

Harvard Business School

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Regency Plaza

Teaching Note

Kris Hodgkins, the project manager for condominium development at the Regency Plaza Hotel complex, is trying to decide how to handle a series of customer requested changes. Condominium sales at the project have been slow, and Hodgkins would like to accommodate the owners' requests. However, the proposed changes may seriously disrupt the construction process. Hodgkins, as the project manager, has to make a decision that takes into account the design, marketing, sales, construction, and financial aspects of the development.

Discussion questions to be distributed to students:

- 1. What has been the role of the project manager up to now? Have the marketing and design processes been set up properly? What, if anything, would you have done differently?
- 2. What should Hodgkins do about the Miller's requested changes? How should she implement her decision? What are the construction implications of her decisions, both now and at earlier stages?
- 3. How would you lay out six to nine units on the floor plan on Exhibit 1? NOTE: You may work in groups of up to four students on this question. You should prepare a transparency with your group's design on it for presentation in class. Your design should be at a level of detail similar to the unit layout in Exhibit 4.

Teaching Objectives

The project manager plays a vital role in communicating with and coordinating the various interest groups involved in the development process. This case analyzes the responsibilities, accountability, and economics of project management. It illustrates the interplay of marketing decisions on design, construction, and financials, and take us through the decision making process at each sequential phase. The situation with the Millers highlights the decisions which must be made regarding the cost and timing of options within the development plan.

Research Assistant Elizabeth H. McLoughlin prepared this note under the supervision of Adjunct Professor William J. Poorvu as an aid to instructors in classroom use of the case "Regency Plaza" No. 391-021.

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As this case discusses the visual aspects of real estate development, there is an opportunity for students to gain some hands-on experience in project design, creating as homework exercises their own unit and floor plans. The floor plan in the textbook (and included as an exhibit to this note) is based on a 1":32' Scale. If possible, the instructor should enlarge the plan to a scale of at least 1":16' and distribute as handouts to the class. Working in groups of up to four, students should come to class prepared to discuss their unit designs. The instructor can use these exhibits to discuss how marketing strategy influences design, how design decisions dictate cost, and how the vested interests of each of the players influence the final product. Inevitably, student designs will display a range of competence - various samples can be used to illustrate common design pitfalls.

What is the role of the project manager? What functional areas does it encompass at each stage of the development process?

The project manager's role is to coordinate the predevelopment activities that lead up to the commencement of construction - design, sales, the approvals process and manage the construction activity itself. Sometimes, but not always, the project manager coordinates the marketing as well.

In the *Regency Plaza* case the project manager has been hired at the completion of the conceptual phase of the project. Given the constraints of the site, and the zoning, massing and setback requirements mandated by the city, an initial development program has been agreed upon. It is Kris Hodgkins' responsibility, in collaboration with the architects to flesh out the agreed upon model - to determine the number of units, unit mix, and configuration of floors which will determine the *schematic design*.

What is the basic concept that has been acceed upon? How did Kris come to decide on 96 versus 72 units? How would you come the profitability of various options? What are the implications of this concept on Regerey's manueting plan, proforma projections, construction requirements? For example, the additional cost of constructing two 1000 square foot units, versus one 2000 foot unit, might or might of be justified to higher dollars per square foot. But are smaller units what the market is likely to delitand?

At this point, a few significant decisions have set the stage for many of the inevitable tensions that follow. Hodgkins mows two facts: 1) As part of an overall mixed use development strategy, the condominium portion of the project will be marketed to the same upscale client base who frequent the hotel, and 2) Regency intermanagement, consistent with its emphasis on catering to the individual needs of lotel quests and providing a product geared to personal service, is committed to a high level of customization of units.

The implications of customization, however, are very different in condominium development than in hetal operations. Upper management's commitment to individualization and lack of experience in the process of condominium development will inevitably come into some conflict with project management demands. How can Hodgkins best manage not only the process, but the players who will invariably have conflicting interests?

With an eye to the bottom line (and possibly her own compensation), Kris wants to minimize project cost. In order to do this, she has a vested interest in trying to limit potentially disruptive design changes farther along in the development process. However, prospective clients are likely to demand a high degree of customization. How well Hodgkins accommodates these constraints from both a marketing and sales perspective, and a construction management standpoint will dictate her success as a project manager.

The instructor might note that Regency's marketing strategy specifically discouraged investors as prospective buyers, looking for a more stable base of homeowners who would have a

Regency Plaza 391-267

vested interest in the long term viability of the development. It was felt that non-owner occupied units would impact ongoing marketing and the reputation of the project. It was anticipated that more speculative investors, betting on an inflationary market, would be willing to "flip" their units as the market would bear, which might have a disruptive effect for other long term owners. From a financing perspective, as well, Regency may have wanted to limit investors. Often a project manager is able to negotiate favorable financing terms for prospective buyers with local lending institutions. In a high end development such as this, the motivation was to provide additional customer service for prospective buyers. In exchange for the volume business a large condominium development might provide, banks were often willing to offer end loan packages which included reduced fees, competitive mortgage rates or other inducements such as on site closings. However, institutions which anticipated selling these loans in the secondary market were required to conform to guidelines which often restricted the number of investor owned units in the condominium development.

It has been determined that the Regency Plaza units would be luxury condominiums targeted at an affluent clientele. The Millers reflect this buyer profile. They are a wealthy suburban couple in late middle age, who are prepared to spend at least \$600,000 on their unit, excluding furnishings. For many buyers these units will probably be second homes, a "pied a terre" in the city. Prospective condominium owners will probably require gracious layouts stitlable for entertaining which make optimal use of the available city views. Used to the space and storage capacity of suburban homes, these buyers will expect amenities such as walk in closets, sizable baths, spacious foyers. They are likely to have the motive and the means to demand individualized designs and decor.

Hodgkins' job will be to build in maximum flexibility of unit design with a minimum of disruption to the development process. As she begins more detailed *design development*, her marketing and design efforts need to focus to half ucing a wide range of amenities with efficient scheduling. The more closely she can artisipate the requirements of the market with upfront research, the more likely she is to minimize change officers in the future. While in the early stages of a project a fluid design and decision making process might be appropriate, as the development approaches completion buyer changes dramatically impact cost.

How well has she investigated market comparables? Working closely with her marketing staff, Kris will need to work but the wait characteristics which will most closely match the dictates of the marketplace. What is the typical buyer profile? How much can they afford to spend? What other options is the competition offering? How will these units lay out? Will there be eat in kitchens, dressing rooms, deas. What kind of fixtures, finishes, amenities, options should she choose? How well does she manage this process?

Hodgkins will at this point have to make some decisions regarding the *timing* of her marketine effort. We know she has targeted a thin market in a weakening economy. While we don't know whether any portion of her financing is contingent on presales, we can assume that the sale of combiniums appropriate time to market these units? From a timeline perspective, what should be the allocation of her marketing dollars? What should she spend on advertising, models? Should she develope a full model unit, or are small scale approximations adequate? In the absence of very complete models, many buyers will be unable to visualize the look and feel of units at this early stage of the development process. Early presales, while providing a measure of financial comfort to Hodgkins, will probably generate a lot of costly design changes down the road. Unlike the leasing of retail or office space, the purchase of a home is a very emotional issue.

Knowing the situation in which Hodgkins will later find herself with the Millers, the class might be able to make some recommendations to Kris which would avert some of her future problems. Has she talked to focus groups, brokers, interior designers, or other special consultants? Has she looked a range of comparable units on the market? Does she know what are the most frequently cited options? Are the architects chosen for the job equipped to give her any guidance,

391-267 Regency Plaza

insofar as their distinctive competence is hotel design? Anticipating that prospective buyers will make changes to the base building design, one might question the wisdom of hiring a local third party to coordinate modifications to plan.

As a first cut, Hodgkins has prepared a marketing package which includes a predetermined number of unit types, a range of amenities, and a menu of options. She has determined a target level of finish, "a standard", and a schedule of trade up options. Seeking to limit customization, she has avoided involving buyers in the design process up front. This might not have been the best approach. Her communication with buyers is minimal, and no clear "drop dead" date for changes seems to have been set. It does not appear that she did a particularly good job in controlling the range of options available to homeowners. In fact, the Millers have hired a design coordinator only six weeks before the scheduled closing on their unit, with the expectation that significant construction changes are possible.

The timing of sales and the degree of custom work required will have a significant impact on the *construction management* process. From a cost standpoint, the option of customization carries a very real price tag to the developer, which is often justified by the ability to achieve premium sellouts. What feeds into the bottom line?

What are the elements of cost - how is it captured; how is it negotiated; how is it contracted for?

At this point, the project is behind schedule and the budget. Hodgkins has an added incentive to minimize changes. The construction can be a clear interest in standardization of units. The general contractor chosen has shortened a already tight chedule; his success in meeting the agreed upon deadlines will depend on efficient set. Julie g of trades and minimal changes to existing working drawings. The review of over 5,00 sep a wings has been required so far. From shop drawings and other bid documents prepared by K.S., prices have been negotiated and finalized with subcontractors, and schedules have been to receivity is dependent on continuity of operations, continuity of materials, and proper crew busines. From a materials standpoint, production and purchasing economies are pregone should buyers opt for individual fixtures and finishes. Customization which prioritizes the needs of owners over that of the overall development plan can result in endless punch lists and cratic rather than optimal use of trades. While in any construction process iterations of redesign, recogning, and rescheduling occur throughout the development timeline, Hodgkins is facing the possibility of significant changes to plan at the worst possible time.

From a construction management standpoint, could she have anticipated some of the current issues in advance? What protection mechanisms might have helped? She might have done any of the following:

- 1) Phase the release of floors, setting a production schedule which allows for customization at different points.
- Ofter a limited range of buildout options which allow for choices within a certain predefined spectrum.
- 3) Overbuild the infrastructure to allow more flexibility with less disruption. However, the tradeoff will be an increased base cost, and a possible reduction of saleable square foot. Given her budget constraints, and marginal ceiling heights already, this might not be feasible.
- 4) Lay out floors so that there are options for expansion and contraction of units, i.e. design big apartments with the ability to divide, or small units which may be combined.
- 5) Allow for a greater degree of design build early on in the process, with all stakeholders part of the decision making process.

Regency Plaza 391-267

Did Regency choose the best contractor for this job? What contractual arrangements are best suited for the construction of the Regency condominiums? Did Regency provide the right incentives?

Working drawings and a set of written specifications in hand, the project was put out to bid. How complete do these drawings need to be? Is the scope of work clearly defined? How many design and finish details can be left open to choice? Construction documents that specify less than 100% of the required finish work leave bid prices and accountability open to dispute, and open one up to the risk of under bids. Too complete will result in expensive change orders. How do we compare bids across the board? What is the determining factor in choosing a contractor?

The nature of the contractual arrangement between owner and contractor will have a bearing on the incentives of the GC and his/her willingness to commit to changes. In this case, Regency opted to negotiate with the three lowest bidders. Kelly Construction, ultimately the lowest bidder, was chosen. While bid prices are one factor in choosing a general contractor to manage one's job, they are only one of many. Timing, flexibility, the lowest reliable price might require a closer scrutiny of the overall bid. A contractor's reputation, financial strength, and experience in this particular product will be important. Contractors without strong credit might have difficulty obtaining materials in a timely fashion. What other commitments does he/she have at the moment? A heavy current workload might impact the contractor's availability of crews and ability to efficiently schedule work. The contractor chosen for Regency Plaza will manage both the hotel and condominium developments, and will answer to two separate project management teams. Is this ideal?

Given Regency's development program, what is the best way to compensate the contractor, and what method of compensation builds to the right incentives for this job? One might question Regency's choice. Regency's desire for a firm upfract price caused them to structure a fixed sum contract. Under this arrangement, the contractor has to absorb the cost of any overruns to the agreed upon budget. As he eats into his contingency funds (a 5–10% buffer to the construction budget), his inclination will be to cut corners of quality, skimp on supervision. At Regency Plaza this is exacerbated by the short sung of an arrange tight construction schedule. Is this in the best interests of our buyers? Given the opportunit for customization by a demanding clientele, a fixed price contract might not be appropriate.

Regency could have opted for a cost plus contract, which would eliminate some of the tension generated by inevitable change orders. By contrast, however, with no incentive to control expenditures, how likely is it that the project costs will come in within the budgeted amount? As we can see with the Miller catering to the whims of buyers can easily get out of control. In what situation might cost plus contract make sense?

Authird option aris did not choose is the guaranteed maximum contract. When some of the construction osts are unclear, this allows for some flexibility, and at the same time puts a control on the upper end of dollars out.

In the context of the above, Hodgkins finds herself in the situation with the Millers - what should she do?

Unfortunately, Hodgkins now finds herself midstream in the process, with slowing sales, unhappy buyers, and antagonistic contractors. Costs are escalating. Quality control is erratic, as the GC tushes to complete the job. The designer hired to coordinate buyer changes is being pressured to cut down on his time, and work is being done without complete documentation. Work sequences are out of order. As manpower is shifted from the nearly completed hotel, 250 construction workers have to be kept busy. At this point, Kris' only option is to provide as much damage control as possible, with a minimal disruption of already installed work?

Hodgkins has a real incentive to please the Millers - she wants to retain their commitment and that of buyers who have put down deposits on their units. She has to be receptive to their

391-267 Regency Plaza

frustrations at this point, and in spite of the inevitable clashes between their goals and hers, to give more than lip service to the issues they have with unit design and completion. The Millers are probably accustomed to calling a small contractor to their house, receiving a quick estimate for the work, and making a quick decision. They are probably aware that there is no such thing as standard pricing for small scale rehabilitation work, but they are not likely to have anticipated the added expense that comes from having to deal with many administrative levels, sole source union contractors, and the complex construction of a high rise first class building. It is also difficult for them to know what questions to ask until a decision is upon them. And finally, until they get prices on requested additional changes to plan, they will be unable to evaluate how important they feel the change to be. In other words, the system itself creates maximum frustration for all the parties. Hiring a designer to help can be a good idea, provided that the client and designer are on the same wavelength as to design and price. At this point, however, the designer has emerged at a fairly disruptive stage in the process.

Basically, Hodgkins has five options. As the case states, her options are:

- 1) Tell the Millers it is too late for changes, and complete the unit as planned. Her risks are twofold; the possibility of losing the Millers altogether, and the potential for significant disruption to other buyers in the future as the Millers contract for their own renovation. However, she will have a completed model to show other prospective buyers, which might help her sales effort.
- 2) Put a hold on the unit, determine the cost of changes, and hope that the added cost will be acceptable to the Millers. Should the cost not be acceptable, Regency will be liable for the cost of the delay, as well as the cost of standard not trades, and invoice surcharges, as subcontractors charge a premium for the relatively minor finish work they are called in to do some days or weeks later. It is likely that regency will have to pay a negotiated share of the added cost in order to accommodar the Milers.
- 3) Hire an independent third party contractor to finish the unit. Again, she is likely to face premium bids, union esistance, and disputes over accountability for the finish product. Unlikely to save much coney, this will probably save time. However, it might create as many problems as it solves. From whom will a new contractor get shop drawings the original GC? CDS? Susan Randolph? The architect who is supposed to coordinate buyer changes? How drawe capture the cost of their time?
- 4) Stop work, and turn the unit over to the Millers as a shell. As the case states, this has both financing and regulatory implications, as well as creating significant construction maintegeneratissues down the road. This is unlikely to satisfy the Millers, who probably have little or to interest in becoming responsible for coordinating the completion of the unit.
- 5) Put them in a different unit, that is not as far along from a construction standpoint. If this is acceptable to the Millers, this might be the least disruptive option. It will, however, carry a cost, as she will have to negotiate some discount from her proforma projections which price out the upper units at higher dollars per square foot. It will also entail a significant delay for the Millers.

clearly, the situation in which Kris finds herself is not ideal, and the solution will be costly for all parties. She has the opportunity to make one final reassessment of the remaining floor plans, this details, and menu of options. In fact, the Millers' proposed changes are quite an improvement ever the original plan. Though late in the process, it is probably appropriate for Hodgkins to consider revisions to plan.

Regency Plaza 391-267

At this point, the instructor can use some of the visual exhibits to point out the implications of change, as well as to explore the broader issues of layout and design.

A look at some unit designs and the implication of changes to existing plans.

The condominium portion of Regency Plaza is physically above the hotel—the management of both design and construction will require coordination with that of the hotel. Beginning with basic structural concepts, the class can look at the implications of designing a condominium complex above a hotel, which in turn is above a parking garage. The ideal spacing of columns for a series of symmetrical parking spaces might prove constraining for the unit designs above. Long corridors appropriate for a series of hotel rooms might be less than welcoming to the homeowner. How does this affect how we think about unit and floor layouts? How does the undermine our flexibility with respect to the Millers or other requested changes?

With a sample floor plan projected on the board, the instructor can point out the implications of various decisions, and use examples to illustrate the process of change orders. For example, in a given space, the instructor can add a partition, or subtract a partition Who/what are affected? How do we cost this out? What trades are involved? Does it leave be his ides with enough windows? Are there heating ducts on both sides? Do all the light fixtures need to be moved, centered? How can we cost out the disruption of already installed work? What if the customer, balking at scheduling constraints and the expense of the union contractors, su vests his/her own electrician. Who then is responsible for the final product, accountable for quality. The GC has to guarantee the work - is he likely to want to do that if other subcontractors are lought in?

The instructor can use the plans to examine individual unit designs. Some of the issues that the instructor can raise are: How do we man et unit with poor views? Is this a one or a two bedroom market? What are the views within units? Are ireplaces required? If so, have students considered the impact on chimneys to the floor above? Ideally, floor plans will show units which make the maximum use of space, which minimize andors, which allow for flexible entertaining, which have kitchens adjacent to baths for efficient tracking of plumbing, etc. In reality, this will probably not be the case with student plans. In looking at the floor plans, some of the more typical errors might be:

Inappropriate scale positions
Bedrooms too small to accommodate beds
Rooms Cless than ideal shape
Living rooms with no windows
Wasterin-unit space (too many corridors, too much hall space)
Avkward placement of baths, closets
Valations to code

As prospective revisions to layouts are discussed, students can see the implications of each change on adjacent space, and see how each decision has other design, cost, or marketing implications.



Summary

The process of project management requires a continual juggling of design, marketing construction, and financial considerations. In this case, students have the opportunity to analyze not only a particular point in the decision making process, but to understand the many factors that provide the context for a decision at any given point in time. An effective project manager must build a set of relationships which will enable him/her to maintain control over the development process with management, buyers, architects, contractors, lawyers, and regulatory agentics.

What this particular case adds, too, is the opportunity to encourage students to think visually. Real estate courses tend to overemphasize numbers, and do not help students to see the interface between good design and the sales effort and as an important element of cost. A follow-up noncredit assignment might be to ask the students to lay out for the selves their own living environment, see what they might have done differently if they had been in control of the design of their building, and think about how this might affect an overall development plan. This case will not make one an architect, but it can help point out the common longer has for many architectural decisions, as well as the importance of good design to the successful marketing of condominiums.

