Market Segments in the Commercial Remodeling and Renovation Sector

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ABSTRACT

The commercial building remodeling and renovation market is little studied and little is known about segments in this market. Using data from in-depth interviews, and a survey of 341 decision-makers, four distinct owner or management-based market segments were identified. The four market segments are: the developer segment that buys, renovates, and holds buildings (buy/renovate/hold), the developer segment that buys buildings, adds value to them, and then sells the buildings (buy/renovate/sell); the owner-occupied buildings segment, and the ground lease segment for national chains and franchises.

The paper discusses how and why the level of interest in energy efficiency varies by segment. For example, the segments most amenable to energy efficiency are the owner-occupant segment and the national chain and franchise ground lease segment.

The paper briefly discusses the effectiveness of different program strategies for each segment. For example, energy contracts that include energy services provisions will be most attractive to owners or franchisees that hold their property for a length of time and pay their own energy costs. Energy contracts that include energy services may be of little interest to commercial operators who buy, renovate and sell.

Introduction

The commercial building remodeling and renovation market is little studied and little is known about segments in the market. There have been a number of studies of energy technology measure useful lifetimes that provide some indirect evidence about the renovation and remodeling market (Bordner, *et. al.,* 1995; Kunkle and Johnson 1991; Lucas 1990; McRae, *et. al.,* 1987; Petersen and Sandler 1991; Skumatz and Hickman 1992, 1994a, 1994b). In addition, there are studies in disciplines outside of energy that have addressed various aspects of remodeling and renovation (Sivitanidou and Sivitanides 2000; Williams 1997; Wong and Norman 1994).

The key questions that are addressed in this paper are whether there are unique segments in the renovation and remodeling market place, and if so, how the interest in energy efficiency varies among the segments. This information can be used to develop energy efficiency program strategies that are appropriate for each segment. The program strategies that are reviewed for applicability to the remodeling and renovation market include rebates, information, design assistance, performance contracts, and standards.

Study Methods

This discussion of market segments is drawn from a larger market characterization study of the nonresidential remodeling and renovation market conducted under the management of the California Energy Commission for California's investor-owned utilities (summarized in this proceeding by Dohrmann, *et. al.,* 2002). The Nonresidential Remodeling and Renovation (NRRR) Study had four major goals:

- To characterize the decision-making process for the purchase of energy-using equipment during remodeling and renovation activity;
- To define the level and types of remodeling and renovation activity by market segment; to define segments useful to program planning and implementation; and to quantify characteristics for segments within the NRRR market;
- To identify specific markets with a high potential to save energy; and
- To develop new strategies and program designs to promote market transformation.

Both qualitative and quantitative data were collected for the characterization study. The data used to define the market segments are drawn from in-depth interviews with 26 building professionals and a telephone survey of 341 decision-makers who completed remodeling and renovation projects in 2000. The methods, survey instruments, and results of both these data collection efforts are fully documented in separate reports (ADM Associates 2001; 2002a).[1]

The focus groups and interviews were conducted in September and October of 2000 in five locations in California: San Diego, Los Angeles, San Francisco, San Jose, and Riverside. The participants included architects, engineers, contractors, developers and property owners. The purpose of the focus groups was to obtain information about key decision-makers, the decision criteria used by decision-makers and the operation of the remodeling and renovation market. One-on-one in-depth interviews ranging from 30 minutes to over an hour were conducted with people who were not able to participate at the scheduled times for the focus groups. Standard recruitment procedures were followed but no monetary incentive was paid to participants.

The 341 decision-maker surveys were completed by telephone in the spring and summer of 2001. The sample was composed of decision-makers associated with a random selection of projects drawn from building permit data collected from a cross-section of 50 California cities. Decision-makers were located from data on the summary building permit information in 169 cases. Because it turned out to be difficult to identify the key decision-makers by this method, Title 24 documentation was obtained for the remaining projects in the sample (172 cases) and used to identify the decision-makers.

[1] Both of these studies are available from the California Measurement Advisory Committee (CALMAC) website, http://www.calmac.org.

General Findings about the Remodeling and Renovation Market

From a policy perspective, it is generally assumed that the remodeling and renovation market is somehow different than the new construction market. When we interviewed and surveyed market actors, we found that it was very difficult to define the boundaries of the remodeling and renovation market. There is no standardized terminology that defines this market. Furthermore, the available data tends to describe the market in terms of alterations, additions, and new construction, which is the way data are collected and categorized by local permitting agencies. During the data collection process, we confirmed that there is additional substantial variation in the way construction activities are classified within and across local jurisdictions.

Building professionals — namely, architects, engineers, and contractors — told us that there were no real remodeling and renovation sub-markets in their professions. While these building professionals had difficulty identifying any meaningful differences between actors involved in remodeling and renovation and new construction, building owners and developers could readily distinguish among market actors based on type of ownership and investment strategies. To paraphrase the comment of one owner during a focus group discussion, "Give me a list of owners and developers and I can tell you which are involved with what kinds of buildings and strategies." As we inquired further about the differences, we found that the segments identified with different kinds of owners and developers had significant implications for marketing energy efficiency. The rest of this paper is devoted to discussing the different segments among owners and developers who may remodel and renovate buildings.

Renovation and Remodeling Market Segments

The results of the data collection and analysis for the NRRR Study indicate that the most important market segments to target for energy efficiency programs are:

- the "buy and hold" developer segment that buys and then holds buildings
- the "buy and sell" developer segment, that buys a building, adds value to it, and then immediately sells the building
- the owner occupied building segment
- the national chain and franchise ground lease segment

We can depict the relationship among these segments in two dimensions (**Figure 1**), whether an owner uses or leases the space in the building and the time horizon of the building holder's investment strategy. The time horizons for the investment strategies can range from a few months to twenty years or more

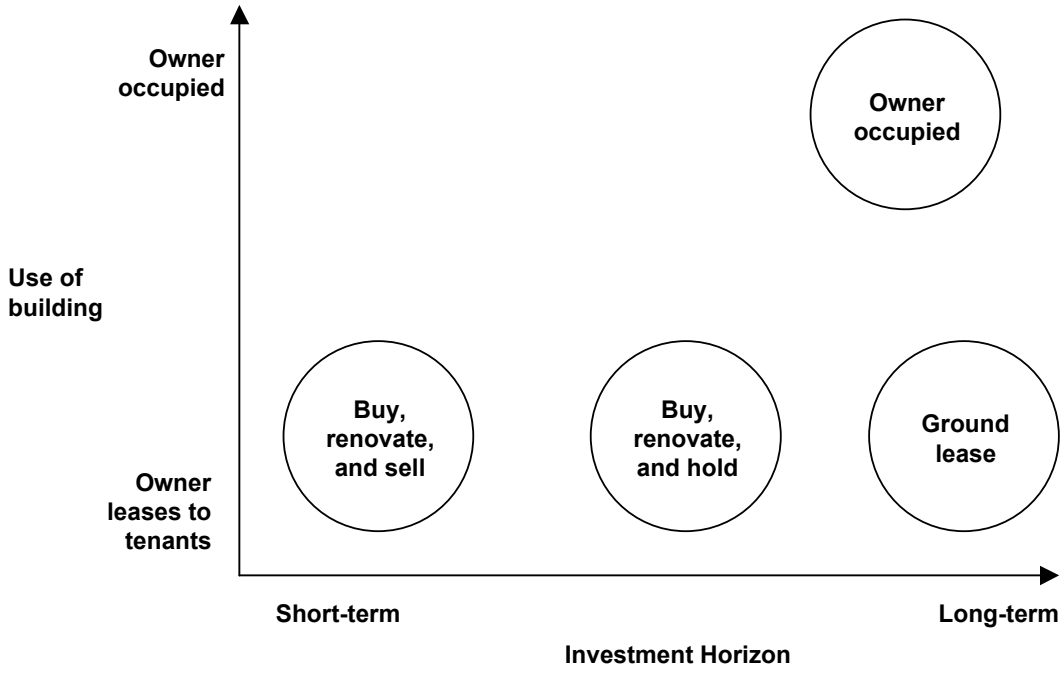
As we can see from **Figure 1**, developers who *buy, renovate, and sell* are located in the lower left quadrant, owners are usually in the upper right while commercial real estate firms who buy, renovate and hold properties are in the lower middle. Ground leaseholders are in the lower right quadrant.[2] It is the segments in the upper right quadrant that are most

[2] In a ground lease, the owner leases a site and the lessee enters into a long-term contract that allows the lessee to build, maintain and renovate as needed over a defined period of time, often as long as 20 years.

amenable to making investments in energy efficiency. Segments in other parts of this graphic are less amenable and need incentives other than return on investment (ROI) to motivate them to make efficiency investments.

The three key differences that differentiate these segments are whether the space is for the owner's use or for lease by the owner, the degree to which the owner exerts control over the space, and the investment strategy that the owner follows with respect to the space. In turn, the program strategies that can be used to influence the market actors in the segment will vary as well based on the possibility of influencing energy efficiency decisions and on the estimated market size.

Figure 1. Remodeling and Renovation Segments in Terms of Investment Time Line and Ownership Pattern



Buy/Renovate/Hold Segment

Much commercial property is owned by owner/developers who buy and hold the property for the purpose of leasing it to others. Over two-thirds of the projects in our study were in properties leased to others. There are at least two key differences between this segment and the buy, renovate, and sell segment which will be discussed next.

The developer doing buy, renovate, and hold, is less likely than an owner making money on turnover to place emphasis on maximizing short-term lease rates because he or she is in the project for the longer-term.[3] This owner/developer is able to consider longer, four- to five-year payback periods. Indeed, our data revealed that 77 percent of the decision-makers interviewed in the telephone survey indicated that tenants for whom space is being remodeled are expected to stay six years or more. Thus, if energy-efficient designs and

[3] For the owner who is buying, renovating, and selling, the idea is to establish the highest possible lease rate per square foot and to lease as much space as possible to demonstrate value to potential buyers. This type of owner may leave some space vacant if renting at a lower lease rate might suggest a lower value for the property.

technologies have paybacks within that range, a developer with a buy and hold strategy, depending on other investment opportunities, may consider them.

If the efficient designs and technologies make the space more desirable for long-term rentals or desirable tenants, the developer may use energy efficiency or its derivative benefits as a way to attract tenants.

If energy services are included and the lease rate (monthly/annual rental costs paid by the tenant) is fixed, then there is some incentive for the owner to reduce utility costs because the money goes to the owner's bottom line. The more frequent case is that, utilities — at least electricity — are the responsibility of the lessee. Thus, there is no financial incentive for energy efficiency upgrades by the owner except for what can be recovered in the lease rate.

Our data suggest that this segment can be influenced to use energy efficient equipment and designs in the following cases:

- When the cost of efficient equipment and designs are competitive with less efficient equipment and designs;
- When rebates are available;
- When tenants are interested in efficient equipment and designs (for instance, indirect lighting equipment which can be highly efficient); or
- The owner perceives that efficient equipment will provide some competitive advantage for the space being renovated.

Information strategies to promote energy efficiency are not likely to be highly effective in this segment because energy costs are of low salience to this group. Performance contracting is a possible strategy, but it must yield some tangible benefits for the owner beyond displacing the owner's need to use his or her own capital. There are also dis-incentives to performance contracting such as managing the performance contract and dealing with the performance contract if the building is sold. In general selling efficiency into this segment is difficult in the absence of financial incentives.

The Buy/Renovate/Sell Segment

A relatively small segment in the remodeling and renovation market is the developer who buys, renovates, and then sells buildings. Based on our survey data, we estimate that in a given year one to three percent of buildings are renovated using this strategy. In this segment, the investment strategy is to buy a building and upgrade it to increase the lease rate that tenants pay. Because the increased lease charges enhance the value of the building, the building can be sold at a premium. The developer makes money on the difference between the investment in the building, on the one hand, and its selling price and whatever value is obtained from leases during the period that the developer holds the building, on the other. Part of the strategy may be to attract high quality tenants with long-term leases who will pay higher rates.

A developer following this strategy tries to renovate and sell the building within a relatively short period, from a few months to three years. Such a developer is looking for undervalued buildings with a desirable location where the application of capital will result in

substantial short-term gains. Based on the focus group results and criteria used in decision-making described in ADM Associates (2002a), developers choosing this strategy:

- Focus on upgrades that enhance the lease rate such as changing aesthetics, revamping the space, adding valued features like fiber optic cable, perhaps re-lamping to improve the quality of lighting, and increasing the availability of power.
- Avoid improvements that do not add to the lease rate unless it can be shown that the improvements will both pay back and show a profit during the period within which the developer holds the building. For example, if window film has a two-year payback, the developer might install film on the windows if the developer anticipates holding the building for three years. If the payback period for window film is longer, then the developer using this strategy is not likely to do it.
- Avoid buildings where replacement of major systems or extensive changes to systems may be necessary, unless the developer believes the cost of the improvement can be recouped through a higher sales price for the building.
- Modify major systems and add controls when the developer believes that these features make it possible to increase lease rates and cover costs and/or increase the selling price.

From a program perspective, it can be difficult to promote energy efficiency among developers/owners in this segment for the following reasons.

- Generally, quite a few energy-efficiency technologies are not perceived to have value that translates to increased lease rates. Energy efficiency is not necessarily linked to valued building attributes such as comfort, indoor air quality, or productivity in the minds of either the developer or potential buyers and lessees of the space.
- Energy-efficient designs and technologies generally do not have paybacks that are less than the period that the developer wishes to hold the building.
- Some potential buyers may be buying the building as a commercial real estate venture in order to lease the space.
- Some buildings are renovated "on spec" which encourages the developer to avoid items that may not be attractive to buyers or people who would lease from buyers.

Developers using this investment strategy tell us that they do look for and accept incentives and rebates if those incentives and rebates offset or more than offset the cost of energy-efficient equipment and designs. The overhead for obtaining the incentives must be low and the turn around relatively quick. Using design assistance to encourage energy efficiency is unlikely to be of interest to a developer pursuing this investment strategy unless it can increase property value and lease value without disrupting the project time frame. Information interventions are not likely to be effective unless the cost of efficient equipment is about the same as standard equipment. Thus, the basic program strategies for encouraging energy efficiency with this type of developer are rebates, competitive costs for energy efficient equipment and designs, and standards and regulations.

The Owner-Occupied Segment

Based on the telephone survey results, a little less than 30 percent of remodeling and renovation projects in California are completed in buildings occupied by owners. Owners invest in space for their own use, and they tailor the space to their needs and the image they wish to project, according to the focus group participants. While operating costs are a factor in owner decision-making, other criteria, such as comfort, worker productivity, the effects of indoor air quality on absenteeism, health, safety, image, and functionality of the space can be important as well.

Because owners typically occupy space for the long-term and because they pay for the energy they use, their bottom line benefits directly from reducing energy costs and there is an incentive for them to reduce their operating costs. This is especially true when the payback period is short and owners are convinced that they will obtain the savings. Owners will accept a five to seven year payback, perhaps even longer, especially if there are factors other than energy savings that make energy efficiency attractive. Most owners state that they do not have specific criteria for payback. Among those who do, nearly 40 percent or more say they will accept a return on investment that takes six or more years.

Even so, the ROI from energy saving measures is often evaluated against other opportunities to invest money in the owner's business. If the business is operating in an environment where investments yield 20 percent, then the payback needs to be less than five years if the only incentives that accrue to the owner are from the reduction in energy costs.

From a policy and programmatic perspective, this segment may be one of the easiest to influence. Owners can be convinced to undertake efficiency upgrades in their own best interests. The architects with whom we discussed remodeling and renovation in the focus groups say that they are often able to do more with efficiency in owner-occupied buildings than in buildings that are occupied by lessees. Although energy costs are often just a few percent of the overall cost of an owner's operation, owners can be motivated to reduce energy consumption. Information directed to owners is likely to reach people who make decisions. This group responds well to rebates, based on focus group comments. This group is also likely to be responsive to performance contracting initiatives, although few participants in the focus groups seemed to be using them. Performance contracting allows the firms to free-up capital for other purposes while reducing overall costs through energy savings. This segment will also respond to design assistance.

National Chain and Franchise Ground Lease Segment

Regional and national chains often build on sites with ground leases, which can have terms of twenty years or more. In a ground lease, the owner leases a site (no building) and the lessee enters into a long-term contract that allows the lessee to build, maintain and renovate a building as needed. About five percent of the projects in our sample were of this type. This means that about three percent of all remodeling and renovation projects were completed in buildings with this type of arrangement. A chain might take a twenty-year ground lease and build, anticipating that the ownership of the structure would revert to the owner of the ground at the end of that time. Such contracts typically spell out procedures for dealing with situations in which the lease does not go to term or a lease extension is desired. The owner of the parcel may set some constraints on the size, style, location, and physical

appearance of the building in order to maintain conformity with other nearby structures. Beyond that, the lessee has nearly complete control over the building. Lessees in these situations can and do modify such buildings with some regularity.

Because of the long-term nature of the ground lease, the lessee is probably more like owners in general and may be willing to invest in efficient equipment to help reduce costs. Like other types of building owner-operators, chains compare the return on investment from energy efficiency improvements with other investment opportunities in the business. A high percentage of these types of properties are fast food or retail operations. Owners of these properties will consider energy efficiency options that may provide other benefits to their operations such as increased sales or productivity.

Since the chains and franchises are frequently regional and national companies, decision-making has to be influenced at regional and national levels or through the image architects who manage the design and brand recognition details of buildings for chains and franchises. As a matter of course, these types of firms often look for incentives such as rebates. No doubt there is some free ridership. The extent to which there is free ridership or the owners have opted for more efficient equipment is not clear from our data.

Design incentives and pilot projects may be particularly effective with this group. Design incentives may give lessees the opportunity to try new technologies, which if adopted, are likely to be widely replicated.

Summary and Conclusions

In this paper, we have examined the renovation and remodeling sector of the nonresidential building market. In terms of practices, materials, and technologies, building design and construction professionals tell us that they perceive few differences between the new construction and renovation and remodeling market. However, building owners and developers can readily distinguish different market segments based on investment strategies.

There is no precise terminology that building professionals use that clearly delineates the remodeling and renovation portion of the building construction market from other parts of the market.

Owners and real estate developers can be segmented in terms of investment strategy and the length of time they hold a building. Members of the segments have different levels of interest in energy efficiency and need to be approached with different market strategies. The four basic market segments discussed above are: the developer segment that buys a building, adds value to it, and then immediately sells the building; the developer segment that buys, renovates, and holds buildings, the owner-occupied building segment; and the national chain and franchise ground lease segment.

There are three important general conclusions to be drawn from this paper. The first is that owners heavily influence decisions about energy efficiency in remodeling and renovation situations. The second is that owners vary in their assessment of the importance of energy-efficiency, depending on their investment strategy. The third and most crucial point is that firms and organizations wishing to influence energy efficiency in the remodeling and renovation market must match their program strategies to the investment strategies that are being used in each segment. This means that firms and organizations promoting energy efficiency must have multiple and well-targeted strategies in order to have broad influence in the market.

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