The Role of Information Technology (IT) in the Real Estate Industry

Introduction
This article identifies the role of Information Technology (IT) in the real estate industry. For the purposes of this article, the real estate industry includes real estate commercial and residential property, developers, builders, engineers, architects, suppliers, subcontractors and other related entities. This paper will identify the differences between the "Project" and "Managed Services Investment" approaches to Information Technology (IT) and how risk assessments help real estate organizations get more out of their existing IT investments.

The real estate industry brings together people and information. For example, information from a real estate developer's job site may be shared with field operations, production scheduling, accounting, sales and many other internal departments. Not only is the information shared internally, but also with outside business contacts such as architectural and engineering firms.

In order to understand the role of IT in real estate related companies, the nature of the real estate industry in general should be considered.

From Boom to Bust, Real Estate's Three Phases
Real estate is generally characterized as having a three-phased cycle including Inventory Absorption, New Development and Contraction due to excess supply. These phases are identified in detail below.

Inventory Absorption
As the economy expands, the demand for real estate gradually begins to grow. This initial growth results in the gradual absorption of residential and commercial properties. Office vacancies start to decline as empty space is absorbed, rents begin to stabilize and eventually start to rise. At first, rents remain below the levels needed to make new construction possible. After a period of time, as demand accelerates, markets tighten and rent rises sharply causing property prices to start to rise. IT projects that were put on hold during the previous real estate down cycle remain on hold until cash flow improves. Employees make due with existing computer equipment until financial situation improves.

New Development
Eventually, rents are increased to levels that permit new development to be profitable. At this stage, new development tends to occur at the peak of the general business expansion cycle. New building starts slowly at first and is accelerated when financial surplus funds are invested in new real estate development. Typically, new building development exceeds the growing demand for space, resulting in over

building. The excess inventory caused from over building weakens the profitability not only of newly created properties, but also of long-established ones. As activity increases, employees attend more meetings and an increase in volume of work requires a greater need for sharing of information between employees and outside business contacts. IT projects are given the "green light" and are typically behind schedule and under funded due to the late start in the real estate cycle.

Contraction
At some point during the over built cycle, property markets begin to suffer from the excessive space created in the preceding new development phase. A general business slowdown causes demand for space to slow, just as the new space created in the preceding new development phase comes into the market. This causes vacancies to rise, rents to stabilize or fall, property values to decline and new construction almost ceases. IT projects started in the New Development cycle are typically completed as real estate enters its down cycle. New projects are either put on hold or are cancelled and there are no new investments in IT.

How is Information Technology Currently Being Used?
Employees of real estate companies frequently think in terms of "projects". It comes as no surprise that a majority of companies think in terms of "projects" (E-mail implementation, web site development, high speed Internet access, etc.) for their IT systems. As a result of this "project" style of thinking, IT and its related funding typically follow the real estate boom and bust cycle. Many "projects" are limited to automating the data capture and reporting processes within a company. For example, IT might be used to automate the process of producing construction budgets, writing commitments and tracking payments to vendors. IT funding typically only occurs during one or, at most two, of the real estate cycles. With limited and inconsistent funding, few companies are able to achieve high level goals with their IT systems.

Successful real estate companies use an "investment" vs. a "project" related approach to their IT systems. The "investment" approach provides IT funding during all three phases of the real estate boom and bust cycle. Even in a down cycle, successful companies use IT to reduce costs and improve operational efficiencies. Through higher end connectivity solutions, an employee in the field might be able to electronically transmit up-to-date information to an IT system in the corporate office. The information is updated real time and provides management with information not readily available anywhere else. This long-term approach to IT "investment" supports the company's long-term goals and objectives. Companies using the "investment" approach are able to move beyond IT basics and achieve a competitive advantage in their marketplaces.

What Are the Issues?

Many real estate companies will need to rely on IT to allow them to expand their businesses over the next five years during a time when many are predicting a slowdown in the economy.

Expected slowdown

"We are seeing a definite slowdown in actual and projected Orange County growth" according to the Urban Land Institute Orange County District Council which also reported "Nevertheless, companies are still generally optimistic about growth opportunities and continue to view Orange County as a good place to do business."

Business expansion

In a similar poll, 63% of the respondents to an Orange County Executive Survey said that they expect to expand their business within five years despite a corporate hiring decrease from prior years. Only 34 percent of the firms stated they would add more employees over the next year.

Will Information Technology Change the Real Estate Industry?

IT is becoming a driving force necessitating change in the way real estate companies market to their clients. According to a California Housing Finance Survey, published by the California Association of Realtors, one-third of the Californians who bought houses and one-fourth of those who sold houses, used the Internet in some way.

Companies that are quick to adapt will survive and those that delay will find it harder than ever to survive against IT savvy competitors. An Orange County Executive Survey confirmed the growth of the Internet and showed that 90 percent of surveyed businesses now have a web site.

Employees of real estate companies are wearing more hats than ever. Corporate real estate executives serve as directors and integrators of information. The traditional lines between departments such as sales, human resources, information technology, finance and others have blurred as departments have a need to share the same information. "Investing" in the IT integration of corporate wide information is essential in order to build a foundation to allow a company to achieve higher level, long-term goals. Effective use of IT is quickly becoming a necessity, even in an industry as conservative as real estate.

Corporate real estate executives must play a leadership role in the integration of resources and IT; thus easing the transition as the lines blur. This requires a blending of people, technology, and connectivity. In this new era, the role of the corporate real estate executive is one of a strategist. New trends and alliances are bringing about continual change in the business climate. One of those changes is the rise in outsourcing.

Internal IT employees frequently have the in depth knowledge required to run and maintain in-house systems. Outside IT professionals provide industry expertise and experience needed to leverage corporate real estate in a new light.

Is Real Estate Evolving?
IT is a key reason for the quickening pace of the corporate real estate evolution. IT is critical in the linkage between the parts of a company that previously had not been linked. This has become even more important in the context of corporate alliances and support of long-term company goals.

Corporate real estate executives are evaluating new information technologies and the impact upon their organizations. A key question is what role IT plays in helping a company become more effective, improve service and measure performance while adding value to their business. Implementing more efficient work processes throughout the organization allows a company to grow revenue. If a company isn't growing revenue, it must reduce expenses.

Consolidations will continue to occur in the real estate industry. IT provides the opportunity for savings through the integrating transactional and reference information.

What Opportunities Exist?
The following are examples for real estate companies that present opportunities for companies to gain additional efficiencies through implementing technology solutions:

- Sharing of common information between various departments. A company using a "Project" related approach to IT might install new equipment in various departments but fail to assist in the sharing of common information. Each department (Accounting, Operations, etc.) might create their own client database with the same vendor address and information. A technology "Managed Services Investment" approach would centralize information into a shared database used by all departments. In addition to the elimination of duplicate information, operational efficiencies are obtained when a vendor address change only needs to be updated in one location.
- Integrating IT with business processes. On a "Project" related approach to IT, companies install new equipment but fail to integrate the new software and hardware with business processes. An "Managed Services Investment" approach would include a business process mapping or analysis. An analysis might follow the trail of information from a field supervisor approving the work that was done, the vendor's invoice, receiving documents and the accounts payable process to cut the vendor check. A process mapping or analysis allows the company to determine how information is used throughout the company and if there should be a change in the way a business processes information. IT solutions are then implemented to support the new business

processes. Using this "Managed Services Investment" approach, IT solutions are able to achieve optimal results.

- Connecting remote locations to the main office. Information exists at a number of different locations. A "Project" related approach to IT involves the installation of dial-up telephone lines or use of the Internet. This allows remote employees working in remote locations to connect to the main office. The concentration is on data collection and how to connect the remote employee to the main office. A "Managed Services Investment" approach might implement solutions that examine how information is used at a remote site. For example, information could be gathered using a hand held computing device then transmitted electronically to the corporate office. This methodology places technology in the hands of the employee performing the work. The "Managed Services Investment" approach focuses on how the remote employee uses information.

- Compatibility with major business contacts. A "Project" approach to IT might include the installation of new hardware and software that is similar to what a company's major business contacts are currently using. An "Managed Services Investment" approach would include working jointly with outside business contacts to determine their future plans and direction. A combined integrated solution with a company and its outside business contacts provides a sound foundation for the future.

- Tracking and accounting for large volumes of transactions. "Project" related solutions involve the installation of new hardware and software solutions capable of handling larger volumes of data. An "Managed Services Investment" approach would involve the implementation of a document management solution capable of storing electronic images of various documents. This higher end solution would allow an image of a committing document (purchase order, work authorization, etc.) to appear on the screen for an accounts payable clerk. When processing a payment, it would be a simple process for the clerk to verify the invoice matches the committing document. With this approach, the filing process is also automated, enhancing the future retrieval of information.

- Efficient use of IT systems currently in place. Organizations taking a "Project" approach might install new IT systems, then request that employees attend outside training classes. Under this "Project" approach, employees learn on the job or from each other using a trial and error methodology. An "Managed Services Investment" approach to IT involves IT and company employees working together during the design, testing and implementation process. Once systems are installed, the "Managed Services Investment" approach works with employee departments to receive the training and follow-up support that is needed. IT follow-up support starts immediately upon implementation and continues while the IT systems are in place. Larger companies may implement a help desk that acts as the initial front line of support to the company employees.

- Use of IT for marketing. A "Project" approach to IT might involve the development of a company web site. While this provides a high tech image for the company, it does not, by itself, help the company achieve its long range goals. An "Managed Services Investment" approach integrates the company's web site with local resources. In addition, web site visitors might request company literature requiring future follow-up. This information needs to be integrated with the manual processes that already exist within the sales and marketing department.

As IT grows, management should strategically think and not limit their approaches to the examples outlined above. Solving the issues facing today's businesses provides a dramatic opportunity to improve operational efficiencies, reduce costs and improve competitiveness.

Network security audits help organizations keep information secure and minimize their risks.

Summary
Employees of real estate companies frequently think in terms of "Projects" for their IT systems. This style of thinking, and its related funding, typically follow the real estate boom and bust cycle. With a limited and inconsistent funding, few companies are able to achieve long-term corporate goals through the implementation of IT solutions.

Successful real estate organizations use a "Managed Services Investment" vs. a "Project" related approach to their IT systems. The "Managed Services Investment" approach provides IT funding during all three phases of the real estate boom and bust cycle. To achieve optimal results, risk assessments are employed during the entire life of the IT systems. By integrating IT with business processes, a company is able to achieve long-term corporate goals and objectives. This prepares a company to compete against highly professional and financially sound competitors.

Future opportunities require an aggressive IT strategy that necessitates funding through all three phases of the real estate boom and bust cycle. IT is not a "Project" related expense. With the proper funding, IT is an "Managed Services Investment" in the company's future.

Each organization has a unique environment that makes it difficult to protect against new and emerging threats. Network and security assessments help organizations identify, manage, and reduce their risks.

Publication Information

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