AN EXPLORATORY STUDY ON THE REAL-TIME STRATEGIC FACTORS OF CORPORATE REAL ESTATE ASSET MANAGEMENT [CREAM] PRACTICES: EVIDENCE FROM INDONESIAN COMPANIES

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"Real-Time strategic change begins with throughput rather than inputs or outputs."
(Professional Management)
--UK Singh and B. Narayal—

"Doing a good job (via A *CREAM* Development Program) is the best marketing"
(Relationship Management)
--Jim Blaschke--

ABSTRAK

*Memasuki era transformasi (reformasi) nasional dan otonomi daerah, organisasi publik dan bisnis Indonesia dituntut untuk mampu mengembangkan daya saing, efisiensi, dan keefektifannya guna melakukan proses perubahan secara kreatif dan berkesinambungan (*sustainable*). Setiap organisasi perlu membangun strategi perubahan secara* proactive *dan* interactive (real-time strategic) *untuk menjadi* the leader of crisis. *Studi ini menjelaskan penerapan* real-time strategic *dengan memotret praktik manajemen aset bangunan perusahaan (*corporate real-estate asset management or CREAM*) di Indonesia. Dengan menggunakan* cluster analysis—*dari 97 perusahaan yang menjadi responden—44 perusahaan (45%) berada dalam kelompok pasif, 37 perusahaan (38.10%) berada dalam kelompok selektif, dan 16 perusahaan (16.50%) berada dalam kelompok aktif. Hal ini menunjukkan potret perusahaan di Indonesia belum efisien dalam mengelola aset bangunannya. Dalam kondisi krisis multidimensional saat ini, berbagai kesalahan tipe I dan tipe III (*mismanagement creates high level of inefficiency and high cost economy*) menjadi suatu budaya yang harus segera dilakukan pembenahan secara sistematik, total, dan beorientasi pada program. Studi ini memberikan gambaran bagaimana bangsa Indonesia hijrah dari belenggu KKN (*inactive and reactive strategic*) menuju Indonesia Baru (*a good corporate and government governance; proactive and interactive or real-time strategic*) melalui* corporate real estate asset management (CREAM).

Keywords: *Corporate Real Estate Asset Management (*CREAM*), Real-Time Strategic, Cluster Analysis.*

INTRODUCTION

Concern over the global competitiveness and the local government autonomy program in Indonesia has drawn attention to the importance of a Corporate Real Estate Asset Management (CREAM) development program. There are indications many world-class companies in developed countries are beginning to reevaluate their policies of benign neglect of property assets (Avis *et al*., 1993; and Joroff, Louargand, Lambert and Becker, 1993). Since mid of July 1997 Indonesia has been having a multidimensional crisis. The consequence of the crisis is the poor market condition has taught many corporate managers to be more efficient. It is during the crisis time real estate assets are more tightly managed, real estate investments more carefully planned, and real estate asset management receives more attention from the public. Many companies are awakening to the importance of their real estate holdings in order to eliminate their inefficiencies (Teoh, 1992). In this respect, this study represents a most timely research, especially in Indonesia today yet there is little academic research in the field.

CREAM describes the relationship between an organization's corporate real estate and overall organizational performance. Particularly concerned with the relationship between corporate real estate and strategic corporate goals and the relationship with other functional strategies (a cross-functional team)—finance and accounting, human resource, marketing, internal business process, and information technology in response to the changing economic and global competitive environment.
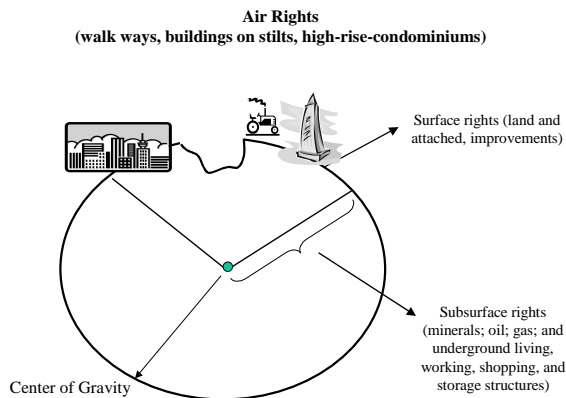
The purposes of this article are to study the current state of corporate real estate asset management in Indonesia by surveying 97 non-real estate corporations and to conduct a benchmarking study of corporate real estate asset management between Germany and Indonesia. The study leads to the assessment of corporate attitudes in corporate real estate asset management. It is also determines whether corporate real estate asset management as a real-time strategic decision.

LITERATURE REVIEW

According to American Institute of Real Estate Appraisers (AIREA) and Australian Institute of Valuers and Land Economics (AIVLE), the definitions of real estate and real property are:

> Real Estate (realty) is the physical land and apputenances affixed to the land, e.g., structures. Real refers to immovable property can be either copreal (having substance) or incopreal (having no substance). Estate represents a person's possessions or interest in land. Technically, real estate includes land, buildings, trees, and most plants (Eldred, 1987).

> Real Property includes all interest, benefits, and rights inherent in the ownership of physical real estate. Real property rights include not only the surface area, but also subsurface and air rights (Eldred, 1987).

Air Rights
(walk ways, buildings on stilts, high-rise-condominiums)

Surface rights (land and
attached, improvements)

Subsurface rights
(minerals; oil; gas; and
underground living,
working, shopping, and
storage structures)

Center of Gravity

Source: Eldred, 1987.

Figure 1. Real Estate (Real Property) Characteristics

Corporate Real Estate Asset Management (CREAM) is a long-term business development through the establishment and maintenance of intelligent and relationship building.

An intelligent building was defined as any building which provides a responsive, effective and supportive intelligent environment within which the organization can achieve its business objectives (DEGW, 1996). The IBE study re-defined building intelligence to be the "efficient" use of buildings, space and business systems (*efficiency benefits*) to support organizations in the "effective" operating of the business (*effectiveness benefits*). The intelligent building was thought of as both a collection of technologies and a system that could respond to organizational change over time (*high-tech positioning*).

A relationship building is the modern design of the working environment which supports the implementation of the impact of new organization structures on the workplace. The key to design of new working environment (more interaction, more collaboration, more individual autonomy within the milieu of a group) is

productivity of both knowledge workers and just as significantly of new patterns of space use (more group spaces, more shared spaces, more intermittent space use). The relationships as assets approach takes the actions of sharing, caring, and daring; but the fact is today's relationship buildings require three essential elements: *trust, value, and dialogue* and incorporate five key sets of skills: *positioning, hunting, coaching, leading,* and *farming (high-touch positioning)* (DEGW, 1996 and Blaschke, 2000).

Joroff (1993) argued that real estate is a company's fifth strategic asset, after employees, capital, technology and information. Joroff (1993) also stated that proactive and interactive (real-time) real estate involves using locations, safety and quality of life policies to do business. In the wake of reengineering, streamlining, relationships and other efficiencies, how a corporation houses its smart workers and how it uses its working space productively are drastically changing. Ettorre (1995) argued that smart organizations (both publics and businesses) are realizing that their real estate—whether rented or owned—is more than just fixed assets. It is to be

leveraged and maximized in myriad creative ways.

Based on the new paradigm of CREAM, the real estate class is distinguished from equities and fixed-income asset groups for reasons beyond its demonstrated performance attributes, tangible asset characteristics and beneficial portfolio correlation coefficients (Pierre, 1989). The distinctions of real estate investments are: the intensive management requirement; extraordinary due diligence is necessary to review management capabilities before assets are required; active managers must competent in real estate markets, capital markets, financial securities, and portfolio management practices; largely conducted in an unregulated environment (Pierre, 1989).

Table 1. Paradigm Shift in CREAM

Paradigm / Criteria	Old Paradigm of CREAM	New Paradigm of CREAM
Management Philosophy	Custodial oriented view of real estate	Management oriented view of real estate
Planning Horizon	Short-to medium-term decision making	Long-term decision making
Style of Thinking	Thinking in technical and property-by-property categories (Transaction Marketing)	Thinking in user and portfolio categories (Relationship Marketing)
Behavior Pattern; Work Styles; Patterns Of Occupation	Inactive & Reactive Individual Process & Project Orientation Intermittent & Irregular	Proactive & Interactive (Real-Time) More interaction and collaboration process & Program Orientation Continuous & Regular
Self Perception of Corporate Real Estate Asset Manager	Engineer Caretaker, Tactical	Problem Solver & Decision Maker; Strategic
Personnel Requirements	Experience, Potential Team	Experience and Creativity; High Performance Team
Degree of Information and Organization	Low	High
Performance Measurement	Implicit Performance Criteria	Explicit Performance Criteria
Patterns of Space Use	Traditional Office and Shared Individual Services	Group & Shared Group Spaces

Source: Schaefers (1999).

Successful the implementation of CREAM in non real estate companies involves two key phases: the strategy phase (the "vision") and the tactical phase (the "action") of real-time problem solving and decision making of property management. The interaction of strategy and tactics effectiveness based on the real time problem solving and decision making and the types of error that may occur in CREAM implementation are shown in figure 2 below.

Source: Schultz, Slevin, Pinto, 1987.

Figure 2. The Matrix of CREAM Implementation Program

The matrix of CREAM implementation program has four possible combinations of strategy and tactics:

Quadrant 1 : High Strategy – High Tactics of CREAM [*Doing Right Thing Right*]: Real Time (Proactive and Interactive)

Quadrant 2 : Low Strategy - High Tactics of CREAM [*Doing Right Thing Wrong*]: Reactive

Quadrant 3 : Low Strategy – Low Tactics of CREAM [*Doing Wrong Thing Wrong*]: Inactive

Quadrant 4 : High Strategy – Low Tactics of CREAM [*Doing Wrong Thing Right*]: Reactive

Errors can be classified as follows:

Type I error : is not taking an action when one should be taken.

Type II error : is taking an action when none should be taken.

Type III error : is taking the wrong action (solving the wrong problem).

Type IV error : is addressing the right problem, but the solution is not used.

Based on the literature review above, this study examines the current state of real estate asset management practices and finds the position of CREAM implementation program in Indonesia.

RESEARCH DESIGN

In an attempt to ascertain the current manner in which major respondents manage their real estate buildings, ninety seven firms were surveyed for this study. Based on the conceptual framework developed, four testable hypotheses are formed:

#1 H_0 : There is no differences of the status of CREAM based on the respondents' industry characteristics.

#2 H_0 : There is no differences of the status of CREAM based on the respondents' sales.

#3 H$_0$: There is no differences of the status of CREAM based on the respondents' total employees.

#4 H$_0$: There is no differences of the status of CREAM based on the attitude of top management toward real estate.

The *chi*-square analysis was used as the statistical tool for testing the hypotheses.

A representativeness questionnaire for the mail surveys was prepared to 630 companies. As a result, there were 116 responded, which represented a response rate of approximately 18, 41%. However, only 97 responses used for the statistical analysis. Most of the remaining of 514 companies declined to participate in the study. It is intuitively anticipated that the survey has a bias resulting in a more positive picture of the CREAM function than actually exists. Nevertheless, the study shows the detailed and up-to-date information on real estate by the most important, explicitly the main agenda for Indonesian's good corporate governance program.

To achieve the purpose of this research, three stages analysis is performed as follows. At first stage, the current status of the management system for real estate assets was thoroughly analyzed and compared with "critical success factors." Cluster analysis was used to reveal distinct differences among the respondent companies in terms of their real estate management practices. Cluster analysis is a process of grouping individual objects (in the case, the surveyed companies) in numerous iterations, until the homogeneity within each group or "cluster" and the heterogeneity between the groups are optimized by using the formula of squared Euclidean distance as follows (Aaker, et al, 1998).

$$d^2{}_{ij} = \sum_{m}^{n} (X_{im} - X_{jm})^2$$

where:

$d^2{}_{ij}$ = The distance between i & j

X_{im} = The value of variable m for object i

X_{jm} = The value of variable m for object j

n   = Total variable

In order to investigate the real-time strategic factors that each company considers in practicing CREAM, the companies were asked to answer the questionnaire, representing fifteen managerial and organizational characteristics, which are in theory and practice well known as critical success factors in the operation of a proactive and interactive (real-time) CREAM system (Avis, Gibson, and Watts, 1989; Gale and Case, 1989; Pittman and Parker, 1989; Joroff et al., 1993; Nourse and Roulac, 1993; and Teoh, 1993). Participants were asked to rate how important each factor is and how well their companies performed with regard to each factor (in other words: have realized each of these factors). Importance and performance were rated on a Likert Scale from 1 to 5 (5: very important; 4: Important; 3: Enough; 2: Less Important; 1: Unimportant).

Table 2. "Critical Success Factors" of CREAM (The Schaefers' Study)

"Critical Success Factors" of Corporate Real Estate Asset Management	
Variable 01	Detailed and up-to-date information on real estate
Variable 02	Centralized keeping of real estate data by real estate management
Variable 03	Integration of both real estate and corporate information systems
Variable 04	Detailed and formal strategic planning for facilities and real estate asset management
Variable 05	Bottom-up integration of strategic planning for real estate and business units
Variable 06	Top-down integration corporate objectives and strategies in real estate planning
Variable 07	Central location of real estate unit in overall organizational structure
Variable 08	Access to top management
Variable 09	Operation of real estate unit as separate and distinct responsibility center
Variable 10	Positive attitude by top management towards real estate
Variable 11	Centralized real estate authority and responsibility
Variable 12	Well-defined and regular real estate performance measurement
Variable 13	Well-defined and regular strategic real estate control
Variable 14	Transparency of real estate costs
Variable 15	Professionally trained and qualified human resources in real estate

Source: Schaefers, 1999

Based on a conceptual framework of fifteen factors representing and influencing CREAM, this study is the first performed on the topic in Indonesia. A considerable amount of information about the status of operational real estate management as an asset by 97 respondents was obtained.

At second stage, a contingency variable analysis was performed in order to determine the influence of various factors on current real estate practice. These influencing factors were grouped in three categories: corporate related, environment related and portfolio related variables. *Chi*-square analysis and Cramer's V were used for testing the significance of the hypothesis. The chi-square concept was used because it yields comparable correlation coefficients for different variables, even when different scales are applied. Because chi-square values for a given correlation tend to rise with the sample size. Cramer's V was additionally applied. Cramer's V builds on the chi-square test but tests the strength of correlation independent of sample size.

In evaluating the results of the Cramer's V analysis, the following parameters were used: resulting values of less than 0.10 indicate no correlation; values between 0.10 and 0.20 indicate a weak correlation. Values between 0.20 and 0.30 indicate a relatively strong correlation, whereas values greater than 0.30 indicate a very strong correlation. It should be

noted that, while Chi-square and Cramer's V analyses reveal the correlation of different factors characteristics, they do not prove causality, so that interpretations as to causal relationships must be based on theoritical considerations (Bortz, 1984 in Schaefers, 1999).

In the final stage of the analysis, the information, planning, organizational and control systems were examined as subsystems of the entire management system.

RESEARCH FINDINGS

Considering the situation that a company is practicing the CREAM and with the help of cluster analysis, three types of companies were identified that differ significantly with respect to CREAM. The distribution of respondents among these three categories is shown in table 3 below.

Table 3. Influence of Type of Industry on CREAM Status

	Industry		Cluster			Total
			Passive	**Selective**	**Active**	
1	Banking/Insurance/Service	Count % within Industry	4 36.4%	5 45.5%	2 18.2%	11 100.0%
2	Manufacturing	Count % within Industry	8 53.3%	4 26.7%	3 20.0%	15 100.0%
3	Food/ Liquor/Tobacco/Pharmacy	Count % within Industry	11 73.3%	1 6.7%	3 20.0%	15 100.0%
4	Energy/Mining	Count % within Industry	4 57.1%	2 28.6%	1 14.3%	7 100.0%
5	Retail/Wholesale	Count % within Industry		4 100.0%		4 100.0%
6	Transportation/Telecommunication	Count % within Industry	6 85.7%		1 14.3%	7 100.0%
7	Chemical & Associated Industries	Count % within Industry	6 85.7%		1 14.3%	7 100.0%
8	Construction	Count % within Industry	2 16.7%	8 66.7%	2 16.7%	12 100.0%
9	Agriculture/Forestry	Count % within Industry	4 66.7%	1 16.7%	1 16.7%	6 100.0%
10	Hotel/Apartment	Count % within Industry	1 14.3%	6 85.7%		7 100.0%
11	Education	Count % within Industry	2 33.3%	3 50.0%	1 16.7%	6 100.0%
TOTAL **Cramer's V = 0.420**		Count % within Industry	**44** **45.4%**	**37** **38.1%**	**16** **16.5%**	**97** **100.0%**

The "active" companies (16.5%) realized the key factors of CREAM at a high level. All characteristics are scored on the average of 3.65. Compared to first group, the "selective" companies (38.1%) show a distinctly lower performance level (the average score: 2.69), whereas the "passive" companies (45.4%) have the lowest realization level (the average score: 1.70). It found that, despite their significant performance level, are at present seriously undermanaged by 44 respondents. This clearly shows a lack of enthusiasm towards real estate as an asset. Most companies have a mainly reactive rather than proactive and interactive real estate management.

The following table provides the Cramer's V analysis of different factors that may influence the status of CREAM in the surveyed companies. Two variables (type of industry and top management attitude) have the score greater than 0.30 indicate a very strong correlation. The remaining two variables have the score between 0.20 and 0.30 indicate a relatively strong correlation. If the variable has the score between 0.10 and 0.20 indicate a weak correlation. The variable has the score less than 0.10 indicate no correlation. It found that the four variables play an important role in influencing the way that CREAM is currently practiced.

Table 4. The Result of Cramer's V Analysis

Variable	Cramer's V	Correlation Indication
Company (Type of Industry)	0.420	Very Strong
Company Size (In Sales)	0.293	Relatively Strong
Company Size (In No. of employees)	0.265	Relatively Strong
Top Management Attitude	0.311	Very Strong

Table 5. Influence of Company Size on CREAM Status

Size of Company (In Sales) * Cluster Cross tabulation

			Cluster			Total
			Passive	Selective	Active	
Sales Rp.	< 50 billion	Count	24	22	4	50
		% within revenue	48.0%	44.0%	8.0%	100.0%
	50 - <250 billion	Count	10	2	2	14
		% within revenue	71.4%	14.3%	14.3%	100.0%
	250 - <500 billion	Count	8	3	4	15
		% within revenue	53.3%	20.0%	26.7%	100.0%
	> 500 billion	Count	2	7	5	14
		% within revenue	14.3%	50.0%	35.7%	100.0%
Total		Count	44	34	15	93
	Cramer's V = 0.293	% within revenue	47.3%	26.6%	15.1%	100.0%

Table 6. Influence of Company Size on CREAM Status

Size of Company* Cluster Crosstabulation

			Cluster			Total
			Passive	Selective	Active	
In Number	< 2000	Count	39	27	9	75
Of Employees		% within total employee	52.0%	36.0%	12.0%	100.0%
	2000 - < 5000	Count	2	4	4	10
		% within total employee	20.0%	40.0%	40.0%	100.0%
	5000 - < 20.000	Count	3	5	1	9
		% within total employee	33.3%	55.6%	11.1%	100.0%
	> 20.000	Count		1	2	3
		% within total employee		33.3%	66.7%	100.0%
Total		Count	44	37	16	97
	Cramer's V = 0.265	% within total employee	45.4%	38.1%	16.5%	100.0%

Table 7. Influence of Top Management Attitude Toward Real Estate on CREAM Status

Top Management Attitude* Cluster Crosstabulation

			Cluster			Total
			Passive	Selective	Active	
Top Management	…has not changed	Count	18	5	1	24
Attitude		% within Top Management Attitude	75.00%	20.80%	4.20%	100.00%
	…has changed	Count	23	19	8	50
		% within Top Management Attitude	46.00%	38.00%	16.00%	100.00%
	…has changed significantly positively	Count	3	13	7	23
		% within Top Management Attitude	13.00%	56.50%	30.40%	100.00%
Total		Count	44	37	16	97
		% within Top Management Attitude	45.40%	38.10%	16.50%	100.00%

Cramer's V = 0.311

Table 8. Hypotheses Testing Results One-Tailed Chi-Square Analysis

Hypotheses	Chi-Square Calculation	df	Chi-Square Table	Conclusion (5% level of significances
H_{01}	34.267	20	31.410	Reject H_0 or Accept H_{a1}
H_{02}	15.983	6	12.592	Reject H_0 or Accept H_{a2}
H_{03}	13.632	6	12.592	Reject H_0 or Accept H_{a3}
H_{04}	18.799	4	9.488	Reject H_0 or Accept H_{a7}
Success Rate (rejection of H_0) = 100%				

In summary, the findings of the statistical analysis and hypotheses testing are as follows:

There are differences of the status of CREAM based on the respondents' industry type, sales, and top management attitude toward real estate.

Furthermore, it is interesting to examine the rank of interest of the CREAM's critical success factors, the differences between importance and performance scores by different clusters. The highest average score of interest is indicative the most important variable of CREAM's critical success factors. A large difference between importance and performance scores is indicative of mismatched resources and needs and shows that improvement is needed in the area.

Table 9. Rank of Interest of CREAM's Critical Success Factors

"Critical Success Factors" of Corporate Real Estate Asset Management		Average Score of Interest	Rank of Interest
Variable 01	Detailed and up-to-date information on real estate	4,31	**1**
Variable 02	Centralized keeping of real estate data by real estate management	3,98	6
Variable 03	Integration of both real estate and corporate information systems	3,70	11
Variable 04	Detailed and formal strategic planning for facilities and real estate asset management	3,78	8
Variable 05	Bottom-up integration of strategic planning for real estate and business units	3,56	12
Variable 06	Top-down integration corporate objectives and strategies in real estate planning	3,70	10
Variable 07	Central location of real estate unit in overall organizational structure	3,35	14
Variable 08	Access to top management	4,20	**3**
Variable 09	Operation of real estate unit as separate and distinct responsibility center	3,49	13
Variable 10	Positive attitude by top management towards real estate	4,25	**2**
Variable 11	Centralized real estate authority and responsibility	3,30	15
Variable 12	Well-defined and regular real estate performance measurement	3,73	9
Variable 13	Well-defined and regular strategic real estate control	3,88	7
Variable 14	Transparency of real estate costs	4,12	**4**
Variable 15	Professionally trained and qualified human resources in real estate	4,08	**5**
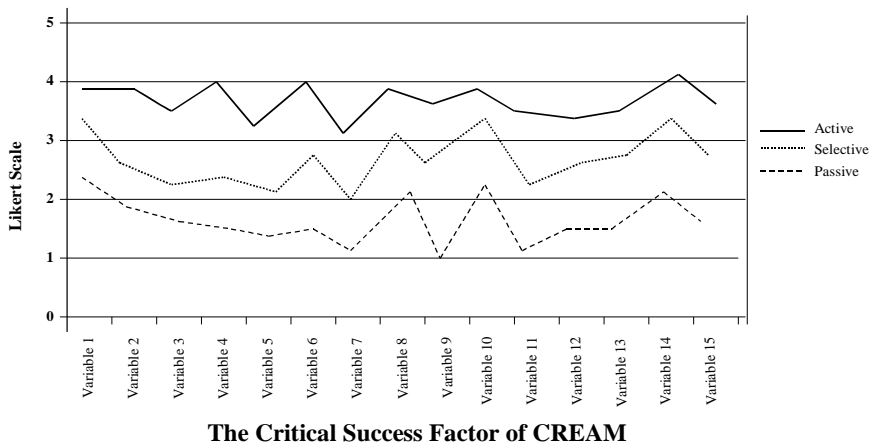
Figure 3. The Average Score of Importance and Performance (The Active, Selective, Passive Clusters)

Table 10. The Distribution of Respondent Companies in Germany and Indonesia Among the Three Categories

Categories	Germany (110 respondent companies)	Indonesia (97 respondent companies)
Active	31.2%	16.5%
Selective	37.6%	38.1%
Passive	31.2%	45.4%

Source: Schaefers, 1999 and Ciptono & Wiryawan, 2000

From the Benchmarking study of CREAM indicates that Germany (as a developed country) typically have more active companies in implementing corporate real estate asset management (CREAM) system than Indonesia (as a developing country). Based on these studies, findings show that both descriptive (i.e., type of industry, size) and strategic (i.e., management style, corporate objectives) play an important role in influencing the way that CREAM is currently practiced.

Indeed, from the Germany study indicates that companies in the service industries typically have an active real estate management system. In contrast, companies from manufacturing sector are dominated by selective or even passive companies (Schaefers, 1999). From the Indonesia study indicates that companies in both industry (manufacturing and services) are dominated by selective and passive companies. Today most of organizations in Indonesia with chronic problems (for instance the CCN problem—Corruption, Collusion, Nepotism) are not looking at their processes, not evaluating the effectiveness and efficiency of their processes, not reflecting back on the processes whenever results are outside of acceptable tolerance limits—but unfortunately realizing the by-pass processes or mismanagement—Quadrant 2:

Doing Right Thing Wrong. In other words, they have not learned to learn from their experiences (learning and empowerment process). They have not recognized the connection between the problems they experience and the way they perform their projects and programs. Much of the emphasis today in the smart management is concerned with the management of business processes. A business process is interdependency activities that a business must perform (voice of the company) in order to meet the voice of the customer in order to cultivate long-term customer relationships (Chase, Aquilano, Jacobs, 1998). Companies literally can not be competitive in global markets unless they can operationally define the voice of the customers (Dean, 2000).

CONCLUSIONS, LIMITATIONS, AND IMPLICATIONS

The study shows that corporate real estate assets are at present seriously undermanaged by 44 respondents (45.4% of the total respondents). It seems that the respondents toward active CREAM has not yet reached them. However, there are indications that in Indonesian companies the CREAM is evolving into a recognized management activity that requires a more real-time strategic. Effective CREAM means moving beyond inactive or reactive strategic and decentralized problem solving and decision making, fragmented across the organization, toward a proactive or interactive strategic, comprehensive and portfolio-wide program management, well supported by adequate and timely information and the commitment of top management (the connective leadership approach).

Even with the mail survey limitations, the study has important implications for CREAM. In addition, this study suggests that the future research into the positive impacts of CREAM practices must take into account a variety of contingency variables and type of companies (small, medium, and large). More important, the study suggests that managerial attention to some unique factors, dependent on these contingency variables, can lessen the likelihood of the lack of enthusiasm toward CREAM status.

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