibility of SCI with clients on the Central Coast. Though MPMI frequently competes with multiple companies on low-bid public work, they still have some clients that invite them and a select few other companies for negotiated agreements, which results in improved profit margins on the job. To earn more opportunities like this, McCall insists that they do everything in their power to protect the owner and foster a positive relationship with them. Furthermore, competition between existing competitors is largely influenced by the number of companies that each firm competes against.

Exit Barriers

Exit barriers have a moderate impact on the level of competition between existing companies for SCI but little to no impact for MPMI. Martin admitted that a change in leadership at SCI is expected to occur in the next five years as long-time managers of their company will be retiring. In the context of continuity and succession planning, other employees within the company need to decide if they are willing to fill those missing roles while bearing more responsibility and, potentially, risk. If there is no one internally to replace current leadership positions, there is a small possibility that the firm may consider seeking an external buyer. This task proves to be challenging for construction firms because they typically do not sell for much, according to Martin. Nevertheless, given that SCI is well poised for being bought out, they may be a target for a larger company that is trying to make a presence on the Central Coast. The only exit barrier that seemed relevant to McCall with respect to small-sized firms in their market was the selling of specialized, expensive equipment. After procuring and using equipment for a specific line of work, a small-sized company can waste a significant portion of their resources if they decide that they need to exit that market. However, the impact associated with purchasing the expensive equipment, with respect to capital resource requirements and entrance barriers, seemed to carry more weight for MPMI than with respect to this context. Therefore, exit barriers are not of primary concern for either company, yet not entirely irrelevant, when considering the competition between existing companies in their markets.

Process Differentiation

Both construction firms argue that process differentiation is a major contributing factor for this force. To provide context, the projects that Martin and McCall prefer are those that occur after negotiated
agreements rather than producing the lowest bid. In order to achieve this, they believe that the key is differentiating their company from others. For SCI, when their competitors appear relatively equal to them, the job is awarded to the company providing tangible reasons for how they offer a better experience. Otherwise, the client has “to go with the person they like, . . . trust and [of whom they] expect more,” Martin claims. From McCall’s perspective, the factor that gave MPMI the edge when bidding the same work at similar quality and price was their company’s reputation: “If you don’t have the reputation, then you [have] to do something else way different.” However, it is rare for SCI and MPMI to offer special services that are inherently different from those offered by their competitors. McCall emphasizes specialty contractors on the Central Coast cannot work on one type of project unless they are willing to travel regularly. Dense metropolitan areas of California have plenty of projects across all types of construction sectors for companies to pursue, allowing firms the opportunity for specialization. According to McCall, on the Central Coast, the specialty construction sector demands that firms deliver a broader scope of projects. Thus, product differentiation is difficult to implement with respect to specific services. As a result, the focus of differentiation for each company shifts from the type of product to the type of process that a company provides. Therefore, Martin and McCall suggest that process differentiation plays a unique role in their competition with existing competitors.

**Substitute of Product or Service**

Little to no impact of substitute services on the level of competitiveness is experienced in each company’s market. The only context that SCI finds this force relevant is related to suggesting alternative solutions to problems that the customer needs to resolve. An example scenario for SCI is a project in which the client may initially desire a building with a concrete structural system. SCI, as the largest dealer in steel buildings in two local counties, may present the idea of building a structural steel framed building instead of concrete because they can procure steel at direct costs and the project may be more successful from scheduling standpoint. The overall impact of substitute services, however, remains minimal for both companies.

**Additional Forces**

Both firms suggest that there are two additional forces that affect their level of competitiveness, rate of growth and cost of labor. Whereas Martin considers rate of growth being affected specifically by resources, McCall considers resources, relationships, and reputation to have a large impact on growth. Additionally, Martin suggests that labor costs are largely influenced by shifts in fixed and variable costs.

**Rate of Growth**

SCI identifies two influences on sustaining the proper rate of growth: “The two biggest limiting factors on the rate of growth are getting the right people do the project and having the necessary capital to deal with the cash flows.” In his opinion, the resources tend to be more limiting than the finances. For example, one $30 million project for SCI is feasible, but ten projects accumulating to $30 million would be difficult for their staff to handle. Martin believes that their growth is essential for the sake of serving the Central Coast, although many times he and his team have told themselves, “There is no way that I want to grow the company above that.” Similarly, from MPMI’s perspective, growing their company has been like a “necessary evil.” The contributing factors to MPMI’s rate of growth are relationships with people, reputation as a company, and resources as a company according to McCall. MPMI does not advertise, post any signage around their shop, and many people have
difficulty finding their office. Since the management of the company has been passed down to the owner’s sons, the company has already grown by about 1200%, which has not always been “fun” growth. With a broad network and strong reputation, a company can grow too quickly in comparison to the human and financial capital at their disposal. Yet, MPMI views growth as essential for the sake of having security in times of unexpected financial circumstances and to sustain a level of incentive for employees. “The second you stop growing your company, nothing grows. Wages don’t grow, profits don’t grow, and opportunity doesn’t grow,” expresses McCall. Altogether, SCI and MPMI view the growth rate of their companies as an impactful element of their ability to compete in their markets.

The Cost of Labor

Martin and McCall both identify the cost of labor to be a crucial force in determining their companies’ competitiveness. Moreover, the cost of labor is the aspect that most significantly impacts SCI’s competitiveness, according to Martin. A large contributing factor to the impact of labor costs is the progression of different fixed costs becoming variable costs. For example, over the past year, SCI’s healthcare offering increased extensively. The company wants employees to be protected, yet there is a maximum that they can afford to pay until they need to ask employees to pay the difference. Similarly, MPMI is significantly impacted by the cost of labor: “Human capital is such a big aspect to the construction industry. You have to be able to keep the resources fed and happy.” MPMI also suggests small construction firms on the Central Coast that are led by “owner-operators”, or owners that work in the office and in the field, are very challenging to compete with due to their production being significantly more efficient than that of other tradesmen. To summarize, the cost of labor is a critical aspect of assessing the level of competitiveness that each company experiences.

Conclusion and Future Research

The two construction firms that participated in this case study provided valuable insight for small-sized construction firms on the Central Coast of California. Although SCI and MPMI differ in many aspects, their company perspectives on competition seem to align with one another on many levels. Both companies affirm that competition between existing companies and the threat of new arrivals are the most influential forces of Porter’s Five Forces that impact the competitiveness of their markets. Also, each company suggests that the rate of growth and cost of labor for their respective companies impact their abilities to compete. SCI and MPMI specify the factors contributing to the level of competition that they experience are relationships with existing clients, the number of competitors and process differentiation. Nevertheless, SCI and MPMI specify the factors contributing to the level of growth and cost of labor for their respective companies. SCI identifies a company’s ability to control fixed costs as a contributing factor to the cost of labor and suggests that resources affect a company’s rate of growth. In addition to resources, relationships with existing clients and the reputation of the company contribute to a company’s rate of growth, according to MPMI. Thus, each company offered distinctive outlooks on the factors influencing the level of competitiveness in their markets.

The case study succeeded in the objectives of highlighting the forces and contributing factors that influence the level of competition in each company’s market and identifying additional forces with respect to the experiences of both companies. Further research is needed in order to understand the
perspective of the overall market of small-sized construction firms throughout the Central Coast of California. By adopting the same methodology of Abduh, Prabowo and Maisarah and targeting small-sized companies that belong to similar industries, perspectives can be quantified with respect to specific markets on the Central Coast. In effect, results can be objectively analyzed and will be more harmonious considering that the companies’ experiences will resonate more with one another. A focused view of the influential factors to competitiveness that is tailored to a specific industry can guide the way small-sized firms on the Central Coast respond to the competition in their markets and help them discern within which markets they can compete most successfully.

References


