

# Construction of the Capability Maturity Model of Dynamic Strategic Cost Management on Real Estate Development Enterprises

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## Abstract

Real estate development enterprises are in the process of gradually mature, and its dynamic strategic cost management is also from generation to development gradually mature process. How to effectively grasp the real estate development enterprise dynamic strategic cost management stage, and look for the pushing direction and key process of evolution of dynamic strategic cost management of real estate development enterprise. There is still a lack of standardized procedures and methods. The capability maturity model can reveal the characteristics of the things that are in the process of the development, in line with the characteristics of real estate development enterprise dynamic strategic cost management and construction requirement. Therefore, this paper establishes the dynamic strategic cost management capability maturity model of real estate development enterprises from seven aspects: customer, market, product, process, organization, technology, government and society, which combined the framework of Capability Maturity Model with the actual characteristics of the real estate development enterprise dynamic strategic cost management. It studies the properties and characteristics of each grade real estate development enterprise dynamic strategic cost management, and analysis of low grade to high grade key process area evolution, to provide theoretical and practical guidance for the dynamic strategic cost management in real estate enterprise

**Key words:** Real estate development enterprise; Dynamic strategic; Cost management; Capability maturity model

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## INTRODUCTION

Real estate has become one of China's pillar industries, real estate development enterprises grew a number of excellent industries. Real estate development enterprises in the process of gradual development become maturity, also it has its own characteristics, compared to the cost of real estate development enterprise, dynamic strategic management is a process from development to maturity. How to grasp real estate development enterprise dynamic strategic cost management effectively, looking for the direction and the key process of promoting real estate development enterprise dynamic strategic cost management evolution currently also missing a standardization of program and method, so, this paper will combine real estate development enterprise dynamic strategy cost management into reality, building capacity mature degrees model, to on a real estate development enterprise dynamic strategy cost management mature degrees expand research.

## 1. COSTMANAGEMENT OF REAL ESTATE ENTERPRISE DYNAMIC STRATEGIC CAPABILITY MATURITY MODEL

### 1.1 The Capability of Maturity Model

In the development process of computer software industry, it often encountered software products of development, and maintained disorganized, software development management not mature, even appeared

so-called of software crisis, to cope with this state, United States to Carnegie Melon University (CMU) software engineering research personnel led of large academia, and business research personnel in software engineering, and technology and tool aspects input has large of human, material and financial, hoping can find a method of improving software quality effectively. In the 1980 of the 20th century, the capability maturity model for software CMM (Capability Maturity Model) was first proposed, improvements to CMMI (Capability Maturity Model Integration of Systems Engineering/Software Engineering/Integrated Product and Process Development/Supplier Sourcing) (Yang et al., 2001). Capability maturity following the introduction of its main uses include:

#### **1.1.1 Software Process Assessment**

Through a team of trained software professionals, software process assessment of the situation of the enterprise, to determine its State, and find out who solved all problems associated with software process, and then persuade senior leadership support for software process improvement.

#### **1.1.2 Software Process Improvement**

Through the capability of maturity model for software development. Companies identify the direction of software process improvement, and develop plans to improve and implement.

#### **1.1.3 Software Capability Evaluations**

By the capability maturity model, by a group of professionals responsible for the evaluation of professional skills training and evaluation of major evaluation for software contractor, software process status.

In short, software capability maturity model is to guide the process of software development enterprises accurately grasp the current enterprise maturity, to identify key issues for improving software quality and process capability, so as to improve the process of selecting the most appropriate strategy.

### **1.2 Cost Management of Real Estate Development Enterprise Dynamic Strategic Relationships With Capability Maturity**

#### **1.2.1 Cost Management of Real Estate Development Enterprise Dynamic Strategic Basis Combined With the Capability of Maturity Model**

##### **1.2.1.1 Project Is Both the Core**

Real estate development itself is the core of the project, capability maturity is also the core project. It can be seen from the cost of real estate development enterprise dynamic strategic management, the core of dynamic strategic cost management of real estate development

enterprise consists of real estate development enterprises and real estate projects. Therefore, the cost of real estate development enterprise dynamic focus project management as the core, and the capability maturity model for software is the same.

##### **1.2.1.2 Project Development Progress Is Difficult to Control**

Development project of real estate development enterprise management is a complex system, involving many factors. It can also be seen in the practice of real estate development projects delayed is a universal phenomenon. Main reason is that development is a complex process, many factors will affect the pace and sales, progress control, return of the money, accounting, there are considerable difficulties, and can seriously affect the effective cost management. There is progress in the process of software that development is hard to control problems, mainly due to the very complex software is a logical system, and various algorithms, customer development process needs changing or unknown factors, such as the same project completed on schedule which will bring disorder.

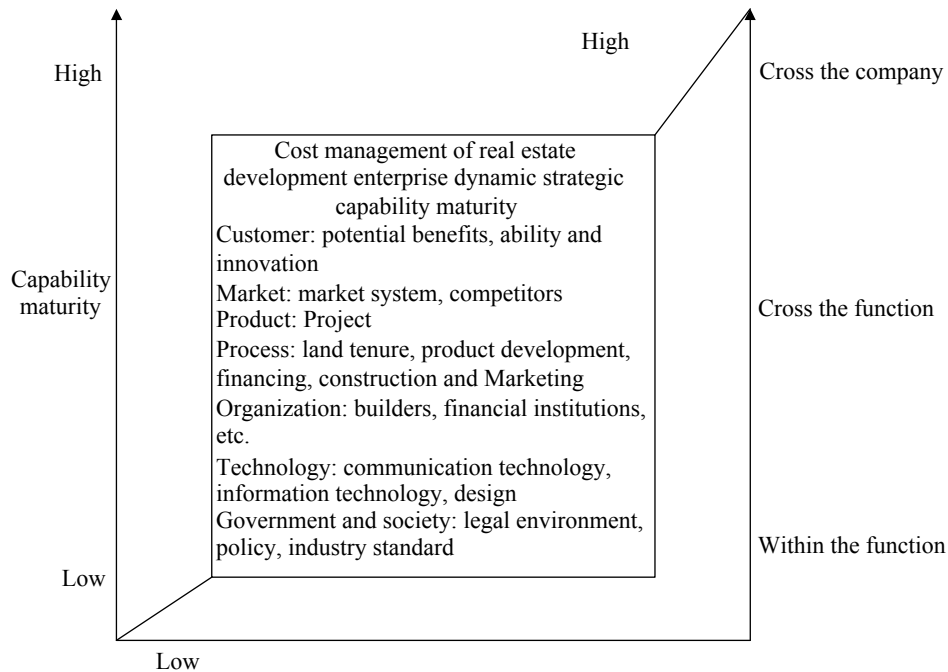
##### **1.2.1.3 The Unavoidable of Project Defects**

When used in real estate development, project delivery, there will always be a certain number of defects, this is due to the characteristics of the project development, and this defect appears significantly affects the quality of the project, impact on maintenance costs, sales back to the progress of internal and external environment.

Thereby affecting the cost of real estate development enterprise dynamic strategic management. Using software projects, too, with the passage of time, in different operating conditions, the software needs to maintain, and often large maintenance effort. Therefore, the capability maturity model was applied to the real estate development enterprise dynamic strategic cost management, will be able to enhance management of real estate development enterprises, improve the level of enterprise strategic cost management of real estate development and product quality control.

#### **1.2.2 Cost Management of Real Estate Development Enterprise Dynamic Strategic Capability Maturity**

As enterprises ' competitive strategy continues to mature, the whole real estate Enterprise dynamic strategic cost management will continue to mature and, therefore, so-called real estate enterprise dynamic strategic cost management capability maturity, as the name suggests is the enterprise dynamic strategic cost management of real estate development degree of maturity.



**Figure 1**  
**Real Estate Development Enterprise Dynamic Strategic Cost Management and Ability of the Relationship**

## 2. COST OF REAL ESTATE DEVELOPMENT ENTERPRISE DYNAMIC STRATEGIC MANAGEMENT CAPABILITY MATURITY

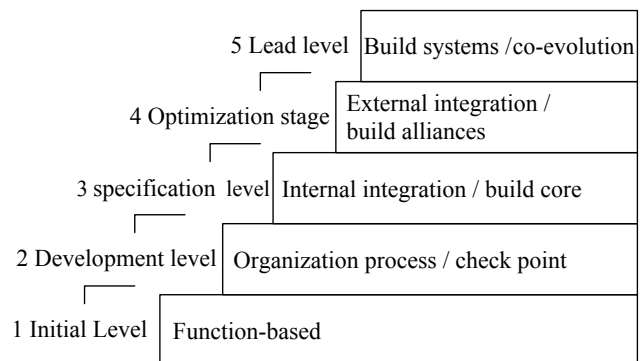
### 2.1 Cost of Real Estate Development Enterprise Dynamic Strategic Management Capability Maturity Model

Cost management of real estate development enterprise dynamic strategic capability maturity model is a framework, it provided a way for those who want to improve the process capability of the real estate Enterprise describes, portrayed the main character of dynamic strategic cost management of real estate enterprise with a maturity level. It is also a formal model detail-oriented real estate Enterprise dynamic strategic cost management of enterprises and organizations anticipated type of behavior. On the basis of the reference literature and practice (Iansiti & Levier, 2004), our cost management of real estate development enterprise dynamic strategic capability maturity model level are divided into: Initial, development levels, levels specification, optimization, and leading (Newman, 2002) (see Figure 2), this is similar to real estate development business ecosystem maturity level.

#### 2.1.1 Initial Level

In this level of real estate development enterprise, no established corresponding policy and process to support dynamic strategy cost management, only simple technology tool and the prototype financial organization; Exist primary records and report functions, strategy cost management work are allowed in management

state. To a large extent, it cannot satisfy current business requirements and management requirements, strategy cost management are in daily coping state and “fire” State.



**Figure 2**  
**Dynamic Strategic Cost Management Capability Maturity Model of Real Estate Enterprises**

#### 2.1.2 Development Level

In this level, missing standardized policies and procedures, various complex and limited support for business technology tools, the informal definition of performance evaluation; lack clear definition of responsibility; lack support for business; the contradiction between strategic cost management level and continuously improve the management requirements became acute; but began to focus on policy implementation and internal systems of the building.

#### 2.1.3 Specification Level

A relatively complete framework of financial management system was established, processes and policies are defined, but not yet clarity or consistent use; organizational

structure and most financial management responsibilities is clear, and contact interaction with the business, internal agree on performance standards within; main guide the accumulated historical data and the core of ERP systems, cannot achieved the modeling and integration striped across the business strategic planning.

### 2.1.4 Optimizing Level

Clear, integrated and consistent observed process, combined with a strategic objective method to assess performance, a comprehensive, in-depth and effective communication within the company, organizational structure clearly defined and flexible efficient: Highly integrated information systems, these can effective interaction with business and working closely with the business sector to form “partnership” integration.

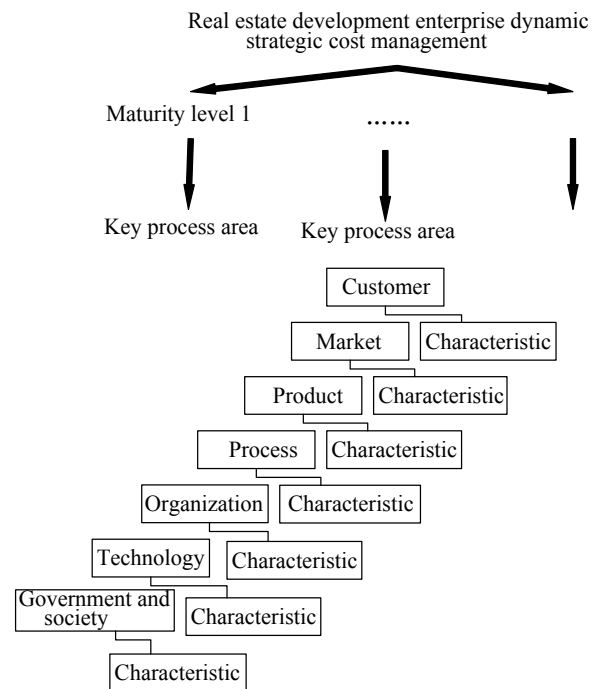
### 2.1.5 Lead Level

Highly standardized and automated processes, core processes in the enterprise are automatic, standardization and integration, at the same time tightly integrated with core financial management tasks, it effective promoted enterprise’s value appreciation. Strategic cost management organizations flexible responsibilities and incentives consistent with business requirements, integration of information, specialized, automated tools to enterprise strategy and operations for global forecasting, planning and monitoring of implementation.

## 2.2 The Capability Maturity and Key Process Areas of Dynamic Strategic Cost Management of Real Estate Development

From the point of practice, real estate development enterprise dynamic strategic cost management to be successful, first of all should make efforts to promote real estate development enterprises and external environment of coevolution. Therefore, in order to achieve real estate development enterprises in each level of maturity and dynamic strategic cost management’s expectations as a result, the real estate development enterprises shall adopt the multidimensional approach to research the dynamic management of strategic cost management problems, then the key problems of the multidimensional here referred to as the key process areas (Lian & Chen, 2013). Real estate development enterprise decision makers and business ecosystem members should pay attention to the key process areas, in order to achieve the objectives of the strategic cost management to improve its dynamic process. Key process areas identified the implementation problems must be solved by each maturity level, there are some non-critical process at the same time, either from the perspective of theory and practice study the evolution of key process areas are starting point and key process areas embodies the requirement of the maturity level (Zhou, 2013; Ye, 2015), the real estate development enterprise dynamic strategic cost management capability maturity model (CMM) reflects the upgrade the way and method of system evolution. Build real estate development enterprise

dynamic strategic cost management capability maturity and key process areas as shown in Figure 3.



**Figure 3**  
**Real Estate Development Enterprise Dynamic Strategic Cost Management Capability Maturity and Key Process Area**

In the competitive strategy environment that the business ecosystem of real estate development companies demonstrated, the seven dimensions--customers, markets, product, process, organization, technology, Government and society cover the cost of real estate development enterprise dynamic strategic management of internal and external environment. Therefore, our analysis and study cost management of real estate development enterprise dynamic strategic analysis of key process areas should be from the seven angle.

### 2.2.1 Customer

Customer refers to the service object of the real estate development enterprises, including direct buyers and tenants, including customer requirements and the customer itself, and the customer approval of the value of real estate development enterprise products directly is closely related to the dynamic strategic cost management.

### 2.2.2 Market

Market refers to the real estate market where the real estate development enterprises state, including the trading characteristics of products or services in the real estate market, and those of such transaction price affect dynamic strategic costs of real estate development enterprise similarly.

### 2.2.3 Product

Products refers to the products or services which the real estate development business offers, as well as the

requirements for dynamic strategic cost management of real estate development enterprise because of the products and services.

#### 2.2.4 Process

Process refers to a range of organized activities that the development and maintenance of real estate development enterprise and which related products (services, protocols, policies, etc.), including “construction activities” and “management” in two ways. The process is closely related to how to find evolutionary direction and space from the value chain of real estate development enterprises. The process of dynamic strategic cost management in real estate development is a dynamic process, structured process. Structure refers to describing the key process areas by a number of key practices, this means that management activities are repeatable and sustainable. Dynamic means there is no mandatory standard to define how to accomplish goals.

#### 2.2.5 Organization

Real estate development enterprises are an economic union which is based on the interaction between organizations. Organization is a organism of the real estate development enterprise, including consumers, developers, contractors, competitors and other stakeholders. It is a very lopsided that the organization which implements dynamic strategic cost management limitations in the financial sector. Dynamic strategic cost management of enterprises for real estate development company should play cost management organizations as the core, participatory manner; simultaneously, it should focus on the construction of corporate business ecosystem environment. In the same commercial ecological system, that forms their own barriers between enterprises easily, hinders communications among enterprises, not conducive to evolution of dynamic strategy cost.

#### 2.2.6 Technology

Technology is a channel or mean by which the real estate development enterprise implements dynamic strategic cost management. In the developing process of dynamic strategic cost management of real estate enterprise, with the development appearing of these technologies, after the combination between process and organizations, bringing new opportunities for strategic costs. Increasing mature of software and hardware brings new of productivity for products design, reduces the cost under improving efficiency of premise; the improvement of information technology, not only effect the process and method enterprise, speed up information communication, also save the cost of communication, especially the process of project management, the communication project and outside.

#### 2.2.7 Government and Society

The real estate industry is an important industry to the State, real estate development company contributes a lot of revenue and taxation for the central and local

governments, the land costs and taxes in the real estate development costs associate to the Government directly, while real estate, as necessities and investment goods, whose price changes have a direct impact on the general public. So in the maturity relation between enterprise strategic cost management capability of real estate development company, mainly in government and society law, land use planning, industry standards and other consequences.

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## CONCLUSION

Dynamic study on strategic cost management of real estate development enterprises is a new field, maturity is the cutting-edge research in the management field. After the successful application of software capability maturity theory in China, putting the theory into the study on dynamic strategic cost management of the real estate development enterprises. From customer, and market, and products, and process, and organization, and technology, and Government and social seven a aspects, established has dynamic strategy cost management capacity mature degrees model of real estate development enterprise, and from this seven a aspects, researched has property and features in each grade of dynamic strategy cost management of real estate development enterprise, and analyzing key process domain of evolution from low grade to high grade, specifying development direction for dynamic strategy cost management of real estate development enterprise.

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