Barriers to franchise initiation for general remodelers in U.S. Remodeling Industry: A non-franchisor perspective.

by

Benjamin C. Murray

This thesis is submitted in partial fulfillment of the requirements for the degree of Master of Science in Built Environment from the University of London.

Bartlett School of Graduate Studies
University College London
September 2008
Abstract

The following report is an exploratory investigation into the barriers of franchise initiation for general contractors in the US remodeling industry. The applicability of theories used to describe why firms franchise is evaluated using secondary quantitative data. Further exploration is achieved by interviewing non-franchising, general remodelers classified as ‘potential franchisors’. Overall, the outcomes suggest that franchisee recruitment is a perceived operational barrier by general remodelers which constrains franchise initiation. The most surprising and significant finding is the impact of key decision-makers’ perceptions on franchise initiation in founder-controlled firms. The outcomes however may only apply to a specific population of firms that are founder-controlled and of a similar vintage to those firms in the sample. According to upper echelon theory, it is likely that outcomes would be different for companies that are not founder-controlled or have younger management. Younger managers may have a risk and psychological profile better suited to initiate nontraditional strategies such as franchising. Institutional theory is used to suggest that as the profile of general remodelers change so too may perceptions of key decision-makers and industry norms. Therefore, it is opined that perceptual barriers to franchising are temporal and likely to reduce over time.

Word count: 11,881

Keywords: US remodeling industry, general remodelers, franchise initiation, and barriers.
Acknowledgements

The author is grateful for respondents from the eight companies and two national trade organizations who gave of their time and insight. In addition, the author appreciates the valuable comments and support of Professor Hedley Smyth at University College London in completing this research. Any errors or omissions however are the sole responsibility of the author.
Table of Contents

1.0 Introduction 1-2

2.0 Remodeling Industry 3-11
   2.1 Size, structure and composition 3
   2.2 Characteristics 5
   2.3 Current trends: Specialization and nationalized remodeling activity 7
   2.4 Franchising: A strategy for general remodelers 9

3.0 Theoretical framework 12-17

4.0 Research methodology 18-20
   4.1 Research question 18
   4.2 Methodology 18

5.0 Findings 21-26
   5.1 Company backgrounds 21
   5.2 Barriers to franchise initiation 22

6.0 Discussion 27

8.0 Conclusions 28-29

References 30-33

Appendix A 'General' designation of State licensing requirements for General Contractors (residential) and Specialty Contractors. A/1

Figure 1 Number of Payrolled Remodelers (Thousands) by Annual Revenue, 2002. 4
Figure 2 Shares of Establishments, Employment and Billings for General Remodeling Firms (Payrolled) by Annual Revenue, 2002. 4
Figure 3 Share of total revenue for Residential Construction Sector (Percentage): Comparison of Wood Manufacturers, General Remodelers, and Retailers, 2002. 7
Figure 4 State licensing requirements for General Contractors (GC) and Specialty Contractors (SC). 13
Figure 5 Median hourly wage rates by Industry. 14

Table 1 Major national franchises in the Remodeling Industry 10
Table 2 Background data on sample of general remodeling firms. 21
1.0 Introduction

Recent studies suggest that renovation has already or will soon become the dominant activity related to the built environment (Sartori et al., 2008). Indeed, the Joint Center for Housing Studies (2007) reports that remodeling activity in the US accounts for over one-third of receipts for the entire construction industry and approximately two percent of the overall economy. Yet, research into the industry is lacking (Holms, 2000; Sartori et al., 2008) which is perhaps partly due to the general absence of quality data sources.

However, recent data from the US Census Bureau and research by the Joint Center for Housing Studies (2007) suggest that the remodeling industry is in a state of transition. Beginning in the 1980's, there has been a steady progression toward consolidation and concentration in the home building industry. The remodeling industry however remains fragmented and is becoming increasingly disaggregated into specialty trades and sectors (Will and Baker, 2007). The resulting environment is one where remodelers may have a diminished bargaining position against more consolidated segments. In addition, remodelers could become more susceptible to market risk as they traditionally serve geographically specific markets and are becoming increasingly specialized.

It is in this environment that franchising would appear a useful business strategy. Franchising allows firms (franchisors) a rapid growth strategy, increases consolidation within the industry, and helps firms spread business risk across markets. Smaller firms (franchisees) would acquire established systems (marketing and support), access to customers through brand recognition, and reduce business startup risk. Moreover, clients would benefit from the cost savings of a consolidated industry and confidence in product and service quality through recognized brands.

Franchising is traditionally regarded as unsuitable for construction due to its historically low barriers to entry, low capital asset bases, and low investments required for contractor training (Smyth, 2000). The ideal type of operation for franchising is a routinized service where the initial outlay and training is high (Smyth, 2000). However, a study which appraised existing franchises in the UK construction industry suggests that in practice there are few operational difficulties (Watson and Kirby, 2000). Indeed, available data suggests that approximately 43 major remodeling franchises are operating in the US, but the vast majority of these firms are single-line specialty businesses with only one general remodeling firm represented.

The following report sets out to identify the barriers to franchise initiation for general remodelers. More specifically, the report hopes to address why there is only one general remodeling franchise currently operating. It is important to note however that franchising is not regarded as a normative theory and the intent is not to argue for its use. It is hoped that this research will add to the burgeoning discourse on the use of franchising in non-traditional industries as well as add to scant research on barriers to franchise initiation and the remodeling industry in general.

To this end, the report begins by addressing the structure and composition of the remodeling industry and characteristics of remodeling work and the current market. The purpose is to create a contextual backcloth against which the potential value of franchising in the industry may be better evaluated. The report then establishes a theoretical framework for evaluating franchising in

---

^1 For purposes of this report, the terms 'general remodeler', 'general contractor' and 'full-service remodeler' are used interchangeably.
remodeling. The discussion draws upon extant literature and compares theories with secondary industry data to establish theoretical barriers to franchising. To gain further insight, a qualitative methodology is employed which takes a 'top down' approach to the research problem and interviews active general remodelers deemed 'potential franchisors'. The findings from interviews are then presented and barriers to franchising are identified and discussed. The final section summarizes the conclusions drawn from data and presents possible limitations to the outcomes. The report concludes by suggesting areas for further research.
2.0 Remodeling Industry

2.1 Size, structure and composition

Residential remodelers are primarily responsible for projects such as additions, alterations, reconstruction, maintenance and repair work on single-family and multifamily dwellings. According to the Joint Center for Housing Studies (2007), the remodeling subsector accounts for over one-third of all activity in the US Construction Industry and approximately two percent of the economy overall. Moreover, the remodeling market has doubled in size over the past decade reaching a new high of $280bn in 2005 (Will and Baker, 2007). Market growth is expected to continue as a generation of do-it-for-me (DIFM) ‘baby boomers’ and existing built stock age (Ander and Stern, 2004). Studies outside the US suggest common trends in Norway (Rønningen, 2000), Germany (Kohler and Hassler, 2002) and Switzerland (Kytzia, 2003). Indeed, Caccavelli and Genre (2000) suggest that more than one-third of economic output from construction in the European Union is related to refurbishment and growth is expected to continue.

However, quality data sources on the remodeling industry are difficult to obtain and therefore research on the industry is generally lacking. US government surveys such as the quarterly Residential Improvement and Repairs Report (C50) and the biennial American Housing Survey collect data on consumer spending for home improvement and maintenance. Detailed statistical data on construction establishments with payroll employees is acquired just once every five years from the U.S. Census Bureau’s Economic Census of the Construction Sector with the most recent reports published in 2005 and 2006, reflecting conditions in 2002. Less detailed data on self-employed contractors is obtained annually by the Census Bureau’s Non-employer Statistics series.

Recent economic reports depict an industry dominated by small remodelers. There are 200,100 firms registering payrolls and reporting over 50 percent or more of their business in residential remodeling (Will and Baker, 2007). Specifically, there are 117,200 specialty firms performing activities such as framing, plumbing and painting, and 82,900 general remodelers which include general contractors, design and build firms, and operative remodelers. There are also an estimated 202,900 self-employed specialty remodelers and 127,200 self-employed general remodelers for the same period. Combined, there were just over 530,000 payroll and nonpayroll remodeling businesses operating in 2002. This represents a 32 percent increase in the number of both categories in the five year period since the previous economic survey in 1997 (Will and Baker, 2007). The majority of growth was experienced amongst self-employed contractors.

Approximately three-quarters of all self-employed remodelers earn less than $100,000 per year and are generally not considered significant players in the industry compared to firms with payrolls. While self-employed firms outnumber businesses with payrolls by roughly 65 percent (Will and Baker, 2007), the data on sole-proprietorships from the Non-employer Statistics series is not as reliable as figures on remodelers with payrolls. If only payrolled establishments are considered, the industry is still predominantly populated by small firms. As Figure 1 illustrates, the number of general and specialty trade remodeling firms operating below $250,000 a year was approximately one and a half times greater than those with revenue above $250,000.

2 The term ‘general remodeling contractor’ refers to the industry of residential remodelers as defined by the North American Industry Classification System (NAICS), 236118. The terms ‘general remodeler’ and ‘full-service remodeler’ are used to refer to general contractors, design and build contractors and operatives.
Figure 1  Number of Payrolled Remodelers (Thousands) by Annual Revenue, 2002 (Source: Unpublished tabulations of 2002 Economic Census of Construction, U.S. Census Bureau from Will and Baker, 2007).

* There are 900 general and 800 specialty trade remodeling firms with receipts above $5,000k.

Figure 2  Shares of Establishments, Employment and Billings for General Remodeling Firms (Payrolled) by Annual Revenue, 2002 (Source: Unpublished tabulations of 2002 Economic Census of Construction, U.S. Census Bureau from Will and Baker, 2007).

Yet, the large number of small firms account for a disproportionately small share of the industry’s overall receipts. For example, general remodelers under $250,000 in revenue account for approximately 12 percent of receipts (See Figure 2). However, large firms earning over $1,000,000 in 2002 generated over 40 percent of employment and captured nearly 60 percent of revenue for all general contractors. The impact of a polarized industry saturated by sole-proprietorships is difficult to
gauge and is a condition not exclusive to the US (cf. Ive and Gruneberg, 2000; Dainty, et al., 2007 for the UK). The condition is seemingly encouraged by historically low financial and regulatory barriers to market entry for contractors. In addition, the small scale of average remodeling projects and diversity of building codes and regulatory requirements from locality-to-locality creates an environment well suited to small firms.

From an economics perspective, the prevalence of small businesses suggests a healthy competitive market which easily adapts to changes in demand. Indeed, large numbers of businesses enter the remodeling market during an upturn and exit during a decline. However, the high variability of industry capacity may not best serve consumers. More specifically, the fluctuations in capacity may translate to losses in reliability and service quality from remodelers serving the industry. Indeed, these factors perhaps exacerbate the general mistrust clients have for contractors (Kadefors, 2004).

The loss of capacity and therefore service quality may be illustrated by business dissolution rates in remodeling. The frequency at which firms leave the market (dissolution rate) is often a marker of industry risk levels (Michael, 1996). Nucci (1999) asserts that between 1987 and 1988 construction and mining had the highest dissolution rates (roughly 15 percent) of all industries. In addition, Carliner (2001) suggests that younger construction establishments exit the industry at a rate more than twice that of older firms which implies that failure rates decline relative to a company’s age (Caves, 1998; Nucci, 1999). According to the 2003 Business Information Tracking Series (BITS), general remodelers had a failure rate of approximately 13 percent compared to 11 percent in the entire construction sector. Average failure rates for businesses across industries during this period were 9 percent (BITS,2003). This is especially significant given that 2003 was considered a fairly typical year for construction (Will and Baker, 2007). Arditi et al. (2000) explains that the high dissolution rates in construction are primarily due to budgetary reasons, or administrative systems and procedures under the control of management.

The high dissolution rate and reasons for failure suggest that remodelers entering the industry are often unprepared to handle the business and management requirements of operating a company. Indeed, construction firms are established primarily by experienced craftsmen with limited formal education (Bates, 1995). In fact, Bates (1995) suggests there is a negative relationship between an individual’s level of education and their propensity to operate a company in construction. The requisite knowledge capital and experience for operating a construction firm is not commonly acquired in college, nor is it widely available to women or minorities (Bates and Grown, 1992). As a result, most business owners in remodeling are nonminority males with artisan backgrounds. However, in addition to the qualities of company owners, the characteristics of remodeling work illustrate the unique sets of problems facing contractors and may help explain why business failure rates are elevated relative to other industries.

### 2.2 Characteristics

The characteristics that distinguish remodeling work suggest why the industry is generally associated with low levels of productivity and higher occurrences of project delays and cost overruns (Holm, 2000). When compared to new construction, the qualities of remodeling sites and clients suggest that the work is complex, uncertain, and requiring skills more akin to a service industry.

Remodels are accomplished on and within existing dwellings. As such, labor activity is restricted by the spatial dimensions of a building whereas new construction can be seen to benefit
from the *tabula rasa* of open sites. As such, the restrictive and unique project environment of remodels limit the repetition of tasks for operatives and increase the scope of planning for managers (Grunenberg and Ivey, 2000; Bresnen and Marshall, 2001). For example, a general remodeler is limited during the construction phase as to the number of workers and subcontractors occupying a site at one time. If there are inhabitants (e.g. clients or tenants), this is further complicated (Glardon et al., 1995). Management of space is therefore crucial and work requires a different sequencing than new construction (Bennett, 1983; Daoud, 1997).

Work on existing structures also limits the use of equipment and plant which could otherwise increase productivity (Grunenberg and Ivey, 2000). Indeed, remodeling is heavily reliant on human capital as the necessary skills are less prone to solution through technical fixes such as pre-assembly and modular construction (Dainty et al., 2007). Moreover, remodeling work must accommodate existing dimensions and ‘out of plumb’ conditions which increase the time required to complete tasks and makes estimating labor requirements difficult. In addition, existing building conditions create high levels of uncertainty and risk for remodelers as there is no reasonable way of discerning what problems lie beneath floors and behind walls (Clancy, 1995; Daoud, 1997; Egbru, 1999). This often means project estimates are based on ‘best guesses’ of work scope and expected conditions. In fact, Quah (1992) asserts that the higher variability of tender bids in remodeling compared to new construction is a result of this uncertainty. Okoroh and Torrance (1996) also posit that in the UK the increase in subcontracting by remodelers is due to the unpredictable nature of remodeling work. Will and Baker (2007) note a similar trend in the US where general remodelers subcontract roughly 32 percent of their total receipts.

The nature and proximity of remodeling clients is an additional characteristic unique to remodeling. Clients tend to be unknowledgeable of construction processes and as such have difficulty evaluating construction work. While inexperienced clients are not exclusive to remodeling, it is an industry where clients traditionally are private home-owners undertaking one-off projects. In addition, clients are likely to inhabit dwellings during construction. Production therefore takes place at the point of consumption and degrees of client interaction and management are markedly intensified (Bosch and Phillips, 2003; Dainty et al., 2007). Moreover, undertaking a remodeling project has extreme financial, aesthetic and practical implications for clients (Holm, 2000). For most ordinary owners, undertaking a remodeling project is a large financial investment as a residence is their most costly purchase (Holm, 2000). Clients are also confronted by the aesthetic and practical realities of a remodeling project on a daily basis (Holm, 2000). The overall result is a project environment which requires proactive and deft client management more commonly associated with service-based industries (Holm, 2000). Indeed, Leather and Rolfe (1997) underscore the importance of client service in domestic refurbishment when suggesting that UK clients value reliability and quality as much as, and sometimes more than, price. However, Kadefer (2004) asserts that consumers emphasize competitive bidding and have a general mistrust of contractors which implies a negative societal perception. Kadefer (2004) argues that this perception becomes a self-fulfilling prophecy which puts contractors at a disadvantage.

It is therefore unsurprising that contractors consider remodeling jobs more difficult to manage than new construction (Koehn and Tower, 1982). The elements cited as most difficult to control are forecasting and planning, analysis of risk and uncertainty, and competitive tendering (Egbru, 1995). These elements are similar to the administrative and financial issues listed by Arditi et al. (2000) explaining the high failure rates of businesses in construction. It appears therefore that the unique site and client characteristics of remodeling aggravate the problems noted by Arditi et al. (2000) and
contribute to a higher failure rate (13 percent) relative to the entire construction sector (11 percent). The higher failure rates translate to experience loss at the service level which may exacerbate the general societal mistrust of contractors noted by Kadeffors (2004).

2.3 Current trends: Specialization and nationalized remodeling activity

It is in this environment that remodeling firms are focusing more on specialization. By specializing and limiting work scope, businesses can better control the high levels of uncertainty and complexity that characterize remodeling. In addition, specialization may favor the relatively limited size of remodeling projects. Indeed, according to the 2002 Economic Census, the remodeling industry is becoming increasingly disaggregated into specialty trades and niche markets. This is remarkable given the already fractured makeup of remodeling contractors which, as discussed, are a group dominated by self-employed business owners. Contractors traditionally served multiple sectors yet are now focusing more on the home improvement market with 94 percent of general contracting revenues and 78 percent of special trade revenues generated by remodeling projects in 2002 (Will and Baker, 2007). In addition, contractors are specializing in types of remodels (e.g. kitchen, bath, decks and basements), projects of certain size or complexity, and types of clients (e.g. large property owners and insurance companies).

Figure 3 Share of total revenue for Residential Construction Sector (Percentage): Comparison of Wood Manufacturers, General Remodelers, and Retailers, 2002 (Source: Unpublished tabulations of 2002 Economic Census of Construction, U.S. Census Bureau represented in Will and Baker, 2007).

![Figure 3](image)

However, the current trend of less diversified service offerings may subject remodelers to higher levels of market volatility. Remodeling is composed of discretionary expenditures which households undertake when the economy is healthy, financing costs are low and incomes are growing (Will and Baker, 2007). When the economy is weak and conditions unfavorable, households will typically defer these expenditures (Hillebrandt, 2000). In addition, remodelers are exposed to the volatility of local markets. Traditionally, firms serve geographically specific markets as building
codes and licensing requirements vary across localities. In fact, specialist firms exhibit higher levels of variability in revenue growth compared to full-service firms. Will and Baker (2007) suggest that between 2000 and 2006 general remodelers reported more balanced performance than other categories. Large remodeling firms may also be better able to cope with market volatility. Yet, while larger remodelers are beginning to play a more dominant role, they are undersized compared to the rest of the home building industry.

Indeed, as remodelers specialize, the remainder of the home building industry is progressing toward greater consolidation and concentration. For example, the top fifty general remodelers generated approximately 5 percent of receipts for the industry while the top fifty retailers and lumber manufacturers accounted for roughly 51 percent and 35 percent, respectively (See Figure 3). Consolidated industries often experience greater efficiencies by reducing the share of resources required for overhead functions such as human resources and budget controls. In addition, by increasing market share, companies benefit from improved bargaining positions with suppliers and are better able to protect against challenges from competitors. These benefits are presumably passed on to consumers through cost savings and confidence in expected service and product quality.

Apparently, remodelers are having difficulty providing a broad range of services within a limited geographic area and still achieve the scale of economies that make consolidation advantageous. Specialization does accomplish some of the same benefits as consolidation by allowing firms to achieve efficiencies of scale and gain market share with suppliers since they require limited product lines (Will and Baker, 2007). However, in addition to increased business risk, remodelers may face a challenge of operating small business-oriented enterprises in a market favoring larger operations. Recent movements by manufacturers and retailers differentiating into remodeling services suggest that at least a segment of the remodeling market may require greater consolidation. At present, remodeling activity is being nationalized via licensing schemes and installation programs which could potentially reduce the market power of general remodelers.

Manufacturers often license retailers or merchants to supply and install products (e.g., windows, doors and flooring) and normally require that consumers use licensed professionals in order to validate product warranties. Licensing complies with contract law and as such is relatively simple for manufacturers to establish. However, it does limit the amount of control a licensor has over a licensee. While comprehensive data on national licensing programs are not available, Qualified Remodeler publishes an annual list of top national firms. Three companies involved in licensing appear on the most recent 2007 list - Window World, Inc., Accent Windows and True Home Value, Inc. While Qualified Remodeler does not offer a list of all active licensing programs, it is expected that the ease of initiating such programs will encourage its use by manufacturers. In fact, one firm (True Home Value) has expanded licensing to include numerous product lines (e.g., windows, doors, roofing and solariums) and services (e.g., roofing and siding installation). The company licenses retailers and general contractors and advertises remodeling services such as kitchen and bath refurbishment. The true scale and success of this particular offering is not known. However, it is

---

3 The reason most frequently cited for consolidation in the home building industry was the need to raise capital to finance increasingly large land positions (Apgar and Baker, 2006).
4 Qualified Remodeler has listed the top producing national remodeling companies since 2003. While the firms are listed franchises in Qualified Remodeler, further research suggests that both companies are manufacturers that offer licensing and certification to retailers for product installation (Sources: http://www.windowworldinc.com; http://www.accentwindows.com/home.html; http://www.thv.com/)
expected that the proliferation of licensing will continue to spread, and in one example, has the potential to extend beyond products into more holistic service offerings.

Retailers of home improvement products are perhaps the largest contributors to nationalized remodeling activity via ‘installed sales’ and design and remodeling services. Such service offerings are becoming available with increasing regularity as retailers such as Home Depot, Lowe’s and Sears Roebuck focus on the burgeoning ‘do-it-for-me’ consumer market. Services are available on products such as water heaters, flooring, and cabinets. The installation is outsourced to independent contractors instead of using in-house employees. Overall, the market has proven robust. Lowe’s, the second largest US home improvement retailer, reported that approximately 6 percent ($2.9bn) of its 2006 earnings ($49.6bn) were generated by installed sales (Gilliard, 2008). However, the operation of these programs has not been without difficulty. For example, Home Depot, the largest home improvement retailer in the US, scaled back installation services due to consumer complaints of poor service and work quality from contractors (Roush, 1999). Indeed, when Home Depot originally offered the service, the company expressed difficulties finding suitable contractors able to handle installations and adhere to company standards of service (Roush, 1999). It is expected that retailers may run into similar difficulties with newly offered design and remodeling services (e.g. kitchen and bath refurbishments) that use the same outsourced model as ‘installed sales’.

It is important to note that the experiences of Home Depot and other retailers suggest that there is a market for a service oriented approach to remodeling. Indeed, a consolidated firm that invested in training programs and apprenticeships could better serve the market either as a stand-alone business or through licensing. At present, the difficulties may hinder the immediate expansion of such programs, but it is clear that retailers are progressing into markets traditionally served by remodelers.

2.4 Franchising: A strategy for general remodelers

While the remodeling industry is becoming more specialized and fragmented overall, a small population of contractors is moving toward consolidation through franchising (See Table 1). Business format franchising is an agreement between two independent businesses where one firm (franchisor) provides the rights to a product or service trademark, an entire business format (i.e. a marketing plan, operating manuals, quality control and financial management processes), and continuing two-way communication to another firm (franchisee). In return, a franchisee pays an initial franchise fee plus annual royalty payments to the franchisor for a certain period of time. Unlike licensing, franchising is subject to securities law and as such is more difficult to initiate and requires greater investment by a franchisor. However, franchisors have comparatively more control over franchisees than licensors to licensees.

Both the market and industry appear suited to franchising as business strategy for general remodelers. Indeed, Will and Baker (2007) suggest that franchising may be useful for general remodelers. As a strategy, franchising allows businesses (franchisors) rapid growth, increases

---

5 Products were deemed simple for a professional to install and as such contractors would be easier to control (Roush, 1999).
6 While in an early stage and difficult to evaluate, Home Depot initially offered a design and build service called ‘Home Depot Expo’ in 50 stores but has since reduced that to 34 stores nationwide (www.homedepot.com).
7 There are two forms of franchising - business format and product. The latter is primarily employed by soft drink bottlers and car dealers and its use is on the decline (Lafontaine, 1992).
consolidation and reduces fragmentation in the industry, and spreads business risk across geographical markets. In addition, franchising may add stability to the industry by reducing high business failure rates of small firms and increase standards of service by helping maintain market capacity. As franchisees, small remodelers are provided support, established management systems, and immediate access to customers through an externally managed brand. Moreover, consumers are expected to benefit from the cost savings of a consolidated industry and increased confidence in service and product quality from brand reputation.

**Table 1** Major national franchises in the Remodeling Industry (Source: *Entrepreneur*).*

<table>
<thead>
<tr>
<th>FULL-SERVICE</th>
<th>HANDYMAN</th>
<th>INSURANCE RESTORATION</th>
<th>SINGLE-LINE SPECIALTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Remodeling</td>
<td>Andy OnCall</td>
<td>Disaster Kleenup International</td>
<td>ABC Seamless</td>
</tr>
<tr>
<td></td>
<td>Handyman Connection</td>
<td>Duraclean International</td>
<td>Aire Serv Heating &amp; AC</td>
</tr>
<tr>
<td></td>
<td>Handyman Matters</td>
<td>Paul Davis Restoration</td>
<td>American Leak Detection</td>
</tr>
<tr>
<td></td>
<td>Home Task Handyman</td>
<td>PuroSystems Inc.</td>
<td>Archadeck</td>
</tr>
<tr>
<td></td>
<td>House Doctors</td>
<td>Rainbow Int. Restoration</td>
<td>Benjamin Franklin Plumbing</td>
</tr>
<tr>
<td></td>
<td>Maintenance Made Simple</td>
<td>Service Team of Professionals</td>
<td>Budget Blinds, Inc.</td>
</tr>
<tr>
<td></td>
<td>Mr. Handyman International</td>
<td>Servpro</td>
<td>California Closet Companies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CertaPro Painters</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DreamMaker Kitchen and Bath</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Floor Covering International</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Four Seasons Sunrooms</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fresh Coat</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Grout Doctor</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Grout Medic</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Kitchen Tune-up</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Miracle Surface Restoration</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mr. Electric</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mr. Rooter</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Nationwide Floor &amp; Window</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N-Hance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>One Hour AC and Heating</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Owens Corning Remodeling</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Precision Door Service</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Premier Garage</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Rooter-Man</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>UBuildIt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>United States Seamless</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>V2K Window Décor and More</td>
</tr>
</tbody>
</table>

* Franchises represented have operated for a minimum of seven years and have at least twenty franchisees. Franchises are represented in alphabetical order respective to area of business.

As a business strategy, franchising is relatively new to remodeling and the construction industry in general.9 Existing franchises are broadly grouped into four business areas, namely full-

---

9 Case Remodeling offers franchise opportunities as either Case Handyman or Case Handyman and Remodeling. The latter is deemed a full-service offering as it services not only minor repair projects but larger remodeling projects that encompass multiple specialty trades. According to the company website, the business model does not accommodate projects over $75k (Source: http://www.casemfranchise.com/faqs.html).
service, handyman, insurance restoration and single-line specialty (Will and Baker, 2007). Table 1 represents data taken from Entrepreneur on major national franchises in remodeling.10 It is clear that the vast majority of firms are franchised in single-line specialties (28) such as siding installation and kitchen remodels which is followed by insurance restoration (7) and handyman franchises (7). According to available data, only one firm currently franchises as a full-service operation.11 The existence of only one general remodeler franchise in a seemingly suitable industry and market environment is worthy of note — although, economic and management theory might suggest otherwise (see next section). It is also remarkable given that the service offerings of handyman and insurance restoration franchises are relatively similar in scope to full-service remodelers. The difference being that handyman work focuses on projects that are small and more ‘repair and maintenance’ oriented. Insurance restoration work serves a different client (insurance companies). However, general remodelers are different enough as to suggest that there is a potential market, but are not dissimilar to the extent that explains why there is only one franchise.

Overall, the description and analysis of the remodeling industry and market raise the question as to the extent the theories of franchising align with the current shape of the market. Therefore, the following section regards the extant literature on franchising in order to appraise the potential barriers to franchising in the remodeling industry. This is accomplished by comparing economic theories of franchising with secondary data from the industry.

---

9 While some remodeling franchises were initiated during the 1980's, most franchises were created in the 1990's and later.
10 Entrepreneur publishes an annual list of the top 500 franchises in the US. The list of franchises available in remodeling was culled from the lists published during the period 2004 to 2008. It is reasoned to be an adequate representation of major national franchises in industry.
11 Will and Baker (2007) note that the firm True Home Value is listed in Qualified Remodeler as national firm and is a full-service franchise. Further research however suggests that the firm is indeed a manufacturer/retailer that licenses installers of its products. In addition, data on national franchises in the construction industry are accessible from multiple resources. The sole use of Qualified Remodeler which relies on self-reporting from companies is not a fully adequate representation of franchising in the industry. Will and Baker (2007) also refer to two additional firms (Window World, Inc. and Accent Windows) as national franchises. These firms are window manufacturers that also sell installation licenses not franchises.
3.0 Theoretical framework

There are two tools generally used to explain why firms choose to franchise, namely resource scarcity theory (Norton, 1988) and agency theory (Felstead, 1993; Dahlstrom and Nygaard, 1999). The following discussion uses the lenses of both theories to regard theoretical barriers to franchising for general remodelers. The examination uses a similar approach to Watson and Kirby (2000) when addressing franchising in the UK construction industry by comparing theories with secondary data from the industry.

Resource scarcity theory, also referred to as capital-market-imperfection, suggests that companies choose franchising as a method of company growth when they require managerial skill, local market knowledge, or financial capital (Oxenfeldt and Kelly, 1969). In other words, companies franchise to rapidly acquire lacking capital. Michael (1996) asserts resource scarcity does not necessarily explain different levels of franchising across industries. However, industries do have different levels of associated business risk and therefore varying costs of capital. Yet, this does not explain why some industries choose to raise capital through franchising opposed to financial markets (Michael, 1996). Businesses requiring higher startup costs would necessitate additional capital, but this would create higher franchisee costs and may affect franchisee recruitment (Watson and Kirby, 2000).

Price (1997) uses average franchisee rates to illustrate the different levels of capitalization between retail and construction industries. Using a similar technique of franchise startup costs as a proxy for industry capitalization, the average amount of capital required for food service franchises ($386,400) is roughly five times that of construction related services ($71,300) (Entrepreneur, 2008). However, data is insufficient to employ this technique further and therefore determine the varying degrees of capitalization for subsectors of the construction industry. Indeed, in terms of capital requirements, Ives and Gruneberg (2000) state that the multiple subsectors comprising the construction industry often share more differences than similarities. It is expected that since remodeling is heavily reliant on human capital as the benefits of equipment and plant are limited, it has levels of capitalization on the low end of the scale relative to the rest of the construction industry. As such, resource scarcity suggests that franchising would not be favored in remodeling. However, the theory may explain why franchising is more prevalent in industries with higher capitalization (e.g. food service and hotels) since the capital requirements for growth are great. It also suggests why franchising may be employed more by specialty trades (e.g. plumbing and seamless gutters) where the cost of capital and necessary equipment is expected to be higher than remodeling.

Since the barriers to market entry are reduced by low capital requirements, the costs of entering the market for general remodelers are easy to bear. Indeed, the financial and regulatory requirements for general remodelers are low. As Figure 4 illustrates, only 51 percent of states require licensing for general remodelers while the barriers for specialty remodelers are considerably higher at 92 percent (See Appendix A). However, while the barriers for entry are low, the sheer diversity of building codes and regulatory requirements may make the barriers for business expansion across geographic markets high. In fact, building and regulatory requirements vary not only from state-to-state but locality-to-locality.

12 There is a high level of variance within each of samples of franchises which is most likely due to the differing capital requirements relative to franchise size and brand value. However, it is reasoned that the arithmetical mean is a reasonable indicator of industry capitalization for purposes of comparison.
While Michael (1996) suggests that resource scarcity is not useful for explaining franchising across industries, local knowledge requirements create a barrier to business expansion through company-owned outlets in remodeling. Firms would lack the necessary knowledge capital to properly enter a local market or evaluate the performance of a company-owned outlet. As such, franchising would appear better suited for geographical expansion by remodeling firms. While overall barriers to entry are low, the variability of regulatory and building requirements across geographical markets suggest that firms looking to expand geographically would require specific market knowledge and therefore favor franchising. Presumably, this is why franchising has been useful for real estate firms such as Century 21 in the US (Luxenberg, 1986; Lewis and Anderson, 1999). Similar to remodelers, real estate agents require a high level of local knowledge capital and indeed consumers rely upon agents for their local market knowledge. Indeed, franchises in real estate maintain approximately 18 to 20 percent of the market (Zumpano and Elder, 1994).

Figure 4 State licensing requirements for General Contractors (GC) and Specialty Contractors (SC) (Source: See Appendix A).

Resource scarcity, however, does not explain why companies continue to franchise as their enterprises grow and acquire necessary capital, or why franchisors invest considerable amounts of capital to initiate franchises and at times will directly finance their franchisees. According to theory, a firm would not continue franchising or make large investments if it is simply a strategy of growth when capital is scarce (Lafontaine, 1992). In fact, research shows that firms franchise more not less over time (Lafontaine and Shaw, 2005; Castrogiovanni et al., 2006).

Agency theory is often used to address the shortcomings of resource scarcity. The theory suggests that firms choose franchising when the transaction costs of monitoring a company-owned outlet exceed that of a franchised firm (Caves and Murphy, 1976; Brickley and Dark, 1987; Felstead, 1993). Since franchisees invest their own capital in a franchise and are therefore residual claimants, their success is directly linked to the success of the franchise. As such, the motivations of franchisees
are better aligned with franchisors than say a salaried manager of a company-owned subsidiary to the company’s main office. Franchising therefore minimizes the costs associated with monitoring behavior and protects against moral hazard as franchisees are less likely to shirk responsibilities. Michael (1996) asserts that issues of moral hazard are probably common across industries. However, behavior in some sectors may be more difficult to monitor which would increase the transaction costs associated with monitoring. Moreover, in industries where workers have higher value added, shirking may create more of a problem (Michael 1996; Watson and Kirby, 2000).


In remodeling, the cost of monitoring is expected to be high as production occurs away from the main office (cf. Cherns and Bryant, 1984) and worker value added is high compared to industries where franchising is more frequently employed (See Figure 5). This suggests that franchising would be favored in construction. Indeed, Watson and Kirby (2000) posit that franchising would be favored over full vertical integration.13 However, the high value added of workers in construction suggests that work practices are generally untrained and employees require greater levels of training to perform tasks. Michael (1996) asserts that potential franchisors in industries reliant on human capital may not be willing to make the required investment in training programs.

Using median industry wage rates as a proxy for worker value added (Becker, 1964; Katz and Summers, 1989; Michael, 1996), it is evident that the average output of a worker in construction ($17.76 per hour) is more valuable than those in heavily franchised industries such as retail ($10.32

---

13 Interestingly, Smyth (forthcoming) applies this concept to supply chain management in construction.
per hour) and accommodation and food services ($8.28 per hour) (See Figure 5). Wage rates specific to general remodelers are not available. However, it was suggested earlier that remodeling work is non-repetitive and heavily reliant on human capital. As such, franchising as a business strategy may have limited use in remodeling. Indeed, Watson and Kirby (2000) find that the primary operational difficulty with existing construction franchises is finding ‘quality’ franchisees. This suggests that the industry’s high human capital requirements may constrain franchise development. However, problems with franchisee recruitment are experienced across industries and are not specific to construction (Knight, 1986; Mendelsohn, 1999). In addition, Egbu (1995) and Arditi et al. (2000) posit that the difficulties in remodeling stem from management systems such as planning and forecasting. It would appear that while remodeling work is non-repetitive and reliant on human capital, greater emphasis is on standardization of operating not production routines. Presumably, this is already used in existing handyman and insurance restoration franchises.

Agency theory argues that since franchisees are residual claimants, their success is tied to the profitability of the franchise. However, franchisors spread business risk across multiple markets while franchisees are subject to local market conditions and therefore higher volatility. Therefore, franchisees require a certain return on their investment (Michael, 1996). If the risk associated with an industry is high, potential franchisees are unlikely to risk their capital. As such, Michael (1996) suggests that the lower the associated risk of an industry, the more frequently franchising will be used. Using business dissolution rates as a proxy for industry risk (Michael, 1996), remodeling (13 percent) has a high risk level relative to other industries which suggests franchising would not be favored. However, Dant and Gundlach (1999) assert that potential franchisees are entrepreneurs and would not likely give up autonomy to a franchisor if an industry has low levels of risk. When industry risk is low, a potential franchisee may venture into the market on their own instead of giving up profits and freedom to a franchise (Dant and Gundlach, 1999). The riskier an industry, the more likely a potential business owner will desire established systems and the support of a franchise. As such, franchising would be favorable in industries such as remodeling where industry risk is relatively high. In fact, Watson and Kirby (2000) found a positive correlation between business risk and franchise representation.

According to extant literature, the two strategic assets franchisors possess are operating routines and brand reputation (Caves and Murphy, 1976; Lafontaine and Shaw, 2005). Some literature suggests that firms will not franchise strategic assets since it places these assets in a governance structure with less hierarchical control (Lafontaine, 1992; Combs and Ketchen, 2003; Gillis, 2007). In other words, businesses with valuable strategic assets will choose to expand through company-owned outlets. However, franchising offers variability into the system which permits local adaptations (Kaufmann and Erdogan, 1999). The importance of local market knowledge and possible adaptation of business operations is an expected requirement for expansion in remodeling. In fact, Gillis (2007) was unable to find empirical support for the idea that firms with specific knowledge embedded in operating routines are unlikely to franchise.

Michael (1996) asserts that in order for a business to franchise, the company brand should have value across geographical markets and customers should also be mobile across markets (Caves and Murphy, 1976; Brickley and Dark, 1987; Brickley, Dark and Weisbach, 1991; Michael, 1996). Regarding brand awareness, Watson and Kirby (2000) suggest that in industries characterized by non-repeat business, brand awareness is probably less important. Indeed, remodeling customers tend to be non-repeat which suggests that a loyal customer base and therefore brand loyalty is not a major issue (Watson and Kirby, 2007). However, when clients are not mobile across markets, companies may
franchise less due to potential free riding behavior by franchisees which would negatively impact system quality (Brickley and Dark, 1987; Minkler, 1990). This may explain why franchising is frequently employed in industries such as food service, accommodation and retail where consumers are likely to repeat purchasing behavior across markets. Since consumers of remodeling services are less likely to repeat behavior across markets, franchising may not be useful. However, companies that perform well are likely to attract customers from elsewhere and new clients from previous customers (Ozaki, 2003). For example, franchising has been a successful strategy for real estate companies that arguably face similar conditions as remodelers. In real estate, national trademarks and brand names are valuable to buyers and sellers who are unfamiliar with local housing markets as it is difficult to obtain information on service quality from local brokers (Frew and Jud, 1986). Instead of gathering information, most buyers rely on a national brand as a guarantee of minimum quality of service. The value of the brand hinges on the quality guaranteed to consumers. For remodeling, this suggests the value of a customer-oriented view of franchising.

While both the resource scarcity and agency theories may explain why franchising is used more in certain industries, the theories are production-oriented and therefore inward focused. An outward focused or customer-oriented view centers on the needs of consumers by providing 'added value'. Added value may be considered as any increase in service or product quality that would not otherwise be obtained (Smyth, 2000). This suggests that firms who serve their customers best will receive referrals and repeat business. Firms may seek a client-oriented approach in industries or markets where clients have considerable market power and desire 'added value'. Therefore those businesses best serving their customers, experimenters in franchising being one option, will get referrals and repeat business. However, poor customer knowledge would be a constraint to this market as well as the current low levels of experimentation with franchising. For franchising to operate as a customer oriented approach, the primary difficulty would be properly locating consumers with adequate market power and identifying their needs. The previous section suggested that remodeling clients may require better assurances of service and product quality. Indeed, construction is traditionally inward focused (Smyth, 2000). In addition, Smyth (2000) asserts that construction clients have considerable market power even in strong markets which is mainly due to the fragmented supply side of the market which normally competes on price (Smyth, forthcoming). Franchising may be a way for remodelers to better serve consumers.

In order for franchising to be viable, the costs associated with building and maintaining a brand to address consumer need would need to be cheaper, in relation to return, for the franchisor than delivering customer satisfaction directly. Essentially, this is a resource scarcity perspective which regards franchising as a cost effective method of growth. For a franchisee to work however, the service delivery would need to be difficult for a single operator to complete. For example, creating and maintaining a brand would be difficult for a single operator. Yet, as a franchisee, a single operator would benefit from not having to develop a brand which is the franchisor’s primary asset. To limit franchisee shirking and therefore moral hazard, the systems for service delivery and quality assurance would need to be simple yet labor intensive. In addition, there would need to be financial penalties for noncompliance in order to discourage ‘free riding’ behavior by franchisees which would negatively impact system quality (Brickley and Dark, 1987; Minkler, 1990). In principle, a customer-oriented approach to franchising appears an employable strategy.

Overall, the theories of franchising and secondary data from the remodeling industry do not reveal definitive barriers to franchising for general remodelers. While resource scarcity suggests why franchising is employed more frequently in some industries (e.g. retail and fast food), it does not
explain why there is only one full-service remodeler currently operating. Moreover, resource scarcity suggests that franchising would be a favored strategy for expansion in remodeling given the importance of local market knowledge capital. Similarly, agency theory extends that with regard to business risk, franchising is suitable for the remodeling industry. However, Watson and Kirby (2000) note that the high level of human capital in construction may present difficulties with finding ‘quality’ franchisees. It is reasoned that the unique skill sets required by remodelers may cause a similar condition even though problems with franchisee recruitment are common across industries (Knight, 1986; Mendelsohn, 1999). However, Watson and Kirby (2000) also found that there are few operational difficulties with franchising in construction (Watson and Kirby, 2000). Moreover, the difficulties noted in the previous section regarding client’s mistrust of contractors and the problems retailers experienced delivering remodeling services suggest that the market would support a client-oriented approach through which franchising is a possible means. It is important to note however that the theories of franchising do little to explain its limited use by general remodelers. Therefore, the following section will present the research question and methodology for exploring the issue further.
4.0 Research methodology

4.1 Research Question

The extant literature does not adequately address the difficulties with employing franchising across industries (Michael, 1996). While some progress has been made regarding the construction industry (Watson and Kirby, 2000), there is no research into franchising in remodeling. In addition, there is little research on franchise initiation in general (Combs et al., 2004; Gillis, 2007). Research that is available on franchise initiation is retrospective and therefore possibly biased (Lafontaine, 1992; Dant, 1995). In addition, businesses that do not initiate franchises (non-franchisors) are excluded from research samples.

The study intends to address franchising as a business strategy for general remodelers by identifying the primary barriers to franchise initiation for firms (potential franchisors). It is expected that by locating the dominant constraints progress may be made toward explaining why only one full-service franchise is currently operating. This is significant given the current industry and market environment which suggest franchising may be a useful strategy.

4.2 Methodology

Since there is no previous research on franchising in remodeling, the proposed study is exploratory in nature. In addition, there is only one general remodeling franchise from which quantifiable data could possibly be acquired. Therefore, a quantitative approach is deemed inappropriate given the lack of available data and a testable hypothesis (Creswell, 1994). However, Zikmund (1997) asserts that a qualitative approach is useful for developing existing theories and diagnosing a situation. As such, a qualitative method of data collection and analysis is employed.

To better understand and identify the potential barriers to franchising, the study regards the problem from the perspective of general remodelers seemingly well positioned to franchise (potential franchisors). It is reasoned that the level of experience, business system and brand development of potential franchisors make them likely initiators of franchises in the industry; therefore they are more appropriate sources of information than potential franchisees. In addition, the proposed ‘top down’ approach is expected to provide a richer source of data than assessing potential barriers to franchising at a project level. Projects do not offer insight on the perceptions of firm owners toward franchising. It is reasoned that firm owners, by virtue of being the key decision-makers, will provide useful insight into perceived barriers to franchising.

Non-random purposive sampling was used to select potential franchisors. The firms were selected from Qualified Remodeler’s annual list of the top 500 US residential remodelers spanning the years 2003 to 2007.\footnote{Over the past twenty-five years, Qualified Remodeler has surveyed and ranked the top 500 remodeling contractors. The magazine depends on the self-identification and self-reporting of firms for information. Inevitably, some firms will be omitted from lists that should perhaps be included. In addition, firms may misrepresent annual sales. However, for purposes of this report, Qualified Remodeler’s list of remodelers offers an appropriate jumping-off point for reviewing top performers in the industry. Moreover, it is reasoned that firms actively seeking inclusion in the magazine and the recognition it affords are potential franchisors. The firms are actively seeking brand awareness which extends beyond their local markets.} According to Weinrauch (1986), franchising is considered feasible for firms
with high gross margins and easily implementable business concepts. In addition, potential franchisors should possess two strategic assets, namely operating routines and brand reputation (Caves and Murphy, 1976; Lafontaine and Shaw, 2005). While disclosure of gross margins is not compulsory for privately-owned firms, the Qualified Remodeler lists the self-reported annual turnover of firms which is used as a proxy. In addition, firms listed as one of the top 500 firms nationally are reasoned more likely to have well developed and systematized business practices compared to firms not listed. It is also assumed that firms applying for repeated inclusion in Qualified Remodeler are potential franchisors since they are establishing national brand awareness. Will and Baker (2007) used a technique of only sampling firms from Qualified Remodeler that routinely reported information. These firms were reasoned to provide more accurate data than those responding occasionally. This study uses the same qualification and selected firms reporting data for at least four of the five years spanning 2003 to 2007.

In order to facilitate data collection and limit the influence of diverse local market conditions obscuring data, the sample was limited to firms operating in the same geographic location. Specifically, the San Francisco Bay Area of California (Oakland, Napa, San Jose, San Francisco and Santa Cruz) was chosen since it is one of the top five metropolitan areas in the US for remodeling projects (Reade, 2001; Roth, 2004; Joint Center for Housing Studies, 2007). In addition, California has relatively high barriers to entry for general remodelers with regard to licensing requirements compared to other states (See Appendix A). The state also has strict building codes due to seismic considerations which require remodelers use complex construction methods and techniques not generally practiced throughout the US. Therefore, the top firms in the San Francisco Bay Area were reasoned to have a greater experience base and more developed operating routines compared to similar firms in most other US markets. The final sample resulted in ten firms which is the practical maximum for a study of this type (Eisenhardt, 1989).

A face-to-face, semi-structured interview process was chosen to obtain qualitative data from potential franchisors. Specifically, the study sought the perspective of company owners or senior managers regarding barriers to franchising. Semi-structured interviews allow research questions to evolve and change during the study. The interviews also permit a reasonable amount of freedom to probe and explore concepts as they arise and the ability to ascertain unanticipated responses (Merton and Kendal, 1946). Since the study is exploratory, the interpersonal and somewhat structured qualities of the interviews were reasoned the most useful method of extracting specific data while allowing for emergent themes.

When assessing small scale repair and maintenance firms in the UK, Leather and Rolfe (1997) employed a similar technique of sampling firms within a specific geographic location. While they used systematic random sampling which was appropriate for the study of small scale firms, localized interviews were supplemented by consulting trade organizations to confirm that data represented national conditions. This consideration is especially important in industries such as remodeling where firms primarily focus on geographically specific markets and there is the potential for local data to not reflect broader conditions. The study therefore adopted this approach and consulted two national trade organizations on data obtained from interviews.

Of the ten general remodeling firms in the sample, eight were available for interviews. The original intention was to conduct all interviews face-to-face with either the company owner or senior management. However, the schedule of one interviewee only allowed for a telephone conversation. Six interviews were accomplished with company owners while the remaining two interviews were
with a vice president and a production manager. Given the experience of all respondents, it was reasoned that all were qualified to represent their respective companies and opine on the research topic. Interviews were accomplished during the month of June in 2008 and were from 45 to 90 minutes in duration with the average interview lasting approximately 70 minutes.

The proposed methodology was selected to provide in-depth and detailed insight into the barriers of franchise initiation for general remodelers from the perspective of potential franchisors (non-franchisors). Given the intention and lack of quantifiable data, a qualitative approach is reasoned as the most appropriate technique for an exploratory study of this type. However, the sample size, while acceptable (Eisenhardt, 1989), is still small and therefore may not reflect general opinion. In addition, the methodology is geographically limited and may be influenced by local market anomalies. Therefore, a technique used by Leather and Rolfe (1997) was employed to address this limitation and lend a national perspective to geographically specific data. Regarding expected outcomes, theory suggests that respondents may note human capital requirements as a potential barrier. In addition, respondents may have a production-oriented view of remodeling and therefore mention the non-repetitive and unroutinized nature of remodeling work as a barrier. Overall, it is expected that the primary impediments be an unfamiliarity with franchising as a business strategy.
5.0 Findings

5.1 Company backgrounds

The following section briefly outlines background information of respondent firms to establish a context for evaluating qualitative data (See Table 2). The remodeling firms interviewed ranged in age from 14 to 30 years with 23 years being the average time since founding. The self-reported annual turnover in 2006 for firms was between $2.2m and $33.8m with a median turnover of $6.7m. On average, firms noted that roughly 95 percent of projects undertaken are in residential remodeling.

While all but two of the respondents were company owners, all firms were founder-operated and six of the eight founders had craft backgrounds. The remaining two founders had professional backgrounds in fields other than construction. One was a former educator with a Masters degree in Education and the other as a psychologist with a PhD in Developmental Psychology. Otherwise, all founders had completed a minimum of some undergraduate coursework or acquired an undergraduate degree. It is worth noting that only one of the founder-operators was female which may be illustrative of female underrepresentation in the industry overall (Bates and Grown, 1992).

Table 2 Background data on sample of general remodeling firms (Source: Interviews and Qualified Remodeler, 2007).

<table>
<thead>
<tr>
<th>FIRM</th>
<th>TURNOVER (2006)*</th>
<th>FIRM'S AGE (YEARS)</th>
<th>KEY DECISION-MAKER</th>
<th>GENDER (FOUNDER)</th>
<th>BACKGROUND (FOUNDER)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$33,777,566</td>
<td>23</td>
<td>Founder</td>
<td>Male</td>
<td>Artisan</td>
</tr>
<tr>
<td>B</td>
<td>$8,384,684</td>
<td>23</td>
<td>Founder</td>
<td>Female</td>
<td>Educator</td>
</tr>
<tr>
<td>C</td>
<td>$7,956,586</td>
<td>28</td>
<td>Founder</td>
<td>Male</td>
<td>Artisan</td>
</tr>
<tr>
<td>D</td>
<td>$6,844,900</td>
<td>20</td>
<td>Founder</td>
<td>Male</td>
<td>Artisan</td>
</tr>
<tr>
<td>E</td>
<td>$6,556,468</td>
<td>29</td>
<td>Founder</td>
<td>Male</td>
<td>Psychologist</td>
</tr>
<tr>
<td>F</td>
<td>$4,612,543</td>
<td>20</td>
<td>Founder</td>
<td>Male</td>
<td>Artisan</td>
</tr>
<tr>
<td>G</td>
<td>$2,985,372</td>
<td>14</td>
<td>Founder</td>
<td>Male</td>
<td>Artisan</td>
</tr>
<tr>
<td>H</td>
<td>$2,190,239</td>
<td>30</td>
<td>Founder</td>
<td>Male</td>
<td>Artisan</td>
</tr>
</tbody>
</table>

* Data for turnover was taken from Qualified Remodeler (2007).

It is difficult to draw cursory conclusions from the backgrounds of a small sample of firms. However, since these are eight of the top ten general remodelers in a specific market, data suggests that firms of this vintage are more likely than younger firms to operate at high levels. Evidently, it takes a certain amount time to develop the skills and knowledge capital required to be a large general remodeler. Also, the presence of two founders with non-cognate backgrounds may imply that technical competence and experience are not necessarily prerequisites for operating a successful remodeling business. However, the dominance of artisan-founders in the sample supports previous research suggesting that the majority of construction firms are founded by craftsmen and that requisite knowledge capital is not easily obtained outside the industry (Bates, 1995).
5.2 Barriers to franchise initiation

The following section presents the two primary barriers to franchise initiation for general remodelers derived from interviews. The first (human capital requirements) is considered a perceived operational constraint which bears on a firm's decision to franchise. The second (perceptions of key decision-makers) is an impediment to franchise initiation; it is perhaps the most significant and unexpected outcome of the study.

Difficulty locating franchisees

Michael (1996) asserts that industries such as remodeling with high human capital requirements will not franchise. Arguably, this was supported to some extent by Watson and Kirby (2000) when finding that franchisors in construction had difficulty with franchisee recruitment. Respondents were therefore asked to discuss the value of human capital in remodeling. Firms 'G' and 'F' suggested that human capital is extremely important. They reasoned that the nuances of remodeling projects and the non-repetitive nature of the work required that operatives and managers possess a great deal of knowledge and experience. Their view was arguably production-oriented and as such they regarded employees as the firms' most valuable assets. Indeed, the business model of these firms gave workers a great deal of autonomy onsite and relatively little supervision. Both firms had high project volumes with a relatively small crew of workers. As such, operatives seemed to have a more managerial role with regard to projects and were heavily relied upon for their expertise and decision-making abilities.

The remaining six firms took a more service-oriented view to human capital. All respondents felt that while human capital is important, its value to the industry is mostly overemphasized. The respondent from firm 'H' opined that the focus on human capital keeps the industry from progressing.

The value of the human element in the industry is often overrated. A remodeling company sells a service or an experience and there needs to be more focus on the experience than on the people.

Interestingly, the firms expressing this view had business models which relied more on process instead of an operatives individual skill. These firms had comparatively lower project volumes to firms 'G' and 'F' and operatives had less autonomy and decision-making freedom. This perception perhaps underscores the value these six firms placed on standardizing service and management processes. In fact, they opined that the established processes of their firms were its core strength. While each remodeling project is entirely unique, these respondents suggested that if processes were followed, projects would be successful regardless of the scope, scale and client. While firms 'G' and 'F' felt systems were valuable, they placed greater emphasis on recruiting and hiring extremely qualified personnel. However, all respondents agreed that remodeling requires a different set of skills compared to those found in other construction sectors.

While respondents placed varying degrees of importance on human capital, all felt that there would be difficulty locating qualified franchisees which would reduce the likelihood of general remodelers initiating a franchise. This finding is similar to research by Watson and Kirby (2000) suggesting franchisee recruitment as the primary operational difficulty with franchising in construction. Given the unique skills required by general remodelers, all informants predicted problems with finding 'quality' franchisee candidates. Watson and Kirby (2000) assert that the
difficulty finding franchisees may reflect the fact that individuals with the requisite skills do not turn to a franchise for support.

Most firms noted that it may be difficult to find franchisees with the appropriate combination of technical knowledge to address production elements and social savvy necessary for service delivery. The respondent from firm ‘C’ likened the process to recruiting an in-house general manager. The respondent reasoned that finding a franchisee would probably be more onerous.

We thought we did all the right things. We found a candidate with construction experience and an MBA qualification. He had a good mix of practical and business experience and looked great on paper. We interviewed him extensively and had him complete a series of personality tests. Despite all the time we invested, he didn’t work out. After a period of time, it was all too clear that his approach didn’t reflect the ethos of the company. Unfortunately, we had to let him go which was extremely frustrating... As for finding a franchisee, I wouldn’t know where to begin. It seems to be a more difficult process with a higher degree of risk.

However, it was interesting that four respondents thought the primary impediment to finding suitable franchisees would be the mentality of most small remodelers. They reasoned that the population of self-employed remodelers would be the likely source of franchisees since they possess the requisite knowledge capital. Indeed, Bates (1995) asserts that the type of knowledge capital required for construction is not readily acquired outside the industry. However, there is a culture associated with self-employed remodelers which respondents argued would make recruitment problematic. They suggested that the industry had a ‘Wild West’ mentality which encouraged ‘macho’ and ‘maverick’ behavior. The industry is male dominated (Bates and Grown, 1992). Phrases such as ‘cowboy builder’ and ‘lone wolf’ were used to describe the mentality of this population of contractors. Overall, respondents felt such remodelers would not be interested in giving up freedom and autonomy to a franchise, especially when the barriers to market entry are already low. These respondents felt that this would severely limit the pool of potential franchisees.

Not to mention, most remodelers are from craft backgrounds (Bates, 1995). All respondents felt that as a franchisor they would desire franchisees capable of operating a firm as a business and not from a production or artisan mindset. They suggested that this may cause difficulties since most remodelers do not seek business training and normally have poor management habits which are illustrated by high business dissolution rates (Arditi, et al., 2000). In fact, Bates (1995) asserts that in construction there is a negative relationship between an individual’s level of education and the propensity for that individual to own a business (Bates, 1995).

The majority of respondents argued that the combination of these factors would make it difficult to locate franchisees willing and able to adapt themselves and their businesses to accommodate a franchise. While most respondents opined that the human capital requirements for the industry are not high, they did suggest that the requirements are unique and this uniqueness would make recruiting franchisees inside and outside of the industry difficult. As discussed earlier however, the problems of franchisee recruitment are common across industries (Knight, 1986; Mendelsohn, 1999) and therefore are not limited to the construction industry. The respondent from firm ‘D’ suggested the following approach:

The ‘maverick’ image and philosophies that encumber most contractor, developer personalities would prevent them from taking the advice of others... As most are self-made men with no other skills, their possibilities and paths are narrowed and they take themselves
and their worth to a business structure much too seriously. Seeing is believing to this type of personality, however, so a successful model, in play, would help, and I believe that women would be more accepting and successful than your average male subject and would target them specifically as well.

The respondent from firm ‘D’ opined that acquiring the first group of franchisees may be difficult, but if the scheme is successful then recruitment should become progressively easier. In other words, a successful scheme would help combat the perceptions of small remodelers. Yet, data from the limited sample of firms studied by Watson and Kirby (2000) suggests that franchisee recruitment becomes more difficult over time. It is interesting however that this respondent recommended targeting women as franchisees. Apparently, women are regarded as separate from industry culture or not encumbered by its philosophies. As such, this respondent considered women more likely to have the appropriate skills for service delivery and more willing to adapt themselves and their business practices to accommodate a franchise.

Overall, the interviews suggest that human capital is a barrier to franchise development. According to respondents, this is because the skills required are unique and not necessarily found in or outside the industry. In addition, respondents felt that there is a cultural barrier with small remodelers which would reduce the pool of potential franchisees. This outcome generally supports the findings of Watson and Kirby (2000) but suggests that the human capital requirement is not only a barrier to franchise operation but also a perceived impediment to franchise initiation.

Perceptions of key decision-makers

The most surprising discovery was the impact of a founder’s perception on a firm’s propensity to franchise. Indeed, Penrose (1959) asserts that the capacity of management is a key constraint to a firm’s expansion. Moreover, the self-image of a founder is central to a firm’s development and ultimately determines its growth (Stanworth and Curran, 1976; Clifford, Nilakant and Hamilton, 1991; Tuck and Hamilton, 1993; Floyd and Fenwick, 1999). While all respondents felt that franchising would work in principle, they did not feel that franchising would be in the best interests of their firms and that the business risk may be too high. The following discussion uses small business and upper echelon theories to explain how founder perceptions present a barrier to franchise initiation.

When asked to describe franchising as a business strategy, all respondents were familiar with the concepts and knowledgeable of its employ in the industry. Four respondents understood the potential benefits of franchising for their firms (franchisors), small remodelers (franchisees) and industry clients. This was surprising because it was expected respondents would not be familiar with a strategy not traditionally employed in the industry. A lack of knowledge in this regard would have been a potential barrier. However, the respondent from firm ‘D’ made the following statement when referring to franchising business systems of general remodelers.

A well systematized business is in many ways no different from any other. Proven systems exist at any larger, successful remodeling company, they could easily be adopted by other firms, or help establish new firms. The ‘gray’ areas of remodeling that seem so difficult have been systematized nationally - estimating, marketing, business format and forms, as well as superb tools for managing production and are all available to those that wish to use them. As important, they are also instantly customizable to fit any market or managerial style.
While franchising was regarded as a potential strategy for general remodelers, none of the respondents were interested in exploring it as a growth strategy. While they appreciated the value of company brands and business models as transferable assets, most perceived franchising as overexposure to business risk. Indeed, Martin (1988) asserts that franchising is a riskier strategy than firm ownership. Out of the businesses in the sample only firm ‘A’ was interested in expanding geographically. The remaining firms focused on differentiation and specializing in niche service offerings as business strategies. Initially, it was reasoned that given the size of firms in the sample, most would have saturated local markets and would therefore look to expand geographically. However, the only firm that had outgrown its market felt that the business would expand geographically using company-owned outlets.

As illustrated in Table 2, all firms are founder-controlled with six of the eight founders having an artisan or craft background. According to small business theory, business owners start as either artisans (owner-operators) or entrepreneurs (owner-managers) (Stanworth and Curran, 1976). Company owners that are concerned with running a firm’s current operations limit their ability to initiate new operations. The mechanism underlying this relationship is the founder’s ability to make ‘self-transitions’ or changes in self-image and associated business behaviors (Tuck and Hamilton, 1993). Founders unable to make appropriate self-transitions inadvertently restrict firm growth. Stanworth and Curran (1976) suggest that most founders of manufacturing enterprises start as artisans (Stanworth and Curran, 1976) and indeed this is true for construction (Bates, 1995). Tuck and Hamilton (1993) assert that businesses founded by artisans generally failed to maximize growth, at least until founder was succeeded by someone capable of effective managerial delegation.

Even though respondent firms were not interested in initiating franchises, it is not likely a result of a founder’s inability to make ‘self-transitions’. During the interviews, most respondents at one point or another stated that the transition from being an operator to a manager was difficult; they did not like losing touch with the craft that initially attracted them to the industry. In fact, the respondent from firm ‘G’ asserted that he would restrict firm growth in order to keep from transitioning into a role where he was not managing operations. Overall, however, the size and success of most respondent firms suggests that founders were capable of making transition to different management roles. Small business theory may be useful though for explaining expected barriers to franchisee recruitment. Most small remodelers have artisan backgrounds and may therefore have a static view of firm growth and are unable to transition into the role of a franchisee. Likewise, for potential franchisors, it may suggest constraints to franchising for businesses outside the sample of firms included in this study.

Upper echelon theory is useful tool for analyzing the perceptions of key decision-makers in respondent firms. The theory suggests that a manager’s decisions are influenced by their personal characteristics, education and prior experiences (Hambrick and Mason, 1984). Indeed, Livesay (1989) asserts that the characteristics and preferences of a founder acutely impact firms. While the theory has not been applied to franchising, Combs et al. (2004) suggest that it may be useful for understanding why firms do or do not choose to initiate a franchise. Specifically, the theory may explain why, in the absence of dramatic changes to business systems and markets, businesses operate for years as non-franchisors before deciding to franchise (Carney and Gedajlovic, 1991; Combs et al., 2004).

Hambrick and Mason (1984) explain that managers with less tenure at a firm are often not as psychologically tied to the existing strategies and are therefore more prone to take risks. Franchising is customarily seen as riskier strategy than firm ownership (Martin, 1988). Conversely, older
managers may seek fewer risks and place greater value on financial stability and career certainty. Not to mention, older managers will likely be psychologically committed to existing strategies (Combs et al., 2004). As such, upper echelon theory seems a useful tool for explaining the barrier to franchise initiation for founder-controlled firms of the particular vintage of those in the sample. Company founders are either risk averse or psychologically beholden to existing business strategies.

The outcomes suggest that the primary barrier to franchise initiation is the perceptions of key decision-makers. Respondents felt that franchising for general remodelers was generally viable but none were interested in employing it as a business strategy. Most expressed concern that franchising would expose their firms to an unacceptable amount of business risk. Moreover, they were content to pursue more traditional and arguably risky growth strategies such as differentiation and specialization in niche markets. While small business theory may offer some insight into the difficulties faced by founder-controlled firms, it is mostly inappropriate for describing the study’s sample of firms. Upper echelon theory however explains how the perceptions of founders can influence and at times hinder growth in founder-controlled firms. The following section explores this idea further with regard to the remodeling industry.
6.0 Discussion

Data from interviews suggest that the primary barrier to franchise initiation is the perceptions of key decision-makers. It is tempting to suggest that these perceptions are symptomatic of a prevailing culture in the remodeling industry. However, is this necessarily true? Is it a symptom of a cultural condition or simply representative of a certain population? The latter is probably true. The sample of potential franchisors are all founder-controlled firms and of a certain vintage. As such, the study is not a fair perspective for beginning a discourse on the culture of the remodeling industry. However, the following discussion uses institutional theory to regard perceptual barriers to franchising and suggest that the barriers may be temporal in nature.

Institutional theory explains how social influence affects organizational decision making (Oliver, 1997). Firms within the remodeling industry exist in an institutional environment defined by rules, norms, values and assumptions that influence economic behavior (Oliver, 1997). Deephouse (1996) posits that it is conformity to institutional norms which grants a firm legitimacy. Indeed, conformance to norms and social expectations occurs even when it is inefficient (Roberts and Greenwood, 1997). However, the practices of highly visible and successful competitors are often observed and copied by competitors (Sherer and Lee, 2002). In other words, as additional firms adopt the strategy of highly visible competitors, the practices are gradually legitimized within an industry. As the practices become part of institutional norms, even more firms adopt the strategies (Sherer and Lee, 2002).

Perhaps this will occur with franchising. Firms that are seemingly well suited to franchise are beholden to their perceptions as suggested by upper echelon theory but they are also subject to the established norms and values of the industry. Institutional theory suggests that since franchising is employed by only one general remodeler that industry norms are not yet broadly amenable to its use as a business strategy despite indicators of a potential market. However, as one firm develops a successful scheme, other companies may begin to adopt the strategy and institutional norms begin changing. In the context of franchising in remodeling, this may be initiated by new industry competitors (e.g. retailers and manufacturers) who are attempting to nationalize remodeling activity. In addition, as older founders leave the industry and are replaced by younger more business oriented managers, the perceptions of key decision-makers may broaden to non-traditional, industry strategies such as franchising. One respondent predicted the following:

I believe that the [industry culture] will change over time. I think it will be a function of the profile of the typical remodeling company owner changing. The next generation will be looking at the business as a business, not as an extension of themselves, having not started the business as a craft-based enterprise. This will be a slow transition over the coming ten to fifteen years, as most of the baby boomer remodeling company owners retire or leave their businesses.

Indeed, the perceived barriers to franchise initiation discussed in this report may be temporal and abate over time. As institutional norms change and the profile of the remodeling company owner changes, the industry may have less of a psychological barrier to franchising. In addition, this may influence the culture of self-employed remodelers, thereby reducing some of the perceived difficulties of franchisee recruitment.
7.0 Conclusions

The structure and composition of the remodeling industry and potential service needs of consumers suggest that franchising may be a useful business strategy for general remodelers. In theory, franchising would allow firms (franchisors) a rapid growth strategy, increase consolidation within the industry, and help spread business risk across markets. Smaller firms (franchisees) would acquire established systems (marketing and support), access to customers through brand recognition, and reduce business startup risk. Moreover, clients would benefit from the cost savings of a consolidated industry and confidence in product and service quality through recognized brands. At present, however, there is only one operating full-service remodeler.

There has been some research explaining franchising across industries (Michael, 1996; Watson and Kirby, 2000). Indeed, Michael (1996) suggests industries with high business risk and human capital requirements such as remodeling will not frequently employ franchising. Watson and Kirby (2000) found however that business risk did not affect franchising in construction. In fact, Dant and Grundlack (1999) suggest that high business risk encourages franchising. The only operational difficulty with franchising in construction was franchisee recruitment (Watson and Kirby, 2000). While this may suggest constraints resulting from high human capital requirements, it is a problem experience across industries (Knight, 1986; Mendelsohn, 1999). In fact, theories on franchising suggest that it is broadly viable for general remodelers and offer little to explain why there is only one existing franchise.

To investigate further, interviews were sought with general remodelers seemingly well positioned to initiate franchises. While the number of respondents was small, the sample size is regarded as practical for this type of exploratory study (Eisenhardt, 1989). Data from respondents suggested that, similar to the findings of Watson and Kirby (2000), the recruitment of ‘quality’ franchisees may be an impediment to franchise initiation. The reasons listed were the unique qualifications required by remodelers (potential franchisees) and the perceived difficulty of recruiting tradesmen from a maverick culture of small remodelers which value independence. However, all respondents felt that franchising should work in principle and the majority regarded their service and management systems as valuable and transferable assets.

The most significant outcome was the perceptual barriers to franchise initiation by key decision-makers, specifically company founders. While respondents felt franchising was feasible, none were interested in exploring it as a business strategy. Most felt that it would subject their firms to an excessive amount of business risk which they were not interested in pursuing. The data therefore suggested that franchising might be more appropriate for younger firms and managers or firms which were no longer founder-controlled. Using upper echelon theory, it was reasoned that older company owners may be more risk averse and psychologically beholden to existing business strategies than younger managers. However, since the primary impediment to franchise initiation may be a generational anomaly and therefore temporal, the discussion suggested that as the profile of business owners change so too may the perceptions of franchising. The result of which may reduce the impact of psychological constraints to franchising noted by founders in this study. The discussion of this idea was developed further by employing institutional theory. Ultimately, it was presented that a successful general remodeling franchise in practice coupled with the changing profile of business owners may encourage overall changes to institutional values or norms. Changes to norms may create an environment which has the potential to further reduce the noted barriers to franchise initiation.
However, given the homogeneity of sampled firms, it is difficult to prove that perceptual constraints to franchise initiation do not extend to firms of different vintage or where firms have transitioned from being founder-controlled. The outcomes suggest that the criteria for selecting firms as potential franchisors may have been flawed. While all firms have well-developed business models, companies were on average 23 years old and founder-controlled. The outcomes suggest the relevance of perceptual constraints. However, future studies of non-franchisors in remodeling should regard younger founder-controlled businesses and firms where the founder is no longer a key decision-maker to determine if this is the case. In addition, future research should evaluate potential franchisees in the industry. It is perhaps reasonable to assume that young, self-employed remodelers would be the best candidates for such a study. The results may identify additional barriers to franchise initiation and help address problems of franchisee recruitment in the construction industry overall.

Moreover, the barriers to franchise initiation for remodelers suggest the need for greater diversity in theories explaining why firms choose to franchise. Combs et al. (2004) have made some progress in this regard by suggesting that resource-based and institutional theories may have bearing. However, most studies are not industry based or are concerned with a firm’s propensity to franchise certain outlets as opposed to having wholly-owned subsidiaries (cf. Lafontaine, 1992). There is an apparent need for more firm-level studies that compare franchisors to non-franchisors.

Notably absent from the discussion are financial barriers to franchising for remodelers. Presumably, the capital investments for starting a franchise may constrain employing it as a business strategy. Indeed, franchise startup costs can be substantial (Stanworth, 1996). Since no firms had explored the feasibility of franchising, data was unavailable for analysis. However, all respondents noted that capital requirements of franchise initiation would be a concern.
References


U.S. Census Bureau, *2002 NAICS Codes and Titles*, [http://www.census.gov/epcd/naics02.htm](http://www.census.gov/epcd/naics02.htm)

U.S. Census Bureau, 2002 Residential Improvements and Repairs Statistics (C50), *Expenditures for Owner-Occupied One-Unit Properties by Payments to contractors or Materials Purchased by Owner.*

U.S. Census Bureau, 2003 *Business Information Tracking Series*.


Appendix A: States requiring licensing for General Contractors (residential) and Specialty Contractors (Source: State government websites).*

<table>
<thead>
<tr>
<th>States/District</th>
<th>General Contractor (License Required=X)</th>
<th>Specialty Contractor (License Required=X)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Alaska</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Arizona</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Arkansas</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>California</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Colorado</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Connecticut</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Delaware</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>District of Columbia</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Florida</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Georgia</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Hawaii</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Idaho</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Illinois</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Indiana</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Iowa</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Kansas</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Kentucky</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Louisiana</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Maine</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Maryland</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Michigan</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Minnesota</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Mississippi</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Missouri</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Montana</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Nebraska</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Nevada</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>New Jersey</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>New Mexico</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>New York</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>North Carolina</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>North Dakota</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ohio</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Oklahoma</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Oregon</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Rhode Island</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>South Carolina</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>South Dakota</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Tennessee</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Texas</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Utah</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Vermont</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Virginia</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Washington</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>West Virginia</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Wyoming</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>Total Requiring Licensing</strong></td>
<td><strong>26 (approx. 51%)</strong></td>
<td><strong>47 (approx. 92%)</strong></td>
</tr>
</tbody>
</table>

* The term 'license' refers to the qualification that potential contractors must achieve which proves knowledge of a particular trade and pertinent construction law. This is generally assessed through testing and a required tenure at a journeyman level 'on the tools' for the specific trade license sought. A license is also required in addition to contractor registering a business to operate within a state. However, each state has slightly different licensing procedures such as general knowledge requirements, required time 'on the tools', and project valuation thresholds at which point a builder must be licensed. Therefore, state designations of licensing requirements are general. The intention of this table is to illustrate differences between general contractor and specialty contractor licensing requirements across the US, and the lower barriers to entry for general contractors in approximately 50% of US markets.