



**BRITISH ACADEMY
OF MANAGEMENT**

BAM
CONFERENCE

3RD-5TH SEPTEMBER

ASTON UNIVERSITY BIRMINGHAM UNITED KINGDOM

This paper is from the BAM2019 Conference Proceedings

About BAM

The British Academy of Management (BAM) is the leading authority on the academic field of management in the UK, supporting and representing the community of scholars and engaging with international peers.

<http://www.bam.ac.uk/>

‘AHEAD OF THE CURVE’: ORGANIZATIONAL CHANGE AND BALANCED SCORECARD PREDICTS ORGANIZATIONAL EFFECTIVENESS

Zareen Husain Farooq

Department of Business Administration, Aligarh Muslim University, Aligarh, India.
zareenusainfarooq@gmail.com

Ayesha Farooq

Department of Business Administration, Aligarh Muslim University, Aligarh, India.
a.farooq.bm@amu.ac.in

Abstract: This research paper proposes a model to analyze the influence of organizational change and Balanced Scorecard on organizational effectiveness. The nature of relation among organizational change, Balanced Scorecard and organizational effectiveness has been observed. This study presents three contributions to the theory of organizational change through Balanced Scorecard. Firstly, it explicates the relationship between organizational change and organizational effectiveness. Secondly, the results assert that Balanced Scorecard has been accepted as a fast becoming a crucial process for corporate change and lastly, business organizations recognize Balanced Scorecard as a predictor of organizational effectiveness. This research article reminds leaders the need for discovering the route to successful and inspiring organizational change, Balanced Scorecard and eventually, organizational effectiveness.

Keywords: Organizational Change, Balanced Scorecard, Organizational Effectiveness, Influence, Predictability

INTRODUCTION

Prior literature suggests that organizations have been exposed to comprehensive environment transformation (Ghoshal, 1987), with more competitive surroundings (David, 2006), further complicated by technological changes (Connor, 1992; Wanberg & Banas, 2000) and a volatile financial surroundings (Hoskisson et al., 2000). The rate of change has turned higher than before (By, 2005) and for the sake of continued existence, organizations focus on anticipating with an aim to adapt to such reorganization (Kuhn, 1970; Drucker, 1999; Ford & Gioia, 2000; Johansson, 2004; Friedman, 2005; Turner et al., 2009). This is achieved mainly through strategic organizational redesign (Greenwood & Hinings, 1988) which entails revising ethnicity of organization (Gilmore et al., 1997). In relation to expansion of business, organizational change has been analyzed as a progress of an organization from the subsisting plateau to a preferred future state to escalate organizational effectiveness (George & Jones, 2002; Cummings & Worley, 2005). With reference to efficiency of employees, organizational change is expected to influence personal development and organizational routine positively (Zeira & Avedisian, 1989; Robertson & Seneviratne, 1995).

Balanced Scorecard is an outline that assists companies construe strategy into operational objectives which persuades conduct as well as performance (Kaplan & Norton, 1996c). Balanced Scorecard indicates balanced cogitation assigned to long and short-term objectives, financial and

non-financial measures, leading and lagging indicators and external and internal performance perspectives (Kaplan & Norton, 1996b, 1996c; Hendricks et al., 2004). Researchers hint that Balanced Scorecard should be employed as a component of strategic management system that bonds mission, vision and values of organization (Kaplan & Norton, 1996c). It helps crafting future with outlook, objectives and propositions that are clearly drawn to notify and encourage constant attempts for advancement. There are four dimensions of performance across which the measures and objectives are distinguished: financial, customer, internal business process and learning and growth. The financial performance measures condense the measurable economic outcomes of actions taken in the past (Kaplan & Norton, 1996c). Typical financial goals are related to profitability determined by operating income, economic value added or return on capital employed (Kaplan & Norton, 1996c). Organizations even build corporate mission centered upon customers (Kaplan & Norton, 1992a). “Clearly, if business units are to achieve long-run superior financial performance, they must create and deliver products and services that are valued by customers” (Kaplan & Norton, 1996c, p. 63). Further, a comprehensive internal-process value chain begins with transformation activity (recognizing present and future needs of customers and building new solutions to fulfill these needs), continuing during operations process (distributing available products and resources to buyers) and ending with post sale services. Organizations may also regularly learn and upgrade processes, equipments and research and development to produce brand new products with additional features (Kaplan and Norton, 1992a).

RELEVANCE OF THE STUDY

Although, studies embrace the alliance between change interventions and organizational effectiveness and also, the implication of organizational change and Balanced Scorecard to construct efficient organizations, only some academic researches discuss outcome of Balanced Scorecard usage on organizational change and organizational effectiveness (Ittner & Larcker, 1998). Sometimes, there is need to confirm relationships methodologically rather depending upon theoretical opinions and recommendations. Review of literature discloses lack of assessment of organizational change and Balanced Scorecard based on reliable and valid research tool. This research article serves as a proposal for business organizations to unveil and believe in the predictability that organizational change and Balanced Scorecard may influence organizational effectiveness. It seeks to answer the following three major questions: 1. Is organizational change predictive of organizational effectiveness? 2. Does Balanced Scorecard influence organizational change? 3. Is there a relationship between Balanced Scorecard and organizational effectiveness? This discourse presents a synthesis of statistical analysis and comprehensive review to interpret and sense the relation among organizational change, Balanced Scorecard and organizational effectiveness. A reliable and valid questionnaire has been developed to measure dimensions of organizational change and Balanced Scorecard. The role of aspects of organizational change (technological, social, leadership and structural) and Balanced Scorecard (financial, customer, internal business process and learning and growth) is empirically tested. The issues, groundwork and preparation to deal with change in technology, society, leadership and structure in the organization are presented. Also, the idea behind each perspective of Balanced Scorecard is discussed. The leaders are provided with real scenario which they may refer to while building choices to counter unpredictable settings. This research may be used to

appraise organizational change and Balanced Scorecard prevailing in organizations and link these with organizational effectiveness.

ORGANIZATIONAL CHANGE AND BALANCED SCORECARD AS PREDICTIVE OF ORGANIZATIONAL EFFECTIVENESS

History reminds that monumental victories of Alexander, Napoleon, Hitler, Stalin and Rommel were the outcomes of plans on battlefield with response to unforeseen circumstances (McNeilly, 2003; Rempt, 2003; Duffy, 2004). The redesigning copiers by Xerox had been outlined by Brown (2002). The Internet companies like eBay, Amazon.com and America Online perceived prerequisite to manage the changes connected with expeditious entrepreneurial growth. Huerta (2008) studied the idea of receptivity to describe the application of managing change in six OECD countries: Finland, France, Italy, Portugal, Spain and Switzerland. These nations assumed crucial development schemes together with changes in organizational culture. It modernized managing public service and addressing mounting expectations of society with limited financial resources and political constraint. Kotter (1996) implicitly encouraged professionals to transform businesses systematically and logically. Latest scientific data and technological expansion cause momentous change in business domain (Burton & Thakur, 1998). Further, corporate culture suggests manner in which employees' associate with each other, customers, business partners and shareholders (Fairbairn, 2005). Although, according to the life cycle theory, structural transformation results in prosperous organizations (Kimberly & Miles, 1980; Hannan & Freeman, 1984), there is not one precise way to restructure which indicates change in organizational structure in accordance with modifications in setting (Kazmi, 2002).

Organizations employ innovative strategies to identify with the requirement for a comprehensible measurement framework and regard Balanced Scorecard as an influential means to motivate change ideas while contributing to organizational competence (Kaplan & Norton, 1996b). In recognition to this change, several years ago, Kaplan and Norton (1992a) found the concept of Balanced Scorecard as imperative tool to rebuild organizations. There are four dimensions of performance across which measures and objectives are viewed: financial, customer, internal business process and learning and growth. Each perspective carries objectives which are spread throughout organization and illustrated on strategy map (Kaplan & Norton, 1996c). It also demonstrates how strategic goals can be broken down into measurable elements (Groene et al., 2009). Extensive usage of Balanced Scorecard is related to better performance but this association does not depend largely on size of organization, market position or product life cycle (Hoque & James, 2000). This arrangement offers a parallel hint of leading and lagging factors of performance assessment, financial and non-financial, internal and external business, quantitative and qualitative measurement, as elements of performance measurement reaches business strategy, missions and goals (Barsky & Bermser, 1999; Huefner, 2002; Fletcher & Smith, 2004). Ahn (2001) explained that applying Balanced Scorecard framework not only adds considerable support in recognizing performance goals, but achieves benefits in administration, such as scheduling and budgeting of strategy-based actions and contributing to strategy communication.

Past observations focusing on various firms established Balanced Scorecard as a productive mechanism to focus and sustain continuous efforts for advancement (Kershaw & Kershaw, 2001;

Brewer, 2002; Gumbus & Lyron, 2002). Colleges and universities employ Balanced Scorecard and evolve frameworks to measure institutional effectiveness on macro-level (Ruben, 1999; Karathanos & Karathanos, 2005). Balanced Scorecard extends measurement system to university administrators that not only connects with policy and mission, but also function as a learning model to conserve sustained advancement. Pienaar and Penzhorn (2000) released Balanced Scorecard model for facilitating rearrangement at an academic library at University of Pretoria in South Africa. It addressed major structural changes along with a series of up gradation in performance contributing to long-term competitive benefits. Joshi (2001) surveyed 60 large and medium-sized Indian manufacturing organizations. It was found that out of 53, 24 firms accepted Balanced Scorecard as a performance management tool. A review of management techniques declared Balanced Scorecard to be one of the mainly approved management devices, with around 44 percent of the organizations utilizing it in North America (Rigby, 2001). The Dutch media statements promoted Balanced Scorecard as “a real trend” (Koning & Conijn, 1997, p. 36), being “a true hype” (Hers, 1998, p. 19) and “a self-respecting organization apparently can no longer do without the Balanced Scorecard” (Van den Heuvel & Broekman, 1998, p. 23), commend that Balanced Scorecard is an influential administrative innovation among diverse organizations in Netherlands during late 1990s (Braam et al., 2007).

In sum, organizational change is predictable to set rewarding influence on individual growth and business practices (Zeira & Avedisian, 1989; Robertson & Seneviratne, 1995). Literature is present in the context of organizational change and Balanced Scorecard. However, a substantial reports links Balanced Scorecard with organizational culture (Kaplan & Norton, 2001; Bititci et al., 2004; Kaplan & Norton, 2004; Halachmi, 2005; Hammer, 2007; Rigby & Bilodeau, 2007). The need for employing integrated and strategic performance management tool to determine and conduct process of organizational change has also been found in writings (Grieves, 2010). Although, few studies are identified linking organizational change and Balanced Scorecard in limited areas, there is a dearth of research appreciating this association empirically.

The core purpose of this research article is to assess the relationship among organizational change, Balanced Scorecard and organizational effectiveness. It illustrates the perception of business organizations towards application of organizational change and Balanced Scorecard. After review in reference to organizational change, Balanced Scorecard and organizational effectiveness, the research hypotheses are proposed in the following terms:

Hypothesis 1: Organizational change has a positive influence on organizational effectiveness.

Hypothesis 2: Balanced scorecard has a positive influence on organizational change.

Hypothesis 3: Balanced Scorecard has a positive influence on organizational effectiveness.

METHODS

Research Instrument

On the basis of broad literature review, a research instrument was designed for data collection. After pilot study and necessary modifications, it was used to gather data from the study sample. The reliability and validity of the research tool was determined. The value of Cronbach’s alpha for the research instrument and every construct was more than 0.700. The variables with low factor loadings (less than 0.400) were removed and the instrument was filtered. As a

consequence, the final questionnaire was left with 45 statements. The instrument was developed on a five-point Likert scale. Following the concluding data collection, the valid responses turned out to be 105. Four constructs for organizational change were technological change, social change, leadership change and structural change. The four constructs classified for the Balanced Scorecard approach were financial, customer, internal business process and learning and growth.

Unit of Analysis and Sample Size

This study revolves around the practices of organizational change and Balanced Scorecard that are pursued by organizations which intend to keep pace with the changing needs. Fortune 500 companies are regarded as to be responsive to the changes occurring in the business surroundings and approving new skills to deal with and apply change schemes. This was the major reason for selecting respondents from organizations among Fortune 500 companies operating in India. The contact addresses of the senior managers or top management were sought. Out of 500 fortune companies, 300 organizations were contacted. The number of responses collected for the present study is 105. Mainly, $n= 30$ is ample, provided the universe is not exceptionally irregular (Boyd et al., 2005). Iacobucci (2009) proposes that a smallest sample size is 50, sample size of 50 to 100 is ample and sample size exceeding 100 is considered momentous.

Data Collection

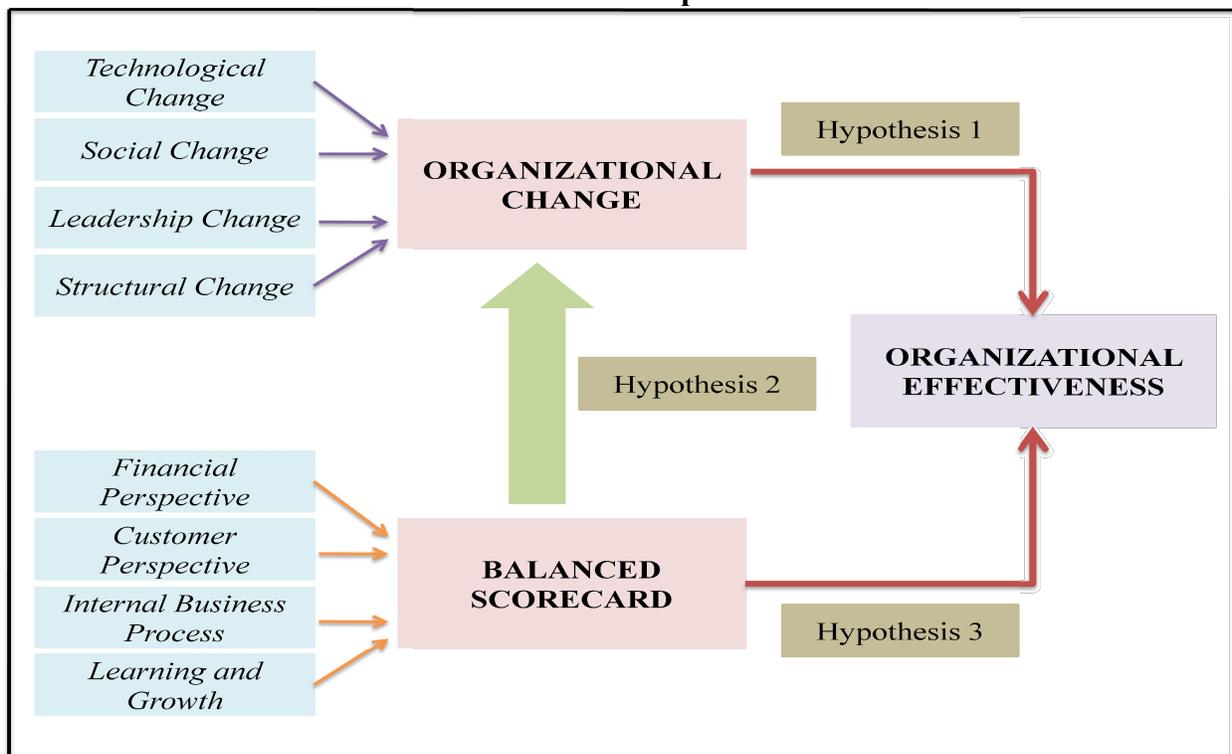
Postal surveys, e-mail based surveys and personal visits were the methods used to forward the questionnaire to possible respondents. The corporate offices were visited personally through professional contacts and acquaintances working there. Some professionals personally carried the questionnaires to their senior managers. Another means of gathering responses was the electronic media. Fox et al. (1988), Haggett and Mitchell (1994) and Kanuk and Berenson (1973) advise that pre-notifications lead to increase in response rates for postal mail surveys. In this research, the potential respondents were notified regarding the intention of the research and their consent with readiness to fill in their replies was obtained. When electronic mails and posts were sent to the selected sample, out of 150 questionnaires, 22 were received. Following a break of about two weeks, the mails were again sent to those who did not reply in the beginning and 50 new possible respondents. The total responses collected personally and by acquaintances reached 35. The reminders were frequently arranged every one to two weeks through electronic emails or telephonic calls. This assisted in accumulating 18 more replies.

Although, continuous reminders were sent to the selected respondents after a certain time period through e-mails, telephones and even friends, the response rate remained low. After complete exhaustion of other means of data collection electronic data surveys were employed. Services of the electronic survey website called www.surveymonkey.com, popular for conducting electronic surveys, was hired for the purpose. The most frequent grounds to prefer an e-survey over conventional paper-and-pencil approach are lesser charges, quick feedback and high response rates (Oppermann, 1995; Saris, 1991; Lazar & Preece, 1999). The questionnaire was posted to 100 likely respondents through electronic survey. 38 responses were obtained within two weeks with additional 14 responses within next four weeks. Hence, the overall number of responses gathered for the research is 105.

THE CONCEPTUAL MODEL

The conceptual model developed for this research is depicted in Exhibit 1. The model presents variables based on the review of literature and their relationship with each other. The model specification may be explained as $OE = f(OC, BSC)$ where, OC refers to organizational change, BSC stands for Balanced Scorecard and OE represents organizational effectiveness. The components of organizational change are technological, social, leadership and structural change. The four perspectives of Balanced Scorecard are financial, customer, internal business process and learning and growth. Organizational change and Balanced Scorecard are considered to be independent variables while examining their influence on organizational effectiveness. Besides, Balanced Scorecard is treated as independent variable to study its relationship with organizational change.

Exhibit 1: The Conceptual Model



ANALYSIS AND DISCUSSION OF FINDINGS

Hypothesis 1: Organizational change has a positive influence on organizational effectiveness.

The adjusted R square value (given in Table 1) shows that the model 1 accounts 60% of variance in organizational change due to technological change with R square equals to 0.604 and highly significant at $p < 0.001$. The standardized beta coefficient value, suggests that change in technology have a huge contact with organizational change (Beta= 0.777, $p < 0.001$). Thus, the results demonstrate influence of technological change on organizational change. It suggests that changes in technology create modifications in the likely areas where the new technology will be used.

Table 1: Regression Model Summary- Influence of TEC, SOC, LEC and STC on OC
df=1, df2=103

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	Sig. F Change
1	.777	.604	.600	.42519	.604	157.267	.000
2	.905	.819	.817	.28758	.819	465.938	.000
3	.929	.862	.861	.25072	.862	645.504	.000
4	.827	.683	.680	.38045	.683	222.081	.000

Predictors in Model 1: (Constant), TEC; Predictors in Model 2: (Constant), SOC; Predictors in Model 3: (Constant), LEC; Predictors in Model 4: (Constant), STC.

Table 2: Regression- Coefficients- Influence of TEC, SOC, LEC and STC on OC

Model		Unstandardized Coefficients		Standardized Coefficients	t-value	Sig. (p-value)
		B	Std. Error	Beta		
1	Constant	.847	.237		3.574	.001
	TEC	.766	.061	.777	12.541	.000
2	Constant	.659	.147		4.482	.000
	SOC	.858	.040	.905	21.586	.000
3	Constant	1.221	.103		11.812	.000
	LEC	.692	.027	.929	25.407	.000
4	Constant	1.421	.162		8.773	.000
	STC	.618	.041	.827	14.902	.000

Dependent Variable: OC

Markus (2004) first coined the term ‘techno-change’ which refers to organizational change driven by technology. Van (1986) considered ‘technology change’ for making organizational change. Zahra and Pearce (1990) emphasized when an organization focus on technological adaptations outside the organization, the adaptive cycle focuses on adaption to conditions within the organization. Innovation in technology needs higher intellectual capabilities of managers (Golson, 1977) since one of the outcomes of technological change is adjustment to basic managerial functions. As a consequence, organizations need to take initiatives to support and teach employees to acquire new skills. Researchers (Bradley et al., 1993; Currid, 1994) observe that instead of being used to support existing procedures, information technology determines the design of work processes and has become a major component for organizational change.

The results also illustrate that social change predicts organizational change. About 81.9% of the variation in the organizational change is explained by social change. R square value (0.819) is large and close to 1 (exhibited in Table 1), which implies social change plays an important role in predicting organizational change. The standardized beta coefficient value (0.905) (given in Table 2) is a large value which indicates a unit adjustment in social change has a large effect on organizational change. It indicates attitudes of office peers, assistants and supervisors may build environment more favorable to readiness and openness towards organizational change. Cameron and Quinn (1999) suggest that employees should adjust their attitudes and behaviors for productive organizational change. In the area of psychology, researchers have presented a model

of individual change (Prochaska et al., 1992), which has been used in management literature (Grover & Walker, 2003; Madsen, 2003; Whelan-Berry et al., 2003). Several studies have reported the positive relationship between social change and organizational change. The findings of the present research are also in conformity with study conducted by Hanpachern (1997) which significantly related social relations to the passion to advance. On the other hand, Cunningham et al. (2002) discussed the other extreme which they found as a fragile association between promptness and social support. They clarify that “job-related interpersonal relationships made a very limited contribution to the prediction of readiness for organizational change scores” (p. 387). It was acknowledged that supportive colleagues may prove to be essential in employee efforts to cope up the demands of organizational change. Drucker (1954) argued that the key barrier to the growth of organizations is the failure of managers to amend their attitudes and behavior as swiftly as the organizations demand. The limited tolerance for change leads to resistance among employees (Kotter & Schlesinger, 2008). A variety of characteristics have been identified to anticipate change in individual responses such as self-concept, risk tolerance (Judge et al., 1999), personal resilience (Wanberg & Banas, 2000), risk aversion (Slovic, 1972), need for achievement (Miller et al., 1994), tolerance for ambiguity (Budner, 1962) and locus of control (Lau & Woodman, 1995).

The adjusted R square value shows that the model accounts 86.1% of variance in organizational change as a consequence of leadership change (given in Table 1). The R square value is large and highly significant at $p < 0.001$ which illustrates that leadership change plays a critical role in predicting organizational change. The model appears to be constructive for building predictions since R square value is close to 1. Large value of standardized beta coefficient (0.929) signifies large influence on organizational change resulting from a single unit of leadership change. The outcome concludes that the energy, enthusiasm and sense of execution which leaders possess, influence the organizational change process. This research is consistent with previous research that one of the most common and influential forces for organizational change is leadership change (Vecchio & Applebaum, 1995). From the perspective of effective leadership, organizational change is often represented in the literature as a means to restore something that has gone erroneous within the organizations. This approach reflects a model of repairs, tools and interventions that managers might introduce to treat organizational failures (DiFonzo & Bordia, 1998). Atkinson (1999) emphasized that there is no organizational change without leadership. Other researchers argued that leadership is significant to organizational change as the modifications in business organizations entail generating a new system and institutionalizing original approaches (Eisenbach et al., 1999; Mills, 2003). Leaders are expected to empower employees and facilitate commitment to cultural change, organizational restructuring and changing work processes (Nonaka, 1994). Leithwood and Jantzi (2000) studied strong significant influence of leadership on organizational conditions and discussed the need for development of individuals as well as whole organization during restructuring. It was also observed that effective leaders offer high levels of motivation and commitment to resolve the issues associated with the implementation of organizational change initiatives.

The variation in the organizational change by 68% is explained by the structural change. The R square value comes out to be 0.683 and highly significant at $p < 0.001$ (exhibited in Table 1). The beta value (0.827) and t-value (14.902) are significant at $p = 0.000$. The values suggest there is a large significant influence of structural change on organizational change. The outcome indicates

that changes in organizational structure are regarded as prerequisite for successful realization of organizational change. The findings of the present study are in conformity with various past studies. Granovetter (1985) and Bennis and Peters (1993) argued that struggle to change arises since organizations are surrounded in its institutional and mechanical configuration. Quinn (1996) observed that “organizations seek consistency through the process of implementing rules and attempt to build structure and formality as a means to ensure long-term stability and predictability” (p. 156). Appelbaum et al. (2008) reported that successful organizations adapt their structures to the needs of their missions. Vallas (2003) noted that bureaucratic organizational arrangement is turning more flexible and participatory to serve current economic conditions. Csaszar (2008) confirmed that organizational structure influences the degree to which the activities are performed in mutual funds, which further predicts the process of organizational change. Likewise, Kanter et al. (1992) underlined that the success of organizational change depends on the extent to which every aspect of the system, including formal structure of the organization, supports the idea of new organization.

Table 3: Regression Model Summary- Influence of OC on OE

df=1, df2=103

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	Sig. F Change
1	.617	.381	.375	.648	.381	63.365	.000

Predictors in Model 1: (Constant), OC.

Table 4: Regression- Coefficients- Influence of OC on OE

Model		Unstandardized Coefficients		Standardized Coefficients	t-value	Sig. (p-value)
		B	Std. Error	Beta		
1	Constant	1.202	.362		3.322	.001
	OC	.752	.094	.617	7.960	.000

Dependent Variable: OE

The adjusted R square value shows that the model accounts 37.5% of variance in organizational effectiveness due to organizational change. R square (0.381) is highly significant at $p < 0.001$ (exhibited in Table 3). The standardized beta (0.617) significant at $p = 0.000$ (given in Table 4), gives a measure of the contribution of organizational change to organizational effectiveness. This shows that there will be a large positive influence on organizational effectiveness with a single unit of organizational change. Thus, *hypothesis 1- Organizational change has a positive influence on organizational effectiveness, is supported*. The findings are, however, in contrast to a few past studies which elucidate that several organizational changes were not as thriving as planned (Fisher, 1994; Maurer, 1996; Strebel, 1996; Beer & Nohria, 2000; Higgs & Rowland, 2000; Hirschhorn, 2002; Miller, 2002; Knodel, 2004; Sirkin et al., 2005; Haines et al., 2005; Alvesson & Svenningsson, 2008; Kotter, 2008). Sometimes, change practices are terminated purposely or lose magnitude and slowly suspended. Also, planned change may face strong confrontation. Individuals are found to be sensitively devoted to the existing culture or work condition which leads to resistance to change (Noer, 1997). Other factors stated by scholars for

futile change programs are lack of sense of urgency, change programs run either too fast or too slow, the objectives are either perplexed or abstract and leaders are either highly authoritative or less influential (Beer et al., 1990; Kotter, 1996; Beer & Nohria, 2000).

Hypothesis 2: Balanced scorecard has a positive influence on organizational change.

The adjusted R square value explains that the model accounts 55.5% of variance in Balanced Scorecard due to financial perspective. R square (0.559) is found to be highly significant at $p < 0.001$ (shown in Table 5). The standardized beta (0.748) significant at $p = 0.000$, gives a measure of the contribution of financial perspective to Balanced Scorecard (exhibited in Table 6). It indicates there is a large positive influence of a single unit of revision of financial perspective on balanced scorecard.

Table 5: Regression- Model Summary- Influence of FIP, CSP, IBP and LGP on BSC
df=1, df=103

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	Sig. F Change
1	.748	.559	.555	.35440	.559	130.587	.000
2	.704	.495	.490	.37930	.495	100.927	.000
3	.794	.630	.626	.32478	.630	175.142	.000
4	.795	.632	.628	.32395	.632	176.556	.000

Predictors in Model 1: (Constant), FIP; Predictors in Model 2: (Constant), SCP; Predictors in Model 3: (Constant), IBP; Predictors in Model 4: (Constant), LGP.

Table 6: Regression- Coefficients- Influence of FIP, CSP, IBP and LGP on BSC

Model		Unstandardized Coefficients		Standardized Coefficients	t-value	Sig. (p-value)
		B	Std. Error	Beta		
1	Constant	2.490	.141		17.700	.000
	FIP	.375	.033	.748	11.427	.000
2	Constant	1.409	.265		5.309	.000
	CSP	.647	.064	.704	10.046	.000
3	Constant	1.084	.226		4.789	.000
	IBP	.747	.056	.794	13.234	.000
4	Constant	1.877	.166		11.279	.000
	LGP	.575	.043	.795	13.287	.000

Dependent Variable: BSC

The above results show that 49% of the variation in the Balanced Scorecard is explained by customer perspective, with R square equals to 0.495 and highly significant at $p < 0.001$. This proves that customer perspective plays an important role in predicting Balanced Scorecard. The beta value (0.704) and t-value (10.046) are significant at $p = 0.000$ (given in Table 6). It advocates that there is a large significant influence of customer perspective on Balanced Scorecard. Kaplan and Norton (1992a) found a well-built influence of customer perspective on Balanced Scorecard framework. They notify that Balanced Scorecard requires managers interpret

their mission statement linked to customer service into precise procedures reflecting the attributes fundamental to customers. They also highlighted that Balanced Scorecard aims at better performance of organizations, which to a great extent depends upon customer's evaluations.

The outcome of regression analysis used to test if internal business process perspective significantly influences Balanced Scorecard. The results indicate that internal business process perspective explained 62.6% of variance. R square is found to be 0.630 significant at $p < 0.001$ (shown in Table 5). The beta value given (0.794) (exhibited in Table 6) suggests that internal business process perspective strongly influences Balanced Scorecard. Since the value is large, internal business process perspective plays a crucial function in predicting Balanced Scorecard. The t-value is equal to 13.234 and it is significant at $p < 0.001$. It is advised that managers may ensure their businesses, based upon internal processes, perform efficiently and firm's end products attend to the requirements of customers (Pandey, 2005).

In addition, the adjusted R square value explains that the model accounts 62.8% of variance in Balanced Scorecard due to learning and growth perspective. R square value comes out to be 0.632 at a significant level where $p < 0.001$. The model is very useful for making predictions. The standardized beta coefficient is equal to 0.795 (shown in Table 5). This explains that one standard deviation in the learning and growth perspective will result in a change of 0.795 standard deviations in Balanced Scorecard. The p-value (0.000) for significance shows a large influence of learning and growth perspective on Balanced Scorecard. Researchers notify that managers learn by doing, observing others and experimenting (Zahra & Filatotchev, 2004; Zucker & Darby, 2007). Pandey (2005) repeated that learning and growth focuses on innovation, creativity, competence and capability. Kaplan and Norton (1996c) examined that the process of learning and growth perspective operates as the navigator of the measures of customer perspective and financial outcome. However, Speckbacher et al. (2003) found that more than 40% of large companies use Balanced Scorecard, but only 17% of them embrace learning and growth perspective.

Table 7: Regression- Model Summary- Influence of BSC on OC

df=1, df=103

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	Sig. F Change
5	.746	.556	.552	.45028	.556	129.069	.000

Predictors in Model 5: (Constant), BSC.

Table 8: Regression- Coefficients- Influence of BSC on OC

Model		Unstandardized Coefficients		Standardized Coefficients	t-value	Sig. (p-value)
		B	Std. Error	Beta		
1	Constant	-.052	.339		-.153	.879
	BSC	.944	.083	.746	11.361	.000

Dependent Variable: OC

Internal business process perspective explained 55.2% of the variance with R square equals to 0.556 significant at $p < 0.001$. The beta value given (0.746) signifies that Balanced Scorecard strongly influences organizational change (shown in Table 7). As the value is large, Balanced Scorecard is found to play an essential role in predicting organizational change. The t-value comes out to be 11.361 and it is significant at $p < 0.001$. Hence, hypothesis 2- *Balanced scorecard has a positive influence on organizational change is supported*. Kaplan and Norton (2001) underlined that organizations utilizing innovative strategies identify the need for an original measurement framework and reflect on Balanced Scorecard as a powerful device for encouraging alterations. They recommended Balanced Scorecard approach as an influential means to translate vision and strategy of a firm into a mechanism that corresponds well with strategic purpose and induces effectiveness against conventional strategic goals (Kaplan & Norton, 1996c).

Table 9: Regression- Model Summary- Influence of BSC on OE

df=1, df=103

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	Sig. F Change
1	.665	.442	.437	.615	.442	81.687	.000

Predictors: (Constant), BSC

Table 10: Regression- Coefficients- Influence of BSC on OE

Model		Unstandardized Coefficients		Standardized Coefficients	t-value	Sig. (p-value)
		B	Std. Error	Beta		
1	Constant	-.116	.464		-.251	.802
	BSC	1.026	.114	.665	9.038	.000

Dependent Variable: OE

The result shows that 43.7% of the variation in organizational effectiveness is explained by Balanced Scorecard (exhibited in Table 9). Since the adjusted R square value is high, this model explains a crucial function of Balanced Scorecard in predicting organizational effectiveness. The beta value is equal to 0.665 and declares that Balanced Scorecard strongly influences organizational effectiveness. The t-value is equal to 9.038 which is significant at $p < 0.001$. Therefore, hypothesis 3- *Balanced Scorecard has a positive influence on Organizational Effectiveness, is supported*. The result is in conformity with earlier academicians and researchers. When organizations implement Balanced Scorecard framework, it helps them develop and meet their objectives. The finding of this research is consistent with earlier studies. Hoque and James (2000) reviewed organizations which implemented Balanced Scorecard and highlighted that higher usage of Balanced Scorecard is connected with superior organizational competency, although this link is not based considerably on enormity of organization, product life cycle or market position. Ahn (2001) declared that applying Balanced Scorecard does not only lend generous support to recognition of targets, but in addition conquer benefits in management, like planning and budgeting of strategy-aligned action plans, assimilating Balanced Scorecard into the practice of company control and purveying strategy communication.

CONCLUSION

The role of organizational change and Balanced Scorecard on business is turning quite prevalent. Their relationship with organizational effectiveness is an important phenomenon in both management research and practice. This research aimed at assessing the relationship among organizational change, Balanced Scorecard and organizational effectiveness. The findings confirmed a positive relationship among organizational change, Balanced Scorecard and organizational effectiveness. The opinion of business executives towards practicing organizational change and Balanced Scorecard had been delineated. A reliable and valid research instrument was developed for the purpose. Regression analysis was employed to examine the influence of organizational change and Balanced Scorecard on organizational effectiveness. The analysis illustrates a significant positive influence of organizational change on organizational effectiveness. Hence, *hypothesis 1 is supported*. A positive influence of Balanced Scorecard on organizational change was established. Thus, *hypothesis 2 is supported*. Also, a positive influence of Balanced Scorecard on organizational effectiveness was exemplified. Therefore, *hypothesis 3 is supported*.

The dimensions of organizational change- technological, social, leadership and structural change, are found to be predictive of organizational change. Large scale information systems, such as Enterprise Resource Planning Systems, Supply Chain Management Systems and Customer Relationship Management Systems are examples of information technology driven technological changes which have been progressively applied in businesses (Harison & Boonstra, 2009). The technological change would require better intellectual facilities of managers to handle technological advancements. The positive or negative attitudes of colleagues at workplace may build environment more favorable or unfavorable to readiness and openness towards organizational change. In case of leadership, the passion, energy and sense of execution which leaders own, influence the process of organizational change. Enthusiasm and positive outlook brings positive and effective organizational change. Reorganization, de-layering and flatter structures are major ideas connected with restructuring. ‘Virtual organizations’ or ‘relationship organizations’ have been derived as workforce turns mobile in reaction to shifting organizational structures. Effective structural change signifies well-organized institutional and mechanical configuration.

The financial perspective demonstrates its large influence on Balanced Scorecard. Balanced Scorecard involves interpretation of the mission statement linked to customer service into precise procedures highlighting attributes essential for customers. The business based upon appropriate internal processes would function competently so that products and services meet the needs of customers. Also, this research encourages managers learn by observing others and experimenting. The research has implications for both academicians and practitioners. It contributes to theory and practice as well. The study presents and tests a conceptual model where the dimensions of organizational change and Balanced Scorecard are identified and linked to organization effectiveness. The findings offer a basic understanding of the two concepts and their influence on organizational effectiveness. Since a positive relationship between change management and Balanced Scorecard has been recognized, the findings will support organizations formulate useful strategies to reorganize their businesses. The influence of various kinds of change on organizational change is empirically investigated. Further, the influence of

the four dimensions of Balanced Scorecard on the formulation of Balanced Scorecard framework is assessed. It will allow business organizations appreciate the role played by these dimensions while formulating strategies and implementing organizational change and Balanced Scorecard framework.

In future, the researchers have the opportunity to compare the perceptions of employees towards change management and Balanced Scorecard in sectors such as banking, healthcare and education. Future researches may be undertaken on a bigger and more diverse sample as it will generate more generalized results. The data was gathered through e-survey method and personally requesting senior managers to fill in their responses. Other methods such as experiments, personal interviews and case studies can be used to collect data related to changes in organizations and implementation of Balanced Scorecard. The findings of this research can be compared with results of similar studies conducted in different countries. It will highlight the differences in the practices of organizational change and Balanced Scorecard in India and other countries.

REFERENCES

- Ahn, H., 2001. Applying the balanced scorecard concept: An experience report. *Long Range Planning*, 34(4), 441-461.
- Alvesson, M. and Sveningsson, S., 2008. *Changing Organizational Culture Cultural Change Work in Progress*. New York: Routledge
- Appelbaum, S., 2008. The impact of organizational change, structure and leadership on employee turnover: A case study. *Journal of Business Case Studies*, 4(1), 21-37.
- Atkinson, P., 1999. Without leadership there is no change. *Management Services*, 43(8), pp. 8-11.
- Barsky, N. P. and Bremser, W. G., 1999. Performance measurement, budgeting and strategic implementation in the multinational enterprise. *Management Finance*, 25(2), 3-15.
- Beer, M., Eisenstat, R. A. and Spector, B., 1990. Why change programs don't produce change? *Harvard Business Review*, 68(6), 158-166.
- Beer, M. and Nohria, N., 2000. *Breaking the code of change*. Boston: Harvard Business School Press.
- Bennis, W. G., 1993. *An invented life: reflections on leadership and change*. Reading, Mass: Addison-Wesley Pub Co.
- Bititci, U. S., Mendibil, K., Nudurupati, S., Turner, T. and Garengo, P., 2004. The interplay between performance measurement, organizational culture and management styles. *Measuring Business Excellence*, 8(3), 28-41.

- Bradley, S. P., Jerry, A. H. and Richard, L. N., 1993. *Globalization, technology and competition*. Boston: Harvard Business School Press.
- Brewer, P., 2002. Putting strategy into the balanced scorecard. *Strategy Finance*, 83(7), 44-52.
- Brown, J. S., 2002. Research that reinvents the corporation: The innovative enterprise. *Harvard Business Review*, 69(1), 102-111.
- Budner, N. Y. S., 1962. Intolerance of Ambiguity as a Personality Variable. *Journal of Personality*, 30(1), 19-50.
- Burton, G. and Thakur, M., 1998. *Management today: Principles and practice*. New Delhi: Tata McGraw Hill.
- By, R., 2005. Organizational change management: A critical review. *Journal of Change Management*, 5(4), 369-380.
- Cameron, K. and Quinn, R., 1999. *Diagnosing and changing organizational culture: Based on the completing values framework*. Massachusetts: Addison Wesley.
- Conner, D. R., 1998. *Leading at the edge of chaos: How to create the nimble organization*. New York: John Wiley & Sons.
- Csaszar, F. A., 2008. *Organizational structure as a determinant of performance: Evidence from mutual funds*. Working paper, The Wharton School, University of Pennsylvania, Philadelphia.
- Cummings, T. G. and Worley, C. G., 2005. *Organization development and change* (9th Ed.). Cincinnati: South-Western College Publishing.
- Cunningham, C. E., Woodward, C. A., Shannon, H. S., MacIntosh, J., Lendrum, B., Rosenbloom, D. and Brown, J., 2002. Readiness for organizational change: A longitudinal study of workplace, psychological and behavioural correlates. *Journal of Occupational and Organizational Psychology*, 75, 377-392.
- Currid, C., 1994. *Computing strategies for reengineering your organization*. California: Prima Publishing.
- David, F. R., 2006. *Strategic management: Concepts and cases* (11th Ed.). New Jersey: Prentice Hall.
- DiFonzo, N. and Bordia, P., 1998. A tale of two corporations: Managing uncertainty during organizational change. *Human Resource Management*, 37(3-4), 295-304.
- Drucker, P. F., 1954. *The practice of management*. New York: Harper and Row.
- Drucker, P. F., 1999. *Management Challenges for the 21st century*. New York: Harper Collins.

- Edmondson, A. C. and Woolley, A., 2003. Understanding outcomes of organizational learning interventions. In M. Easterby-Smith & M. Lyles (Eds.), *International handbook on organizational learning and knowledge management* (pp. 185-207). Cambridge: Blackwell.
- Eisenbach, R., Watson, K. and Pillai, R., 1999. Transformational leadership in the context of organizational change. *Journal of Organizational Change Management*, 12(2), 80-89.
- Fairbairn, U., 2005. HR as a strategic partner: Culture change as an American Express case study. *Human Resource Management*, 44(1), 79-84.
- Fisher, L., 1994. Total quality: Hit or myth? *Accountancy*, 22(4), 50-51.
- Fletcher, H. D. and Smith, D. B., 2004. Managing for value: Developing a performance measurement system integrating EVA and the BSC in strategic planning. *Journal of Business Strategy*, 21(1), 1-17.
- Ford, C. and Gioia, D., 2000. Factors influencing creativity in the domain on managerial decision making. *Journal of Management*, 26(4), 705-732.
- Friedman, T. L., 2005. *The world is flat*. New York: Farrar, Straus & Giroux.
- Fox, R., Crask, M. R. and Kim, J., 1988. Mail survey response rates: A meta-analysis of selected techniques for inducing response. *Public Opinion Quarterly*, 52, 467-491.
- George, J. M. and Jones, G. R., 2002. *Understanding and managing organizational behavior*. New Jersey: Prentice Hall.
- Ghoshal, S., 1987. Global strategy: An organizing framework. *Strategic Management Journal*, 8, 425-440.
- Golson, J. P., 1977. *The impact of technological change on organization management*. Proceedings of the 15th Annual South-East Regional Conference, New York.
- Govindrajnan, V. and Trimble, C., 2005. Building breakthrough businesses within established organizations. *Harvard Business Review*, 83(5), 58-68.
- Granovetter, M., 1985. Economic Action and Social Structure: The Problem of Embeddedness. *American Journal of Sociology*, 91(3), 481-510.
- Greenwood, R. and Hinings, C. R., 1988. Organizational design types, tracks and of strategic change. *Organizational Studies*, 9, 293-316.
- Grieves, J., 2010. *Organizational change: Themes and issues*. Oxford: Oxford University Press.

- Groene, O., Brandt, E., Schmidt, W. and Moeller, J., 2009. The Balanced Scorecard of acute settings: Development process, definition of 20 strategic objectives and implementation. *International Journal for Quality in Health Care*, 21(4), 259-271.
- Grover, R. A. and Walker, H. F., 2003. Changing from production to quality: Application of the situational leadership transtheoretical change models. *The Quality Management Journal*, 10(3), 8-24.
- Gumbus, A. and Lyron, B., 2002. The balanced scorecard at Philips electronics. *Strategic Finance*, 84, 45-59.
- Hannan, M. and Freeman, J., 1984. Structural inertia and organizational change. *American Sociological Review*, 49, 149-164.
- Hendricks, K., Menor, L., Wiedman, C. and Richardson, S., 2004. The balanced scorecard: To adopt or not to adopt. *Ivey Business Journal*, 69(2), 1-6.
- Higgs, M. and Rowland, D., 2000. Building change leadership capability: The quest for change competence. *Journal of Change Management*, 1(2), 116-130.
- Hoffecker, J., 1994. Using the balanced scorecard to develop companywide performance measures. *Journal of Cost Management*, 8(3), 5-17.
- Hoskisson, R. E., Eden, L., Lau, C. M. and Wright, M., 2000. Strategies in emerging economies. *Academy of Management Journal*, 43, 249-267.
- Hoque, Z. and James, W., 2000. Linking balanced scorecard measures to size and market factors: Impact on organizational performance. *Journal of Management Accounting Research*, 12(1), 1-17.
- Huefner, R. J., 2002. Application of the balanced scorecard approach. *CPA Journal*, 72, 58-60.
- Huerta, M. O., 2008. Managing change in OECD governments: An introductory framework. *OECD Working Papers on Public Governance*, 12, 1-72.
- Haggett, S. and Mitchell, V., 1994. Effects of industrial pre-notification on response rate, speed, quality, bias and cost. *Industrial Marketing Management*, 23, 101-110.
- Haines, S., Aller Stead, G. and McKinlay, J., 2005. *Enterprise wide change-superior results through systems thinking*. San Francisco: John Wiley & Sons.
- Halachmi, A., 2005. Performance measurement is only one way of managing performance. *International Journal of Productivity and Performance Measurement*, 54(7), 502-510.
- Hammer, M., 2007. The 7 deadly sins of performance measurement and how to avoid them. *Sloan Management Review*, 48(3), 19-28.

- Hanpachern C., 1997. *The extension of the theory of margin: A framework for assessing readiness for change*. Unpublished Doctoral Dissertation, Colorado State University, Fort Collins.
- Harison, E. and Boonstra, A., 2009. Essential competencies for techno change management: Towards an assessment model. *International Journal of Change Management*, 29, 283-294.
- Hers, F., 1998. Doe mij even een balanced scorecard! *Financieel-Economisch Management*, 29(4), 18-20.
- Hirschhorn, L., 2002. Campaigning for change. *Harvard Business Review*, 80(7), 98-104.
- Hoque, Z. and James, W., 2000. Linking balanced scorecard measures to size and market factors: Impact on organizational performance. *Journal of Management Accounting Research*, 12(1), 1-17.
- Ittner, C. and Larcker, D., 1998. Innovations in performance measurement: Trends and research implications. *Journal of Management Accounting Research*, 10, 205-239.
- Johansson, F., 2004. *The medici effect*. Boston: Harvard Business School Press.
- Joshi, P. L., 2001. The international diffusion of new accounting practices: The case of India. *Journal of International Accounting, Auditing and Taxation*, 10(1), 85-109.
- Judge, T. A., Thoresen, C. J., Pucik, V. and Welbourne, B. M., 1999. Managerial Coping with Organizational Change: A Dispositional Perspective. *Journal of Applied Psychology*, 84(1), 107-122.
- Kanter, R. M., Stien, B. A. and Jick, T. D., 1992. *The challenge of organizational change*. New York: The Free Press.
- Kanuk, L. and Berenson, C., 1973. Mail surveys and response rates: A literature review. *Journal of Marketing Research*, 12, 44-53.
- Kaplan, R. S. and Norton, D. P., 1992a. The balanced scorecard- Measures that drive performance. *Harvard Business Review*, 70(1), 71-79.
- Kaplan, R. S. and Norton, D. P., 1992b. Strategic learning and the balanced scorecard. *Strategy and Leadership*, 24(5), 18-25.
- Kaplan, R. S. and Norton, D. P., 1993. Putting the balanced scorecard to work. *Harvard Business Review*, 71(5), 134-142.
- Kaplan, R. S. and Norton, D. P., 1996b. Strategic learning and the balanced scorecard. *Strategy & Leadership*, 24(5), 18-24

- Kaplan, R. S. and Norton, D. P., 1996c. *The balanced scorecard: Translating strategy into action*. Boston: Harvard Business School Press.
- Kaplan, R. S. and Norton, D. P., 2001. *The strategy-focused organization: How balanced scorecard companies thrive in the new business environment*. Boston: Harvard Business School Press.
- Kaplan, R. S. and Norton, D. P., 2004. Measuring the strategic readiness of intangible assets. *Harvard Business Review*, 82(2), 52-63.
- Karathanos, D. and Karathanos, P., 2005. Applying the balanced scorecard to education. *Journal of Education for Business*, 80(4), 222-230.
- Katz, D. and Kahn, R. L., 1978. *The social psychology of organizations*. New York: John Wiley & Sons.
- Kazmi, A., 2002. *Business policy and strategic management* (2nd Ed.). New Delhi: Tata McGraw Hill.
- Kimberly, J. and Miles, R., 1980. *The organizational life cycle*. San Francisco: Jossey-Bass.
- Knodel, T., 2004. Preparing the organizational 'soil' for measurable and sustainable change: Business value management and project governance. *Journal of Change Management*, 4(1), 45-62.
- Kotter, J. P., 1996. *Leading change*. Boston: Harvard Business School Press.
- Kotter, J. P., 2008. *A sense of urgency*. Boston: Harvard Business Press.
- Kotter, J. P. and Schlesinger, L. A., 2008. Choosing strategies for change. *Harvard Business Review*, 86(7/8), 130-138.
- Koning, J. and Conijn, F., 1997. Balanced scorecard? Nooit van gehoord!”, *Tijdschrift voor Administrateurs en Controllers*, 12(7/8), 34-38.
- Kreshaw, R. and Kreshaw, S., 2001. Developing a balanced scorecard to implement strategy at St. Elsewhere Hospital. *Management Accounting Quarterly*, 2(2), 28-35.
- Kuhn, T. S., 1970. *The structure of scientific revolution*. Chicago: University of Chicago Press.
- Lau, C. M. and Woodman, R. W., 1995. Understanding organizational change: A schematic perspective. *Academy of Management Journal*, 38(2), 537-554.
- Lazar, J. and Preece, J., 1999. Designing and implementing web-based surveys. *Journal of Computer Information Systems*, 39(4), 63-67.

- Leithwood, K. and Jantzi, D., 2000. The effects of transformational leadership on organizational conditions and student engagement with school. *Journal of Educational Administration*, 38(2), 112-129.
- Madsen, S. R., 2003. A model for individual change: Exploring its application to human resource development. *Human Resource Development Review*, 2(3), 229-251.
- Markus, M. L., 2004. Technochange management: Using IT to drive organizational change. *Journal of Information Technology* 19(1), 4–20
- Maurer, R., 1996. Using resistance to build support of change. *Journal for Quality & Participation*, 19(3), 56-63.
- McNeilly, M., 2003. How one man ruled the known world? *Journal of Strategy and Leadership*, 31(3), 52-54.
- Miller, D., 2002. Successful change leaders: What makes them? What do they do that is different? *Journal of Change Management*, 2(4), 359-368.
- Miller, V. D., Johnson, J. R. and Grau, J., 1994. Antecedents to willingness to participate in a planned organizational change. *Journal of Applied Communication Research*, 22, 59-80.
- Noer, D. M., 1997. *Breaking free: A prescription for personal and organizational change*. San Francisco: Jossey-Bass.
- Nonaka, I., 1994. A dynamic theory of organizational knowledge creation. *Organizational Science*, 4, 14-37.
- Oppermann, M., 1995. E-mail surveys: Potentials and pitfalls. *Marketing Research*, 7(3), 29-33.
- Pandey, I. M., 2005. Balanced scorecard: Myth and reality. *Vikalpa: The Journal of Decision-Makers*, 30(1), 51-66.
- Prochaska, J. O., DiClemente, C. C. and Norcross, J. C., 1992. In search of how people change: Applications to addictive behaviors. *American Psychologist*, 47(9), 1102-1114.
- Rempt, R. P., 2003. President's forum. *Naval War College Review*, 56(3), 5-6.
- Rigby, D., 2001. Management tools and techniques: A survey. *California Management Review*, 43(2), 139-160.
- Rigby, D. and Bilodeau, B., 2007. *Management tools and trends 2007*. Boston: Bain & Company.
- Robertson, P. and Seneviratne, S. J., 1995. Outcomes of planned organizational change in the public sector: A meta-analytic comparison to the private sector. *Public Administration Review*, 55(6), 547-558.

- Ruben, B., 1999. Toward a balanced scorecard for higher education: rethinking the college and university excellence indicators framework. *Higher Education Forum QCI Center for Organizational Development and Leadership*, 99(2), 1-10.
- Saris, W. E., 1991. *Computer-assisted interviewing*. Newbury Park: Sage Publications.
- Sirkin, H. L., Keenan, P. and Jackson, A., 2005. The hard side of change management. *Harvard Business Review*, 83(10), 108-118.
- Slovic, P., 1972. Information processing, situational specificity, and the generality of risk taking behavior. *Journal of Personality and Social Psychology*, 22, 128-134.
- Spechbacher, G., Bischof J and Pfeiffer T., 2003. A descriptive analysis on the implementation of balanced scorecard. *Manage. Account. Res.*, 14 (14) 361 – 388
- Strebler, P., 1996. Why do employees resist change? *Harvard Business Review*, 74(3), 86-92.
- Turner, D. M., Hallencreutz, J. and Haley, H., 2009. Leveraging the value of organizational change management methodology. *The International Journal of Knowledge, Culture and Change Management*, 9(9), 25-33.
- Vallas, S. P., 2003. Why teamwork fails: Obstacles to workplace change in four manufacturing plants. *American Sociological Review*, 68(2), 223-250.
- Van den Heuvel, H. and Broekman, L., 1998. Wolf in schaapskleren 2- Scorecard nader gebalanceerd. *Personeelbeleid*, 34(1), 23-26.
- Van De Ven, A. H., 1986. Central problems in the management of innovation. *Management Science*, 32(5), 590-607.
- Vecchio, R. P. and Appelbaum, S. H., 1995. *Managing organizational behavior*. Toronto: Dryden.
- Wanberg, C. R. and Banas, J. T., 2000. Predictors and outcomes of openness to changes in a reorganizing workplace. *Journal of Applied Psychology*, 85(1), 132-142.
- Whelan-Berry, K., Gordon, J. R. and Hinings, C. R., 2003. Strengthening the organizational change process: Recommendations and implications from a multi-level analysis. *Journal of Applied Behavioral Science*, 39(2), 186-207.
- Zahra, S. and Filatotchev, I., 2004. Governance of the threshold firm: A knowledge-based perspective. *Journal of Management Studies*, 41(5), 885-897.
- Zahra, S. A. and Pearce, J. A., 1990. 'Determinants of Board of Directors' Strategic Involvement. *European Management Journal*, 8(2), 164-173.

Zeira, Y. and Avedisian, J., 1989. Organizational planned change: Assessing the chances for success. *Organizational Dynamics*, 17(4), 31-45.

Zucker, L. and Darby, M., 2007. Virtuous circles in science and commerce. *Papers in Regional Science*, 86(3), 445-470.