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**Tracking and Evaluating the Impact of Large Scale Change  
Initiatives: A Proposed Approach based on the Application of  
Balanced Scorecard Framework**

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## **Tracking and Evaluating the Impact of Large Scale Change Initiatives:**

### **A Proposed Approach based on the Application of Balanced Scorecard Framework**

#### **ABSTRACT**

Change Deployment and Change Management literature stresses the significance of introducing changes at a systemic level by focusing on strategy, structure, culture, systems, processes, tasks and behavior for sustained and continuous effectiveness of large scale change efforts. While various diagnostic models have been suggested in Change literature that helps in identifying internal and external alignment issues at a systemic level to inform change interventions within organizations, an integrated measurement system to track and evaluate the impact and effectiveness of Change initiatives has still not got the desired focus. This paper proposes a conceptual approach for tracking, measuring and evaluating the effectiveness of large scale Change interventions in organizations by drawing on some of the techniques of the *Balanced Scorecard* (BSC). This paper proposes that, to reap greater benefits from large scale Change, one must not only ensure alignment but also a continuous review of Change Deployment Processes at a systemic level. The approach focuses on the use of BSC techniques such as developing Change Themes and Results, setting Change Objectives, developing Lead and Lag Performance Measures for achievement of Change Objectives and measuring the progress of the initiatives with respect to the desired Objectives, for evaluating the effectiveness of Change Deployment efforts, all through applying cause and effect linkages.

**Key words:** Change Deployment, Systemic Alignment, Integrated Measurement Systems, Balanced Scorecard, Lead and Lag Measures, Cause and Effect Linkages

## INTRODUCTION

Terms like Change and Change Management have been a part of the corporate lexicon for more than two decades now, capturing the critical need of business organizations to remain competitive. Organizations that do not adopt the right Change interventions or those that do not manage Change effectively always remain at risk of becoming static thereby slipping into obsolescence, eroding its capability to survive in an increasingly dynamic and competitive market and environment. Tracking and continuously reviewing the Change and Change Deployment processes at a systemic level is therefore a critical success factor for business enterprises that have introduced large – scale transformational changes.

Bringing about change and managing change in organizations is not something new. Even before the term Change Management became a fad among consultants and a research focus among academics , and an area of concern among organizations, starting from the 1970s (Hughes, 2006) , a large number of organizations have had a structured system-wide approach to bring in new techniques, new structure, new work culture and managing the implementation of these change initiatives through the application of behavioral science principles, popularly covered under the aegis of *Organizational Development*. The formal origins of the concept of Change Management can be traced to the seminal work by Kurt Lewin, 'Field Theory in Social Science' (Lewin, 1951) who conceptualized Change process as evolving through three stages: unfreezing, moving and refreezing. Since the 1990s there has been a spate of research highlighting the dynamics of change, change deployment processes and change management in organizations, with varying focus on individual, group and organizational factors facilitating or hindering organizational responsiveness and adaptability in the face of new challenges. While there has been a plethora of studies on the

What, When, How and Why of Change Management, research on how to deploy, track, measure, sustain and reinforce change has been surprisingly limited and rather inconclusive (Buchanan, Fitzgerald, Ketley, Gollop, Jones, Lamont, Neath & Whitby, 2005).

The main objective of this paper is to propose an approach to monitor and review the progress of large scale Change Deployment initiatives in organizations through integrated measurement mechanisms. Change Initiatives may range from incremental, evolutionary approaches involving minor adaptive responses to internal and external demands; to change that includes radical, revolutionary and transformational changes. Nadler and Tushman (1989) have provided a useful classification of change that can inform the intensity and scope of change management interventions required. Nadler and Tushman propose that there are four types of organizational change: *Tuning*, involving small incremental adjustments made in a proactive manner, *Adaptation*, involving reactive incremental responses to a pressing demand for change, *Reorientation*, involving strategic changes that are major but within the existing frame of the organization especially the values, culture, and done so in a proactive manner to prepare oneself for inevitable challenges in the future and finally , *Recreation*, that is a break from the past involving an entirely new configuration of systems and processes, and therefore the most intense and traumatic for those involved (1989). Transformational changes, with its high intensity, wider scope and associated uncertainty may require more focused and sustained change management efforts with continuous monitoring systems to keep reviewing, revising, and aligning change management efforts to meet the desired objectives and goals, as the risks associated with failure are higher for such changes.

In this paper we are proposing that transformational changes may not bring about the desired results if we do not develop the right performance measures and structured review systems,

especially since large scale strategic changes occur over a longer period of time and score relatively higher in associated uncertainty.

Performance measurement systems have always been in use to assess organizational processes and outcomes. However, while up to the 1970s and early 1980s, traditional past-focused accounting-based performance measurement systems were more in use, their short-term outlook and associated disadvantages were soon realized and in the late 1980s and early 1990s, these have given way to more balanced and integrated performance measurement frameworks with a focus on *lead* and *laggard* measures and internal and external factors (Bourne *et al.* 2000).

Given the dearth of specific Performance Measurement Frameworks for measuring Transformational Change Initiatives, this paper proposes an integrative approach for tracking, reviewing and measuring internal and external alignment during periods of Transformational Changes, to keep the Change on track in accordance with strategic requirements. The framework suggested in this paper falls within the overall framework of the Balanced Scorecard framework as proposed by Kaplan and Norton (1992) and proposes an integrated approach to measuring change as opposed to compartmentalized approaches which are inadequate for sustaining change.

The first part of this paper will review literature on why change efforts fail, with a specific focus on poor diagnoses, internal and external alignment issues and inadequate measurement systems. The paper will then review and compare performance measures and associated metrics that are available for tracking and measuring the progress of Change Initiatives including Total Quality Management based Performance measures, and the self-assessment criteria specified in awards such as Malcolm Baldrige Quality Award (MBQA) and European

Excellence Awards. This section will conclude with a review of the Balanced Scorecard System and how it scores over the other Performance Measurement Tools and the significance of developing integrated measures such as BSC for tracking, reviewing and sustaining changes. The fourth and final section of the paper proposes a step wise approach to large-scale Change-Deployment developed by the authors that focuses on the use of Balanced Scorecard techniques such as Developing Change Themes across Perspectives, Setting Change Objectives, Developing Lead and Lag Performance Measures linked to Change Objectives, identifying key initiatives linked to the achievement of Change Objectives, for evaluating the effectiveness of large scale transformational change efforts, all through applying cause and effect linkages.

## **REVIEW OF LITERATURE**

### **Why Do Change Efforts Fail?**

Evidence indicates that up to seventy percent of change efforts fail in organizations (Beer & Nohria, 2000). A review of literature suggests that Change efforts fail due to three reasons: *first*, the *Need and Context of Change* is not clear because those introducing Changes have not assessed the environmental demands and organizational requirements accurately leading to incorrect choices in Change interventions, thus inhibiting organizations from achieving desired results, although the organizational systems and processes itself may be aligned internally; *second*, Change is *not Implemented* well leading to compartmentalized efforts at bringing about change without paying adequate attention to internal and external alignment issues; and third *Integrated and Accurate Measurement Systems* to track and review changes are inadequate.

### *1. Diagnosing change*

A review of literature suggests that appropriate diagnoses would include reviewing the present state to identify deficiencies and establishing a baseline to compare improvements brought about by the change. Nadler & Tushman (1989) proposed that large scale Strategic Changes are successful only when informed by a thorough diagnosis of the organizations' unique challenges as opposed to 'mimicking' change interventions introduced by other successful organizations without careful thought.

Hayes (2007) has suggested that when radical change is required, focusing on the future state holds special significance and people are more likely to be motivated to change if the diagnoses reveals that existing systems and processes will not help the organization to survive. Hughes (2006) has proposed a change classification framework that lists diagnoses and preparation as an important first step, comprising of a clarification of the nature, context, content, scale, scope of change in addition to an identification of both the 'explicit' and 'implicit' reasons for change. An intensive two year study of large scale transformational changes by Kee & Newcomer (2008) has found that changes often fail because leaders fail to consider complexities of change such as size, scope, associated risk factors, the adaptability of the change initiative in accordance with environmental demands, differing perceptions and desired outcomes of divergent stakeholders and incomplete diagnoses of the socio-political environment including the legal regulations and availability of economic resources, leading to a negative impact on change outcomes.

Various diagnostic models have been proposed which inform the scale and scope of change that helps in identifying gaps in internal and external alignments and thus informs specific

change interventions that may be introduced. Nadler and Tushman (1989) propose that congruence or fit between core internal components of work, people, formal structures and processes and informal structures and processes is necessary to turn strategy into desirable outputs, and one must arrive at the best fit depending on the assessment of one's own strategy and assessment of the nature of the internal elements. Burke & Litwin's model reiterate the significance of internal alignment and posit that large scale transformational changes involve changes to mission, organizational structure, strategy and leadership which in turn will have an impact on tasks, roles, structures, systems, work climate, motivation and performance (1992).

## ***2. Deploying and implementing change***

Available literature suggests that Change efforts can also fail because of poor implementation. The open systems view to organizations posits that organizations are a system of inter-related parts operating in a complex environment, and Changes in any one of the elements, inputs, outputs or processes will have an impact on other elements. In order to benefit from Change therefore, a holistic, synergistic, gestalt approach is recommended by various authors that bring about improvements at a systemic level as opposed to introducing Change in a discrete fashion.

Schneider, Hayes, Lim, Raver, Godfrey, Huang, Nishi & Ziegert (2003) studied the significance of alignment in service organizations and have found that for service excellence, strategic alignment between service strategy, tradition and culture is necessary and this nexus should be supported and reinforced by HR practices, such as selecting and retaining the right people, goal-setting, training, performance management and reward mechanisms. Higgins (2005) has proposed an 8S model, which posits that successful companies reflect a strong

alignment of the seven 'contextual' Ss – structure, systems & processes, leadership style, staff, resources and shared values to facilitate the eighth S – optimal 'Strategic Performance' and 'Strategy Execution' and to reap the benefits of new strategic directions. Higgins also provides evidence that even the best strategy could face problems in execution because of poor alignment between the seven Ss (2005). Four key elements are required for successful transformational efforts, according to Kee & Newcomer (2008) including Change centric leadership throughout the organization, a culture that supports innovation and risk-taking, Change mechanisms such as structure, systems, policies and procedures that support the Change; and using appropriate Performance Measurement Metrics to facilitate Change.

Several studies have indicated that for Change initiatives such as Total Quality Management (TQM) to succeed, it is fundamental that alignment exists between structure, culture, processes, and organizational practices and these support employee behavior in a coherent and consistent manner. For example, Hoogervorst, Koopman & Flier and Zia (2005) report that TQM efforts fail primarily because of failure to perceive TQM as a strategic initiative and because traditional mechanistic structures are incompatible with the culture and processes required to execute TQM, which rests on employee involvement and human centered approaches.

As is evident from aforementioned literature, the significance of assessing gaps in internal and external alignment cannot be overstated for the success of large scale Transformational Changes. However it may be appropriate to caution here that while organizations with strong internal alignments are able to respond faster to environmental demands as compared to organizations with inadequate alignment (Nadler and Tushman, 1989; Siggelkow, 2001) these may also be impediments to change itself. Based on empirical data conducted in a

longitudinal fashion, Siggelkow (2001) has proposed a framework which posits that when confronted with 'fit-destroying change' - environmental change that affects both internal and external alignment, organizations with strong internal alignments are able to respond faster to environmental demands. However 'fit-conserving change'- change that strengthens internal alignment but comprises of incorrect choices with respect to organizational structure, culture, tasks, roles, and policies may reduce adaptability to external challenges thus reducing competitiveness in the long run, Siggelkow (2001). Buchanan, Fitzgerald, Ketley, Gollop, Jones, Lamont, Neath and Whitby (2005) , based on an extensive review of literature on factors influencing sustainability of Change posit that various factors at all levels, individual, group and organizational, influence sustainability of Change, including systemic alignment, cultural issues, process issues and political issues.

The various studies as cited in this section provide further evidence towards making the case stronger for measuring Change deployment in an integrated manner to assess its validity on a periodic basis.

### ***3. Building integrated measurement systems***

Even when the right interventions are chosen and Change is implemented successfully, Change initiatives may still fail to achieve the intended objectives if adequate performance measurement systems are not available at each stage of the Change Process to track and measure change. Not many studies have assessed the role of Performance Measurements in Change, but the few that have, stress the need for developing integrated measures to track and sustain Change. Kee & Newcomer (2008) based on their intensive two year study of large scale Transformational Changes in public and non-profit organizations have found inadequate measurement systems to be a major reason why Change efforts fail. The authors stress that

widespread use of performance metrics can reduce the risks associated with large scale Transformational Changes and appropriate performance data may be used to inform key stakeholders about the scale and impact of Change in addition to reward and reinforce positive Change Outcomes. Similar findings have been reported by Zia (2005) who has stressed the need for regular reviews, audits, documentation and feedback mechanisms during all stages of TQM deployment for TQM efforts to be successful. Johnson, Cassell, Close & Duberley (2001) have reviewed performance evaluation and control systems used to support Change in manufacturing enterprises which, in an increasingly uncertain environment are faced with introducing new , innovative and flexible manufacturing processes. Data revealed that Change initiatives often did not take root because individuals were often rewarded for task behaviors that were not aligned with strategic aims and managerial perceptions of what behaviors are important , Johnson, Cassell, Close & Duberley (2001). This and other studies (Cheng, Dainty & Moore, 2007) reiterate the need to develop comprehensive performance evaluation and control systems to study the complex linkage between inputs, processes and outputs to monitor Change processes so as to identify gaps and to facilitate desired behavior. Hacker and Washington (2004) suggest that since the impact of large scale Changes may not be realized until much later, it may be necessary to have both formative and summative assessments in place to measure the success of change, after ensuring that the change has been implemented appropriately. Although several studies have identified that Change efforts may fail because of inadequate measurement systems, there are very few studies that provide an insight on integrated performance measurement tools that can assist in measuring large scale Change efforts introduced by organizations.

Before we can offer a critical analyses of the performance measurement systems that have been reported to measure change, it may be necessary to first identify the performance measurement systems in general, the key metrics, and the advantages and disadvantages associated with these tools.

### **Key Performance Measurement Systems and Associated Metrics**

The significance of Performance Measurement is vital to organizational effectiveness. Measurement in some form has always been existent in organizations to provide feedback on efficiency and effectiveness of the value-chain activities. Historically the use of financial measures has dominated the use of performance measurement systems in organizations with empirical evidence suggesting that in such organizations, performance on financial measures may lead to a perceptual bias, creating a halo effect, and influencing the manner in which the organization's performance on non-financial measures are interpreted (DeBusk, Killough & Brown, 2005). Tracking parallel developments in performance measurement across various management disciplines including management accounting, operations, marketing, human resource management and corporate strategy, Chenhall & Langfield – Smith (2007) note that traditional profit-based measures such as Return on Investment (ROI) and Economic Value Analyses, have over the years given way to 'holistic' performance measures in the field of Operations Management, in light of developments such as Total Quality Management (TQM) , Just in Time (JIT), Flexible Manufacturing Systems (FMS), Lean Manufacturing and Value Added Manufacturing. The authors have found a similar shift towards integrated measures in the fields of Human Resource Management and Marketing with the former having moved towards innovative and integrated measures such as the 360 degree appraisal and the Human Capital Index and the latter having found strong links between *lag indicators* such as profit,

customer loyalty and customer satisfaction and *lead indicators* of employee satisfaction and quality of goods and services as provided to customers (Chenhall & Langfield-Smith, 2007). Gomes, Yasin and Lisboa (2004) based on an extensive review of literature on the evolution of performance measures in manufacturing industries posit that while traditional cost accounting measures may have been appropriate to a closed-systems view of organizations appropriate till early 1990, with its focus on efficiency, the automated operational phase of the 1990s and the E-commerce stage , post 2000, have placed manufacturing industry in an increasingly dynamic environment , thus making it necessary to understand, track, and measure both efficiency and effectiveness using a systematic, proactive, balanced and integrated measurement approach. Empirical data also suggests that Total Quality based organizations and those winning Quality Awards are more likely to have effective performance measurement tools, with a much higher focus on non-financial measures and process measures, Sinclair & Zairi (1995) and Grosbois, Choisine & Kumar (2008).

A TQM based performance measurement model proposed and validated by Sinclair and Zairi (1995) posits the significance of strategy development and deployment in a step-wise fashion with a clear definition of the critical success factors and key performance indicators, and rewarding superior performance. In addition, Sinclair and Zairi also note that process owners should actively identify and map the value-chain activities, translating these into objective and measurable performance indicators , appraising and managing individual performance with a focus on continuous improvement , feeding and integrating the results from broader “break-point” performance assessment techniques such as activity-based costing, and benchmarking, in addition to integrating the results from self-assessment techniques such as Malcolm

Baldrige Award Criteria and European Quality Award Criteria into overall performance measurement processes at the organizational and process level (1995).

Awards such as the Malcolm Baldrige Quality Award (MBQA), established in 1987 with performance criteria arranged in a hierarchical order to form an integrated performance management system overlapping a variety of functional disciplines including Leadership, Strategic Planning, Customer and Market Focus, Information and Analyses, Human Resource Focus, Process Management and Business Results (Ford & Evans, 2000) and the European Quality Award, based on EFQM criteria, established in 1992, have further provided organizations with a 'holistic framework' for self-assessment to bring about sustainable performance improvements in an integrated manner (Nabitz & Klazinga, 1999, Calvo-Mora, Leal & Roldan, 2006). Empirical evidence suggests the significant and important role played by the 'Enablers' in the EFQM primarily Leadership that drives *Policy* and *Strategy* which will then be executed through *People, Partnership* and *Resource Allocation* and *Processes* (Calvo-Mora, Leal & Roldan, 2006).

While these quality-based assessments are a step forward in performance measurement and supports organizational assessment as a whole, they are not integrated systematically with an organization's strategy thus preventing successful strategy execution, and it is here that the Balanced Scorecard Framework scores over these earlier measures. Wongrassamee, Gardiner and Simmons (2003) have compared EFQM and BSC approach on core dimensions such as Objectives, Strategies and Plans, Targets, Rewards and Feedback and note that while both approaches are flexible and non-prescriptive, EFQM focuses on multiple objectives based on TQM principles and does not address strategies while BSC focuses on multiple objectives based on desired corporate strategy. In addition, BSC supports Strategic Alignment through

'Strategy Maps' that connect each measure to strategy thus helping an organization establish cause and effect linkage between measures and strategic outcomes.

Kaplan & Norton (2004), based on data from more than three hundred organizations posit that more than seventy-five percent of a company's long-term value is produced by intangible assets such as people, values, and culture, and therefore performance measurement systems that only focus on financial outcomes, may not be able to capture the essence of the value-creation process in organizations. Kaplan & Norton (2004) provide evidence from numerous organizations that Strategy-focused organizations using BSC frameworks are able to execute their strategy more successfully as compared to those that don't. The BSC systematically links lag indicators or outcomes with lead indicators or drivers through cause and effect linkages thus providing a holistic view of the value-creation process. The framework posits that objectives, measures, targets and initiatives are to be established from four perspectives, including *laggard indicators* such as Financial Performance and Customer Satisfaction, Retention and Growth, and *lead indicators* such as Internal Business Processes which has implications for Customer and Financial outcomes and an organization's intangible assets , Learning and Growth Perspective, that when improved and aligned leads to improvement in Internal Business Processes , which will then be a driver for customer satisfaction and shareholder value (Kaplan & Norton, 1992, 1996, 2004).

Empirical evidence from organizations that have used the Balanced Scorecard to measure performance have reported that strategy-focused organizations have found the BSC to be a useful tool to translate vision into strategy. For example, using a longitudinal quasi-experimental approach Davis & Albright (2004) reported that financial benefits were significantly greater for banks that used the BSC (with its focus on both financial and non-financial measures linked

through systematic cause-and-effect linkages) and significantly 'outperformed' other banks that did not use such a system. Empirical evidence collected from 125 firms over a period of five years by Bryant, Jones & Widener (2004) suggests that value creation processes in organizations are 'complex' with value resulting from complex interlinkages between the four basic dimensions of Learning and Growth, Internal Business Processes, Customer Perspective and Financial perspective, with the outcome of each perspective having an impact on the outcomes of all higher level perspectives.

Kaplan and Norton (2008) in their book 'The Execution Premium' have provided a systems model that links operations with strategy through feedback loops, thus supporting strategy-focused organizations to execute their strategies. The six stages in the model include *first*, the development of strategy, *second*, planning and articulating the strategy using tools such as strategy maps and balanced scorecards, *third*, Aligning the organization with the strategy at each level of the organization, *fourth*, planning the operations and setting priorities with the help of various process improvement tools, *fifth*, monitoring and reviewing the execution, and *sixth* testing and adapting the strategy with the help of operational data, thus providing a comprehensive feedback about the cause and effect linkages in an integrated manner (Kaplan & Norton, 2008).

The significance of having integrated performance measures clearly linked to strategic objectives is highlighted in this section with empirical evidence. While organizations have evolved in their measurement systems moving from financial to integrated measures, of these integrated measures, BSC is suggested as a more complete measurement system based on evidence because it not only provides data on a combination of lead and lag measures (which many of the TQM based measures also provides), but in addition, links them systematically to strategy through

cause and effect linkages thus facilitating strategy execution. Thus it may be suggested that Strategic Changes may benefit from having integrated measurement tools such as the Balanced Scorecard that can provide information about key aspects of the Change process itself.

### **Performance Measurement and Change Management**

While the academic and practitioner rhetoric on Change Management highlight the significance of measuring and sustaining Change, a systematic approach to measuring Change and empirical evidence related to the same is limited. For example, Chan (2004) surveyed administrators of 132 local governments in the United States of America and 52 municipal governments in Canada, and found that only fourteen (7.5%) municipal governments reported having implemented the BSC and 80% reported that while they did have measures on various performance perspectives such as financial performance, operating efficiency, customer satisfaction, employee performance, these were financial measures and majority reported not having developed any performance measure for innovation and Change. Chenhall & Langfield – Smith (1998) report that while performance measurement systems are considered very important to measure the impact of Change, lack of integrated performance measures with a balanced focus on both financial and non-financial measures can limit their impact on achievement of dual strategic outcomes that focus on customer satisfaction and cost reduction. Results of this study also found that organizations that had ‘accounting champions’ to promote accounting innovations were able to generate support among senior management for the involvement of accounting in Change programs and for assisting in the development of Performance measures that focus on ‘soft’ and ‘hard’ performance measures (Chenhall & Langfield – Smith (1998)). Hacker & Washington (2004) report that while there are several studies that document why Change efforts fail, there are not many performance measurement tools available that can assist

in measuring large-scale change efforts, a finding supported by Neely *et al.* (1996). In the context of introduction of a new performance management system in the government of Botswana, Hacker & Washington, have proposed six focus points to assess the implementation of large scale Change efforts, that includes *first* establishing *well defined key result areas and goals* to ensure that goals are aligned with the vision, are appropriate, and measurable with specific targets, *second, well defined objectives*, linked to specific key result areas, long-term and annual targets, action plans to achieve the goals, *third, well-defined measurement systems*, with time-series data to be collected from reliable data sources and change agents who understand this data so that they can be interpreted appropriately, *fourth, periodic reviews*, and appropriate follow-up mechanisms for continuous improvement, *fifth*, visible, well-defined and well-communicated performance management systems with specific accountabilities for key change agents concluding with *sixth*, documentation and institutionalization of best practices (2004).

While the various studies as reviewed posit the significance of Performance measurement in Change programs, availability of an integrated approach that can help measure the effectiveness of large-scale Change deployment and its progress with respect to internal and external alignment across various levels in the organization is limited.

### **PROPOSED APPROACH TO MEASURING TRANSFORMATIONAL CHANGE – APPLYING THE BSC FRAMEWORK**

This paper proposes a conceptual approach for evaluating the effectiveness of Transformational Change interventions in organizations by drawing on some of the techniques of the *Balanced Scorecard* (BSC). The fundamental assumption behind developing this framework is that all Transformational Changes will be Strategic Changes as it has to serve some Strategic purpose and should be supporting the new Strategic goals and strategies of the organization. We propose

therefore that measurement of Transformational Changes will have to be done in an integrated manner to understand the key linkages between micro and macro dimensions of the organization impacted by the Change and must be continuously aligned with the strategic goals of the organization (Cassell, Close & Duberley, 2001; Hacker & Washington, 2004; Zia, 2005; Cheng, Dainty & Moore, 2007; Key & Newcomer, 2008), and therefore the rationale for applying the techniques of the Balanced Scorecard in our proposed framework on measuring change (Chavan, 2009; Kaplan & Norton, 2008; Chen, Dainty & Moore, 2007, Hayes, 2007; Davis & Albright, 2004; Bryant, Jones & Widener, 2004; Chan, 2004; Hacker & Washington, 2004; Chenhall & Langfield-Smith, 1998) The BSC framework highlights the significance of linking measurement systems to Strategic Objectives and scores over traditional performance measures with its emphasis on alignment, cause and effect relationship and focus on both *Lead* and *Lag* Measures, in addition to focusing on the four perspectives of Financial, Customer, Internal Business Process and Learning and Development which is at the core of the BSC framework (Kaplan & Norton, 1992, 1996, 2004, 2008)

### **Proposed Approach for Tracking and Evaluating the Impact of large scale Change Deployment Processes:**

Stage 1: Aligning Change Initiatives with an accurate Diagnoses of the need for change

Stage 2: Proposing a Change Deployment Approach based on the Balanced Scorecard Framework and developing Performance Measures for tracking and evaluating Transformational Change

#### **Stage 1: Aligning Change Initiatives with an Accurate Diagnoses of the Need for Change**

Based on a review of literature (Hayes, 2007; Hughes, 2006), we can propose that any transformational change model should begin with the question - *What is the need for change and*

*where is this need arising from?* Organizations wherein changes are initiated without an accurate analysis of contextual relevance will certainly fail as the change initiatives are not aligned with the real needs of the organization (Kee & Newcomer, 2008; Nadler & Tushman, 1989). This need may arise either for effective fulfillment of the vision, mission and strategic direction or they may be propelled by a need to redefine the vision, mission and strategic direction itself for realigning oneself with the market realities. Whereas in the former the need for Transformational Change arises from the internal dynamics and processes or rather lack of it, in the latter case the need for Change arises more due to the external factors, such as major shifts to the economic, social, legal and technological environment, that is turning the existing vision, mission and strategic direction of the organization as redundant, obsolete or out of synch with external requirements. This contextual identification is important in terms of identifying the framework for organizational diagnoses. The organizational diagnoses accordingly must be directed to answer two primary questions: *First*, what should be the strategic directions for the Change and *second*, how the same is going to be achieved. This would help in selecting the right Change Model/Initiative. Once we have selected the Change Model/Initiative to bring about Transformational Change the organization needs to evaluate the *organizational preparedness* for the same to complete the alignment process from the identification of need for Change to the rolling out of the Change Model/Initiative (Higgins, 2005; Hoogervorst, Koopman & Flier, 2005, Schneider, Hayes, Lim, Raver, Godfrey, 2003) The steps as described above are illustrated in Figure 1.

**INSERT FIGURE 1 ABOUT HERE**

**Stage 2 - Proposing a Change Deployment Approach based on the Balanced Scorecard  
Framework for tracking and evaluating Transformational Change**

Once the Change model has been identified and Organizational Preparedness is aligned, it is proposed that the Change-Deployment process can be initiated in line with the Balanced Scorecard Deployment process. In order to do so it is important to first understand the Balanced Scorecard Deployment Framework and then attempt to build the Change Deployment Process in a way that it captures the key dimensions of BSC Deployment Framework.

The Balanced Scorecard (BSC) Framework proposed by Kaplan & Norton “provides executives with a comprehensive framework that can translate a company’s vision and strategy into a coherent and linked set of performance measures” (1996, p.55). The BSC framework proposes a structured, methodical and detailed process of Strategy Deployment in a way that the Strategy gets linked to Performance Management Systems of the organization through the four perspectives, Financial, Customer, Internal Process and Learning and Development, the key steps being systematic development of themes and objectives in each perspective and developing performance measures for each of the objectives. The entire process gets systematically aligned through cause and effect linkages at each stage. One of the key contributions of this framework is the concept of laggard and lead indicators/measures. The framework suggests that instead of tracking the performance of the Business through traditional outcome based financial measures called *Lag Indicators* (Kaplan & Norton 1996, 2004), the organization must track the same by also measuring the intermediate outcomes and the output measures called *Lead Indicators* that drive these outcomes or Lag Indicators, thus providing a regular monitoring and reviewing mechanism for future improvements. The core/generic outcome measures as explained by Kaplan & Norton (1996) “tend to be lag indicators such as profitability, market share, customer satisfaction, customer retention, and employee skills” (p.149). However, to ensure that the outcome measures are attained they have suggested measures that lead to the attainment of

outcome measures which they have called lead indicators/measures and have been defined as the 'Performance Drivers'(p.149) Kaplan & Norton (1996) also proposed that measuring organizational performance through BSC helps in clarifying, communicating and aligning strategic initiatives across the whole organization and this is achieved through developing systematic cause and effect linkages, thus breaking down vertical or horizontal barriers in strategy implementation. In operational terms, Strategy is broken down into three to five strategic themes which are called *pillars of excellence* (Rohm, 2008 a, 2) These strategic themes straddle across the four perspectives, and is further broken down into smaller strategic objectives in each of the four perspectives to manage each theme better. The entire process, from breaking the strategy into strategic themes, to linking the performance measures (lead and lag), is linked together through systematic cause and effect relationship in the form of a Strategy Map (Rohm, 2008 b).

### **Deployment of Transformational Change**

Transformational Changes, as has been emphasized by academics, researchers and practitioners alike, cannot be deployed without having a well thought-out plan or strategy, not only due to its sheer size and complexity but also because of the dynamics involved in the deployment of the same. Based on various studies as cited in this paper (for example, Kee & Newcomer, 2008; Hayes, 2007, Cheng, Dainty & Moore, 2007; Cassell, Close & Duberley, 2001; Buchanan, Fitzgerald, Ketley, Gollop, Jones, Lamont, Neath & Whitby, 2005; Higgins, 2005; Kotter, 1980; Burke & Litwin, 1992; Hoogervorst, Koopman & Flier, 2005) we can propose that certain key elements are critical to effective Change deployment process :

#### **1. Clarity of Purpose and Contextual Relevance**

2. Criticality of Alignment *internally* between Structure, Culture, Process, Strategy, Task, People, Technology and *externally* with the Market and the general Environment.
3. Managing the People side of Change, and
4. Constant Monitoring and Periodic Reviews, which necessitates Development of Effective Performance Measures for doing the same.

This paper postulates that in order to achieve the above stated dimensions of Change Deployment process, it is necessary to develop a step-wise, structured and methodical approach for improving and sustaining the efficacy of initiatives in each segment.

### **Proposed Approach**

Drawing from the key dimensions of the Balanced Scorecard Deployment Process and the Change Deployment Process as indicated in the previous section, we propose the following steps to ensure the effective deployment of transformational changes.

Step 1: Framing the Desired final Outcomes expected to be achieved from the Change Deployment and the Strategy for achieving the same. This step will involve two sub-steps including:

- a. Defining the intended Outcomes/Results expected from Change within the specific Time-Frame.
- b. A Strategic Approach to achieving the desired Change Outcomes/ Results in the most effective way, meeting all specified parameters.

Step 2: Breaking the Strategic Approach into Change Themes and linking it to Key Results that capture the critical essence of the outcomes desired from Change.

The Strategic Themes should be able to clearly articulate the specific directions the organization must focus on during the Change implementation in order to deliver value to its divergent stakeholders.

Step 3: Breaking each Change Theme into manageable Change Objectives.

Change Themes being broad are difficult to measure as is the case with the Balanced Scorecard. Accordingly it needs to be broken down into manageable Change Objectives which can be monitored and reviewed against specific performance measures.

Step 4: Develop Performance Measures for each Change Objective.

Specify Performance Measures, both Lead and Lag against each Change Objective, both *generic* that applies across all units and departments and *specific* to the needs of each unit and department.

Step 5: Aligning the Change Outcomes, Change Themes/Results, Change Objectives and Performance Measures developed for Change Deployment through an integrated Cause and Effect Analyses at each level.

Internal and external alignment is particularly significant at all stages in Strategic Transformational Change to reap the benefits from change.

### **INSERT FIGURE 2 ABOUT HERE**

Clarity about what end-result the Transformational Change will bring is the first step necessary to reap the benefits of the Change proposed (Figure2). While considering Large Scale Transformational Changes, the most important requirement is to clearly articulate in the very beginning, the final Strategic Outcomes desired through the entire Change Deployment exercise.

Following in the footsteps of Balanced Scorecard Framework, once the desired final Outcome from Change is clearly understood and articulated; the next steps are firming up of the

Strategic Direction and Deliverables, which may be stated as Change Themes and Change Results. It is critical that Change Themes are developed in such a way that it captures the critical essence of the desired final outcome of the Change and the strategic direction it should focus on to meet the expectation of all stakeholders.

Change Objectives are then proposed as the next critical step in the process of deploying strategic transformational changes. The purpose of developing objectives is primarily to break the themes into meaningful, manageable and measurable components which will help in accomplishing the articulated Change themes. What is debatable however is whether these objectives of Change should always be developed for each of the Four Perspectives of Financial, Customer, Internal Business Process and Learning and Development as is the case with Balanced Scorecard Deployment or is there a case for developing objectives in a direct and simpler way.

Chavan, based on empirical evidence from multinational organizations reports that organizations that have implemented the BSC did so because they needed an integrated and flexible performance management system that could provide information on all key dimensions of the business in an integrated manner and this enabled them to successfully execute their strategy (2009). However the multiple measures of the BSC may also pose a challenge to decision-makers with evidence showing that managers might give more weighting to 'common measures' and underemphasize or in some cases ignore 'measures' that are unique to particular units, as managers involved in decision-making have not developed these measures and therefore may lack an understanding of the same (Lipe & Salterio, 2000). In addition, a major challenge faced by large organizations that have deployed Balanced Scorecard, include capturing, collating, analyzing, and generating the required data to create reports for effective monitoring and review

of the processes in view of multiple objectives against each theme in each perspective and at different levels of the organization. Over the years this issue has been addressed by automating the deployment processes and development of a number of resultant software (Marr & Neely, 2003).

It is therefore posited that organizations looking for a simpler and manageable approach for developing effective measures to track Change have an option to develop Change Objectives directly from Change Themes without relating to Four Perspectives of Balanced Scorecard.

In case of organizations that have already adapted the BSC framework or are intending to opt for the same, it may be preferable to develop Change objectives in a similar framework using the four perspectives. For other organizations, an alternative approach may provide a simpler and at the same time a rigorous process of developing performance measures by developing Change Objectives directly from Change Themes without reference to the four BSC perspectives (Figure 3). In either approach, it is necessary to establish systematic cause and effect linkages vertically between objectives and measures and horizontally among objectives and among measures

**INSERT FIGURE THREE ABOUT HERE**

Cassell, Close & Duberley (2001) report that performance evaluations and control systems must be developed to study the complex linkage between inputs, processes and outputs, and the evaluation and control system at one level must be matched to the other two levels to facilitate the execution of desired behavior for the change to take root. We propose that once the Change themes have been translated into Change Objectives, Performance Measures are to be developed for each Change Objective for continuous monitoring and evaluation of the Change Processes designed to achieve the Change Objectives. While developing Performance Measures, we also have to ensure that they are neatly tied to Change Objectives and explicitly defined in terms of

process owners and unit of measure linked with collection, frequency, data quality, expected value, threshold for better than expected performance and lower than expected performance, all of which are valid to ensure measurement of the right things in the right way at the right time. Above all, these measures must provide useful management information for effective analyses and decision-making regarding change initiatives. One of the key learning from Balanced Scorecard Framework is the concept of Lag and Lead measures which are linked to measuring outcomes versus key drivers for achieving the outcomes.

The indicators/measures could be core outcomes, intermediate outcomes that will lead to these core outcomes and outputs that we desire from change. Outcome measures, by definition, are measures which can be achieved at the end of the measurement cycle that can take quite long to achieve and in the absence of performance drivers or lead indicators/measures will be difficult to be tracked and therefore the need for intermediate outcomes and outputs. Chen, Dainty & Moore (2007) report that performance management systems when aligned with organizational goals can help in developing and sustaining competencies to facilitate change and continuous feedback processes that monitor and evaluate all stages of change implementation can help address the gaps in a timely manner. It is proposed here that once the intended Change Objective is clarified it is important to establish targets and timelines according to benchmarked standards. As specified in BSC, specific initiatives must be articulated to achieve these targets and appropriate resource allocation must be ensured in addition to having specific tools, to measure whether these targets are achieved or not and if not, address the gaps accordingly. As is specified in the various change models, external alignment also must be ensured at all times since organizations are operating in a dynamic environment and therefore a constant assessment of outcomes and outputs is necessary at all stages of deployment so that these may be revised to ensure alignment.

Our proposed approach concludes with a final step of ensuring Alignment across the Change initiatives horizontally and vertically not only at the beginning of the Change Initiative but also continuously through a double loop feedback process to ensure the continuity and integrity of the total approach. This final step which is a continuous process in the Change Deployment Strategy will ensure alignment across the various Change initiatives in the organization such that the Change gets implemented in a coherent and integrated manner , the significance of which has been emphasized by several authors.

## **CONCLUSION**

This paper proposes a conceptual framework for tracking and evaluating the impact of large scale change interventions in organizations by drawing on the some of the techniques of the *Balanced Scorecard framework* (BSC). Most of the large transformational change initiatives are introduced to break away from the past and therefore involves in most cases questioning the very assumptions the organizations are based on. In addition, all transformational changes are strategic changes and involve some changes to vision, mission, strategy and culture (Nadler & Tushman, 1989; Burke & Litwin, 1992) in the face of current and future macro realities impinging upon the organizations. More often than not such transformations may not only require in most cases a recreation of the vision, mission, strategy, structure and culture, but in addition may require the realignment of the same at a systemic level both internally and externally in order to achieve strategic results through assessing and addressing gaps in alignment in a timely manner (Buchanan, Fitzgerald, Ketley, Gollop, Jones, Lamont, Neath & Whitby, 2005; Siggelkow, 2001; Huang, Nishi & Ziegert, 2003; Nadler & Tushman, 1989). Addressing a gap in available literature, this paper proposes a systematic and integrated approach to track and review large scale Transformational Change by drawing on the core dimensions of

the BSC approach. It is recommended that an application of the suggested framework in the context of large-scale transformational changes in organizations will provide evidence related to the validity of the proposed approach in addition to providing further directions for future research.

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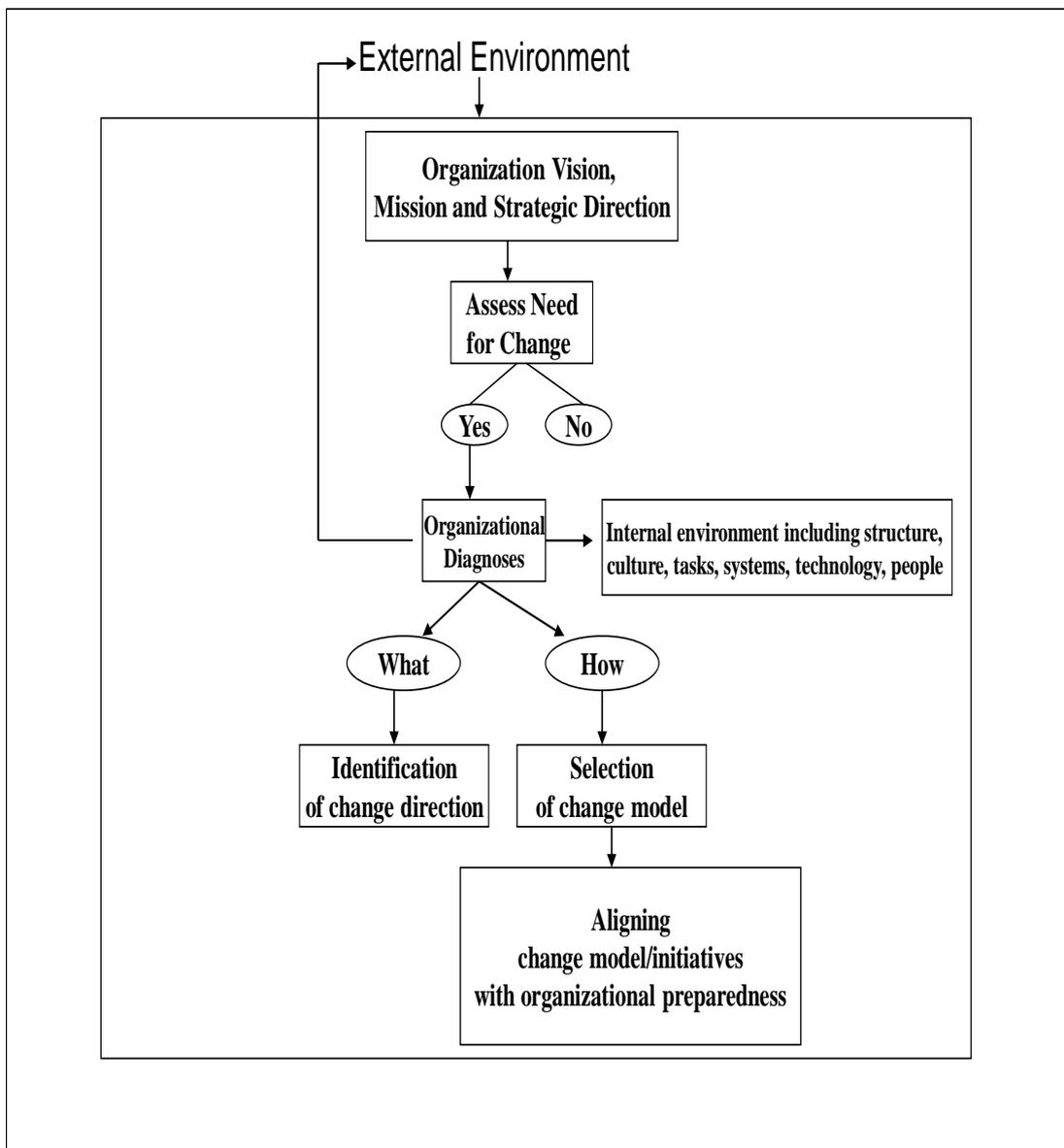
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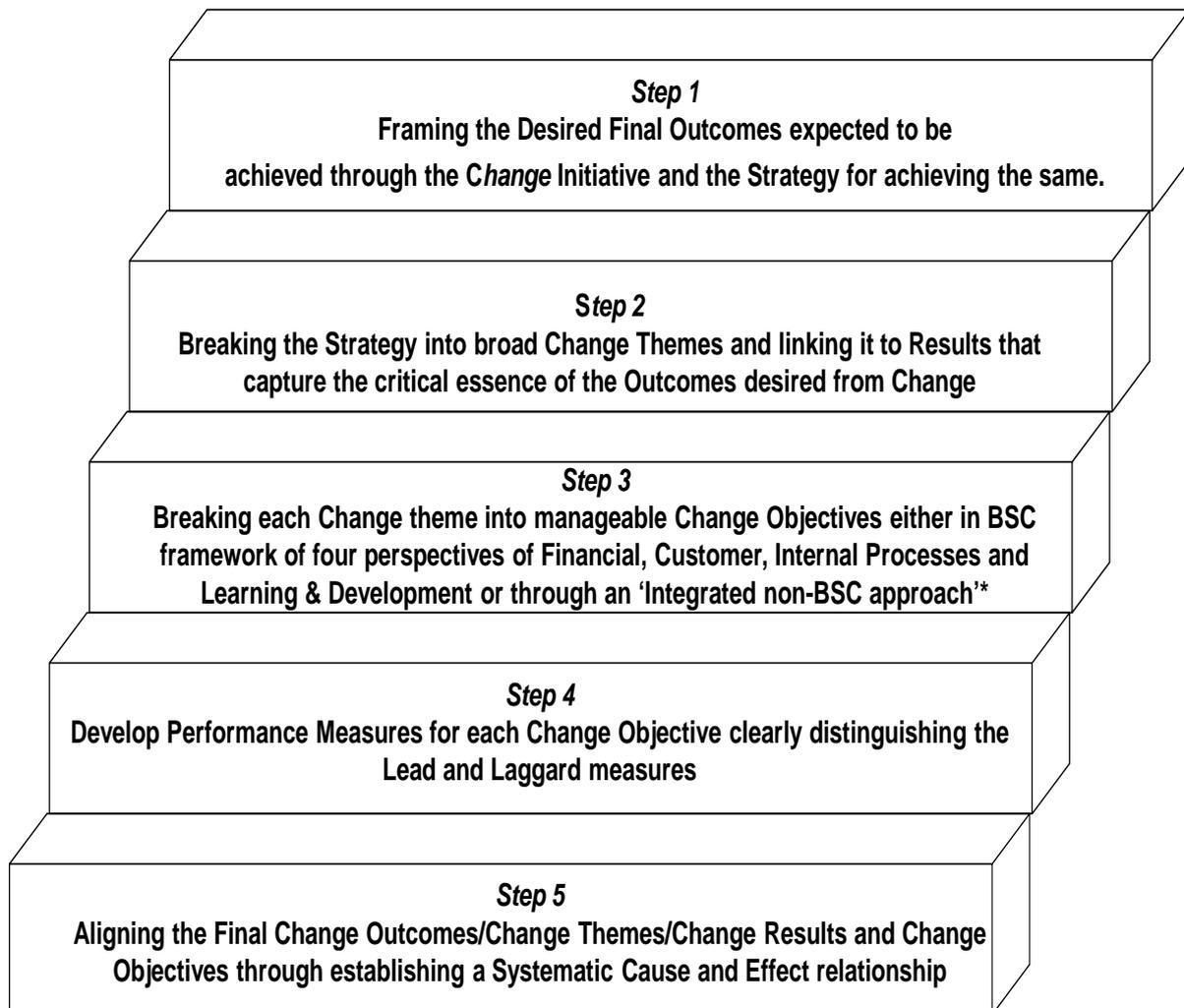
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**FIGURES**

**Figure 1 - Aligning Change Initiatives with an Accurate Diagnoses of the Need for Change**



**Figure 2 - Change Deployment Strategy based on Balanced Scorecard Deployment**



**\*Figure 3: An Integrated non-BSC approach to Change Deployment and Measurement**

