

The Role of Moderation in Top Management Support in the Influence of Change Management and Organization Readiness towards Success Implementation of Enterprise Resources Planning (ERP) Oracle Fusion Cloud at PT Bukaka Teknik Utama, TBK

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Abstract. Digital transformation through the implementation of Oracle Fusion Cloud Enterprise Resource Planning (ERP) is a strategic move to integrate complex business processes within a manufacturing and engineering environment such as PT Bukaka Teknik Utama, Tbk. Although ERP systems offer operational efficiency and real-time data visibility, the system transition process is often fraught with user adaptation challenges and operational hurdles. This study aims to analyze the effect of Change Management and Organization Readiness on the success of Oracle Fusion Cloud ERP implementation, and to examine the moderating role of Top Management Support within these relationships. This study utilized a quantitative methods approach, collecting primary data through Likert-scale questionnaires and in-depth interviews. The sample consisted of 56 respondents, consisting of key users and end-users across various divisions/departments at PT Bukaka Teknik Utama, Tbk with descriptive analysis to provide deeper context to the findings. The results indicate that both Change Management and Organization Readiness have a positive and significant impact on ERP implementation success. The crucial finding of this study proves that Top Management Support significantly moderates these relationships. Sustained support from top management in the form of direct intervention during crises, adequate resource allocation, and firm transition policies was shown to strengthen the positive impact of change management and organizational readiness on system success. The conclusion of this study emphasizes that technical and structural readiness are insufficient without strong executive commitment.

Keywords: Change Management; ERP Implementation Success; Oracle Fusion Cloud; Organization Readiness; Top Management Support.

1. Introduction

PT Bukaka Teknik Utama, Tbk (BUKK) is located on Jalan Raya Narogong Cibinong KM 19.5 Cileungsi Bogor Regency, West Java, was established in 1978 and has grown to become one of the main contributors in the manufacturing and Engineering, Procurement, Construction (EPC) sectors in Indonesia. The company has diverse business lines ranging from the manufacture of Steel Bridges, Steel Towers, Passenger Boarding Bridges, Oil and Gas Equipment, Road Construction Equipment, Special Vehicles, and Plant Systems, to renewable energy solutions. The complexity of products and cross-divisional operations demands an integrated information system to unite financial, logistics, production, and human resource data in real time.

Digital transformation has become a necessity for manufacturing companies. To maintain competitiveness in the Industry 4.0 era, the need for real-time data visibility, process efficiency, and operational scalability drives the adoption of Enterprise Resource Planning (ERP) systems. Enterprise Resource Planning (ERP) is a "Software package system" a business that helps companies to automate and integrate most business processes; share data and activities within the company, create and access information from a timely environment" (Sabarguna, 2009:3). ERP It is an investment in both business and human resources, so the implementation process requires strong commitment and cooperation from all levels of management, employees, and implementers. ERP is a software application. An integrated and comprehensive computer system. ERP is developed based on functional modules that cover all aspects of resources within a company.

Shang and Seddon (2000) describe ERP systems as solving business efficiency problems and their successful implementation results in streamlining organizational processes resulting in savings of money and time. However, Al-Mashari and Al-Mudimigh (2003) in their research stated that many companies even today are still unsuccessful in implementing ERP. Nijher Raafat (2016) argues that researchers estimate that 90% of ERP implementations are delivered late or over budget and company activities show a 67% failure rate in achieving goals and are considered negative or unsuccessful.

Success rate of implementation. The current ERP system is still considered low and Many companies have implemented ERP systems but have yet to fully utilize the potential of ERP systems within their organizations (Tjakrawala, 2012). The failure rate of information technology projects is reported to range from 30% to 70%. ERP implementation is often associated with high failure rates, especially when organizations pay little attention to the dynamics of changing work cultures. Experience in various manufacturing companies

Show resistance arises from employee concerns about losing control, changing workloads, and uncertainty in new roles. Without a structured change management strategy, including two-way communication, key stakeholder engagement, and ongoing training, technology transformations can easily be hampered by passive attitudes or even active resistance from end users. Meanwhile, organizational readiness encompasses more than just the availability of IT infrastructure. An adaptive organizational culture, supportive mid-level leadership, and flexible work procedures are equally important in ensuring the adoption of new systems. Organizations that have not mapped their Human Resources competency gaps or prepared rollback protocols risk operational disruption. Therefore, readiness measurements must encompass technical, structural, and psychological dimensions to ensure a smooth implementation process.

2. Research Methods

Study This is quantitative research. According to (Sujarweni, 2015), Quantitative research is a type of research that produces findings that can be achieved (obtained) by using planned and structured statistical procedures or other means of quantification (measurement) clearly from the beginning to the creation of the research design. While the definition of quantitative research according to (Sugiyono, 2019) is to evaluate pre-existing hypotheses, positivist research methods involve studying a specific population or sample, collecting data with research tools, and analyzing quantitative or statistical data. Because the purpose of this research is to determine the magnitude of the influence between the variables studied, then ratio data must be processed, thus requiring the use of quantitative methodology in this research approach.

3. Results and Discussion

3.1. Respondent Description

Study This uses a saturated sampling technique (census) which focused on a population of key users, functional managers, and operational staff directly involved in the daily Oracle Fusion Cloud workflow at PT Bukaka Teknik Utama, Tbk. After the questionnaire distribution and data cleansing stages, valid data were obtained from 56 respondents.

Demographic characteristics Respondents were broken down into four main categories: Department/Division, Position Level, Length of Service, and Education Level. This mapping is crucial to ensure that the data collected truly represents the operational conditions across divisions in the company.

3.2. Respondent Characteristics Based on Department/Division

The involvement of various divisions is very important in the implementation of ERP forensuring that there are no more information silos (ego-sectoral data). The following is the distribution or respondents by division:

No	Department / Division	Number Respondents	of Percentage (%)
1	<i>Accounting & Finance</i>	20	35.71%
2	<i>Global Supply Chain Management</i>	15	26.79%
3	<i>Project Management & Operations</i>	12	21.43%
4	<i>Production & Fabrication</i>	9	16.07%
Total		56	100%

Table Respondent Characteristics Based on Division

Respondents were dominated by the Accounting & Finance division (35.71%).

Matter This is very much in line with the objectives of implementing Oracle Fusion Cloud ERP inPT Bukaka Teknik Utama, Tbk., to improve its Accounting & Finance system and integrate it with the Supply Chain Management & Inventory system. This division is the upstream of the company's entire information flow. They are responsible for preparing financial reports required by management and stakeholders. High participation from

This division provides strong validity assurance for the variables.

Organization Readiness(X2), because the Accounting & Finance division isThe party most affected by transaction complexity at PT Bukaka Teknik Utama, Tbk, which had to manually translate various types of projects into a standardized Oracle database structure, followed suit. The Supply Chain Management and Project Management departments followed suit as downstream users tasked with executing procurement and controlling project costs.

3.3. Respondent Characteristics Based on Position Level

Position or the respondent's position determines the depth of their insight towards management policies and operational realities in the field.

No	Position Level	Amount Respondents	Percentage (%)
1	<i>Top / Middle Management</i>	8	14.29%
2	<i>Key Users/Supervisor</i>	16	28.57%
3	Functional Staff / End-Users	32	57.14%
Total		56	100%

Table Respondent Characteristics Based on Position Level

More than half of respondents (57.14%) were functional staff, followed by key users or mid-level supervisors (28.57%). The presence of functional staff is vital to objectively assess the Change Management variable (X1), as they are the primary subjects of changes in daily work practices. Furthermore, the involvement of eight managerial-level respondents provides a balanced and valid perspective for measuring the Top Management Support (Z) instrument, ensuring that the evaluation of leadership support is not only viewed from the bottom up but also reflects the company's strategic commitment.

a. Descriptive Analysis of Research Data

Descriptive analysis aims to provide an overview of Assessment or perception of 56 respondents regarding the indicators of each research variable. Measurements were conducted using a Likert scale of 1 to 5. To facilitate interpretation of the average (mean) value of respondents' answers, the following class interval range was used:

- . 1.00 – 1.80 = Very Bad / Strongly Disagree
- . 1.81 – 2.60 = Not Good / Disagree
- . 2.61 – 3.40 = Good Enough / Quite Agree

- . 3.41 – 4.20 = Good / Agree
- . 4.21 – 5.00 = Very Good / Strongly Agree

Based on Based on the results of the questionnaire data tabulation, the following descriptions were obtained for each variable:

b. Descriptive Analysis of Change Management Variable (X1)

Change Management Variables obtained overall average value of 3.85 which is in the Good category.

- . Indicator Highest

Indicators regarding "Clarity of information and implementation of modules operational training" received the highest score (4.05). This shows that the ERP implementation project team at BUKAKA has made maximum efforts in providing basic education on how to use the Oracle Fusion Cloud interface before the system was launched.

- . Indicator Lowest

Indicators regarding "User resistance and fear management" got the lowest score (3.40 - the lower limit of the Good category).

- . Interpretation

Although employees felt the technical training was adequate, overall psychologically there is still reluctance and worry to completely abandon old habits. Transitioning to Cloud systems demand rigid workflow discipline, which can often be overwhelming for operational staff in the initial stages of adaptation.

c. Descriptive Analysis of Organization Readiness Variable (X2)

Organization Readiness Variable or organizational readiness to acquire value average of 3.72 (Good Category).

- . Indicator Highest

Indicator related to "Infrastructure readiness and business process adjustments structural" recorded a very positive score (3.95). Respondents, especially from the Accounting & Finance division, felt that the company had set clear standards, such as defining reports related to the need for reporting to related parties and stakeholders within Oracle.

. Indicator Lowest

Indicator regarding "Cleanliness and standardization of historical data (Data Cleansing)" got the lowest score (3.35 - Fairly Good category).

. Interpretation:

These findings highlight the real challenges on the ground. Before Using ERP, many inventory reports and material specification data are managed decentralized using spreadsheets. Respondents complained about the complexity of adapting to these legacy data formats, particularly issues with regional formatting interoperability (such as inconsistent use of decimal points and delimiters).

d. Descriptive Analysis of Top Management Support Variable (Z)

Variables Top Management Support obtained the highest average score compared to all other variables, namely 4.15 (Good category approaching Very Good).

. Indicator Highest

Indicator "Leadership's firmness in requiring compliance" system usage" scored 4.30 (Very Good).

. Indicator Lowest

"Availability" Indicator time flexibility for key users to focus on migration projects" scored (3.85).

. Interpretation:

This figure proves that the top management of PT Bukaka Teknik Utama, Tbk has an exceptionally strong political and strategic commitment. The leadership is willing to intervene, bypass bureaucratic red tape, and mediate between divisional egos. However, core team members (such as the Accounting Manager) sometimes struggle to balance their time between overseeing the ERP implementation and completing their daily workload.

e. Descriptive Analysis of ERP Implementation Success Variables (Y)

Oracle Fusion Cloud ERP Implementation Success Variables obtained an average score of 3.92 (Good Category).

. Indicator Highest

"Integration and Cross-Divisional Data Availability" (4.10).

. Indicator Lowest

"Quality of service and speed of resolution bugs from the support team" (3.65).

. Interpretation

In general, the implementation was considered a success. Employees felt The immediate benefit is the elimination of information silos; technical specification data from upstream can be directly pulled into procurement and finance divisions without the need for time-consuming manual reconciliation. However, because this is a Software as a Service (SaaS)-based system, responses to customizations or operational system issues can sometimes feel less immediate, requiring coordination with consultants or the cloud service provider.

f. Evaluation of Measurement Model (Outer Model)

Evaluation measurement model (outer model) is carried out to ensure that the research instrument used in the form of a questionnaire has high level of accuracy (validity) and reliability in measuring each latent variable. In the Partial Least Squares (PLS) approach, the outer model testing of 56 respondents at PT Bukaka Teknik Utama, Tbk was measured through three main criteria: Convergent Validity, Discriminant Validity, and Construct Reliability.

g. Convergent Validity Test

Convergent validity measures the extent to which an indicator is positively correlated with alternative indicators within the same construct. The parameters used are the Outer Loading value (factor loading), which must be greater than 0.70, and the Average Variance Extracted (AVE) value, which must exceed the threshold of 0.50 to indicate that the construct is able to explain more than half of the variance of its indicators.

Based on the results of the PLS algorithm iteration using SmartPLS the convergent validity values obtained are as follows:

Variables	Indicator	Outer Loading	AVE	Information
	CM1 (Clarity) Information & Roadmap)	812		Valid

Change Management(X1)	CM2(Training AdequacyInterface)	790	655	Valid
	CM3 (Resistance Management) User)	825		Valid
Organization Readiness (X2)	OR1(Standard AdjustmentLOD/SOP)	765	640	Valid
	OR2 (InfrastructureNetwork& Devices)	840		Valid
	OR3(Data &Interoperability) Cleansing	792		Valid
TopManagementSupport (Z)	TMS1 (Assertiveness) Require System)	875	730	Valid
	TMS2(Conflict ResolutionCross-Divisional)	860		Valid
	TMS3(Time AllowanceKey Users)	828		Valid
Success ImplementationERP (Y)	SUC1 (IntegrationCross-DataDivision)	810	685	Valid
	SUC2(ImprovementProductivity)	845		Valid
	SUC3 (SpeedResponseSupport Team)	828		Valid

Table Results of Convergent Validity Testing

Based on Table data, all indicators of the four variablesThe research has an Outer Loading value above 0.70. The highest value for the Change Management variable (X1) is shown by the CM3 indicator (0.825), which means that user resistance management has the largest contribution in forming the change management variable.

In the Organization Readiness variable (X2), the OR2 indicator related to infrastructure readiness has the highest loading value (0.840). The OR3 indicator which represents the improvement of historical data from spreadsheet documents (such as consistent formatting of decimal points and thousands separators for accurate readability by the Oracle database) was also proven valid with a value of 0.792. This confirms that data hygiene is an integral part of organizational readiness.

For the Top Management Support (Z) variable, the TMS1 indicator (top management assertiveness) recorded the highest value of 0.875. This reflects that direct intervention from the Board of Directors is a key pillar of management support. Meanwhile, the AVE values for all concepts were above 0.50 (ranging from 0.640 to 0.730). This demonstrates that, convergently, all measurement instruments distributed to 56 respondents met strict validity requirements.

3.4. The Influence of Organization Readiness on the Success of ERP Implementation (Hypothesis 2 Accepted)

Testing proves that Organization Readiness is the strongest direct predictor of system success (path coefficient 0.355; P-Value 0.001). In accordance with the TOE (Technology, Organization, Environment) framework, a new system can only operate optimally if the company's structural foundation and infrastructure are ready to absorb it.

In a large-scale structural engineering company like BUKAKA, Operational readiness goes far beyond simply providing internet bandwidth. These findings demonstrate that the success of the go-live phase is crucially determined by the thoroughness of the pre-implementation phase, particularly in aspects of process standardization and data cleansing. For example, the global supply chain management division's initiative to formulate standard operating procedures related to nomenclature and uniform item/goods naming is a vital foundation.

Besides that, readiness in executing technical data migration from Spreadsheets play a crucial role. Data precision issues such as ensuring regional format compatibility, particularly regarding the use of thousands separators and decimal points, must be resolved before data is pulled into an Oracle database.

3.5. The Moderating Role of Top Management Support on Change Management (Hypothesis 3 Accepted)

Findings This provides an important theoretical contribution: Change Management programs designed by mid-level teams have limits. Effectiveness is lacking if it's not accompanied by structural authority. In the field, software training is often considered a mere formality if employees feel that leadership doesn't truly care. However, at BUKAKA, Top Management Support proved to be a catalyst. When the board of directors led by example by making the

Oracle dashboard the sole reference in operational evaluation meetings, the Change Management initiative gained massive political traction. This leadership assertiveness strengthened the Reinforcement dimension of the ADKAR model, converting training-derived knowledge into routines and permanent compliance at the grassroots level.

3.6. The Moderating Role of Top Management Support on Organization Readiness (Hypothesis 4 Accepted)

Statistical testing proves that the presence of Top Management in a way significantly strengthens the impact of Organization Readiness on operational success of the system (path coefficient 0.270; P-Value 0.008).

Inbusiness entities that have a lot of product diversification (starting from steel towers to steel bridges, standardization initiatives and the formation of new divisions often clash with sectoral egos. Each business unit tends to maintain its own reporting procedures and standards. These findings demonstrate that infrastructure readiness and the formulation of

Road map mature data governance will not run smoothly without intervention from Top Management.

Top Management in BUKAKA acts as a bridge that Breaking down divisional/departmental barriers. When a conflict of authority arose between the Accounting & Finance, Global Supply Chain Management, and Project Management Operations divisions regarding project report formats, swift and decisive intervention from Top Management ensured adherence to the system integration roadmap. This support ensured that the company's "readiness" capital wasn't stalled by bureaucratic conflict, but was successfully fully converted into a cohesive, real-time, and centralized financial reporting and operational control system within Oracle Fusion Cloud.

4. Conclusion

This study evaluates the dynamics of large-scale information system implementation large by testing the influence of Change Management and Organization Readiness on the Success of Oracle Enterprise Resource Planning (ERP) Implementation Fusion Cloud, and the role of Top Management Support as a moderating variable. Based on empirical testing using Partial Least Squares - Structural Equation Modeling (PLS-SEM) on 56 respondents representing operational and managerial elements at PT Bukaka Teknik Utama, Tbk, the following conclusions were drawn:

a. The Influence of Change Management

Change Management proven to have a positive and significant influence towards the success of ERP implementation. The company's systematic efforts to communicate the project roadmap and conduct effective interface training effectively reduced employee psychological resistance. A shared understanding encouraged a disciplined transition to work behavior, facilitating the smooth flow of daily data input into the cloud ecosystem.

b. The Influence of Organization Readiness

Organization Readiness has a positive, significant influence and is the strongest direct predictor of system success. Infrastructure readiness and standardization of business processes from the precondition phase such as the formulation of nomenclature standards and adjustments Regional compatibility (decimal point/thousands separator) on historical data prior to migration proved crucial in preventing inter-module integration failures and data read anomalies.

c. Moderation in Change Management

Top Management Support significantly moderates and Strengthening the influence of Change Management on the Success of ERP Implementation. Training initiatives at the operational level gained optimal leverage because they were driven by the example and political intervention of top management who mandated the use of the new system as the sole basis for performance reporting.

d. Moderation on Organization Readiness:

Top Management Support significantly moderates and Strengthening the influence of Organization Readiness on the Success of ERP Implementation. The hierarchical authority of the board of directors effectively breaks down the sectoral egos between divisions/departments, ensuring that the foundation of procedures (such as asset and inventory standardization) can be integrated smoothly with the Supply Chain Management (SCM) and Finance (accounting & finance) modules without being hampered by internal bureaucracy.

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