

De-commoditizing change management

A call for the re-positioning of change management on IT projects

De-commoditizing change management

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Abstract

Purpose – The purpose of this paper is to begin the discussion about re-positioning change management in information technology projects and to propose a framework for improving the quality of decision making in change initiatives that may contribute to that re-positioning.

Design/methodology/approach – The paper analyzed all change management job advertisements in Australia in both the public and private sectors for May 2015, to identify which change management-related skills were being sought. The purpose was to try to identify any patterns that would confirm or negate the original observations, and to help develop a research question for a subsequent, substantive study.

Findings – Change management may be perceived as predominantly comprising communications, stakeholder management and training. The quality of leadership decision making in change initiatives may also be contributing to the consistently high failure rates.

Research limitations/implications – The analysis of job advertisements was a sample only, and requires more quantitative research.

Practical implications – The required alignment of leadership, ethics and change can only be achieved by first improving the quality of leadership decision making, which demands a values-based approach.

Originality/value – The paper highlights a restriction to the scope of practice of change management, and how that contributes to continuing high failure rates. The value is that it provides deeper insight into the commonly accepted “leadership alignment” issue, as well as demonstrating that this is probably the least practiced aspect of change management. The paper also challenges to build strong ethical foundations for the practice.

Keywords Ethics, Leadership, Decision making, Change management

Paper type Research paper

Introduction

There exists an extensive literature detailing the failure of change initiatives. The information technology (IT) industry has not been immune to project failure and the consequences include cost and time overruns, industrial and performance issues and project abandonment. Change practitioners may be brought in to facilitate the process but their efforts are often stymied by poor access to decision makers, narrow terms of reference, and poor decisions by project leaders. This paper argues that these restrictions may, in part, be a consequence of a prevailing perception of the role of change management that impacts both the hiring and positioning of change practitioners in IT projects. One of the more significant consequences of this perception



is that it may inhibit the ability of change practitioners to influence leadership decision making and leadership alignment, arguably the most significant contributors to change initiative failure rates (Brown, 2014). A related, and significantly more troubling, issue is the perceived overall decline in ethics and ethical behavior in society, education and in business (Plinio *et al.*, 2010). The consequent intensification of the call for an increase in ethics in change management, and the related concerns about the ability of current leadership theory to address contemporary issues (Maak and Pless, 2011; Burnes, 2014), creates a sense of urgency, which, in our opinion, cannot wait for theory to catch up. We contend that there is a need for a practical framework that improves the quality of leadership decision making in change initiatives, and that may contribute to more effectively positioning change management on IT projects. Consequently, our purposes in this article are to begin the discussion about re-positioning change management in IT projects and to propose a framework for improving the quality of decision making in change initiatives that may contribute to that re-positioning.

Background

We suggest that the predominantly IT project-based environment in which change management operates has created a demand for change deliverables and products that have restricted the scope of the discipline while omitting critical variables. We, as change practitioners, may be contributing to the perception through a tacit acceptance of the processual, formulaic approaches expected in these project environments. Further, this positioning significantly restricts the scope of practice of change practitioners, thereby inhibiting the ability to influence the quality of leadership decision making. The consequences of these perceptions may constitute a significant contributing factor to the consistently high failure rates of change projects (The Standish Group, 1995; Robbins-Gioia, LLC, 2001; Change Management Institute, 2010; Cooke *et al.*, 2001; Eser *et al.*, 2007; KPMG, 1997; OASIG, 1995; Qassim, 2010; Project Management Institute, 2004).

Despite the lack of a universally accepted definition of change management (Armenakis and Bedeian, 1999; ~~Awal *et al.*, 2006~~; Kezar, 2001), there are commonly accepted theories, classifications and models. Although the scope and context of this article preclude detailed discussion of classifications of change approaches and theories, common themes throughout these models and methodologies are the importance of the role of organizational culture (Burnes, 2014; Kotter, 1996; Pettigrew, 1997), organizational learning (Senge, 2000; Rashman *et al.*, 2009; Bechtold, 1997) and leadership and management behavior (Kotter and Cohen, 2002; Peters, 2006; Bennis, 2000), in sustaining successful change. Burnes (2014) describes the emergent change view of the determinants of successful change as incorporating culture, organizational learning, managerial behavior, power and politics and organizational structure. Kotter (1996) lists eight reasons why change initiatives fail: allowing too much complacency, failure to create a sufficiently powerful guiding coalition, underestimating the power of vision, under-communicating the vision by a factor of 10 (or more); permitting obstacles to block the new vision; failing to create short-term wins, declaring victory too soon and neglecting to anchor changes firmly in the corporate culture. The literature does not explicitly identify “training” as contributing to the success or failure of a change initiative. Burnes (2014), however, does identify IT training as an example of the focus on individuals in incremental change. IBM (2008), in their global research of change projects and of over 1500 change practitioners, identified the top three major change challenges as: changing mindsets and attitudes, corporate culture and complexity is underestimated.

They further identified the top six factors of successful change as: top management sponsorship, employee involvement, honest and timely communication, corporate culture that motivates and promotes change, change agents (pioneers of change) and change supported by culture. Effective training is listed as number seven. Brown's (2014) review of the research of why change initiatives fail confirmed that "lack of adequate leadership involvement" was consistently ranked as one of the top three contributing factors to change failure rates. He further contended that the determinant of effective leadership involvement or alignment was the quality of leadership decision making. He argued that ethics played a critical role in improving the quality of decision making by decreasing levels of both uncertainty and equivocality in the process.

Burnes and By (2011, pp. 3-4), suggest that:

The danger of not only allowing, but encouraging unethical leadership and change can be reduced where there is openness about and alignment of values and objectives, transparency in decision-making and truly independent external scrutiny. The axis on which acceptable and unacceptable outcomes revolve is the ethical values which underpin and link together particular combinations of leadership and change. We believe the fundamental flaw in some approaches to change is that not only are they not explicit about values, but they give the impression that it is somehow unworldly or naive even to mention ethical considerations.

Consequently, we suggest that there is an acknowledged need for a values-based, practical framework that synchronises the practices of leadership and change, and that may contribute to re-positioning change management on IT projects. Further, such a framework must be based on improving the quality of leadership decision making.

In summary, the literature, research and the identified factors contributing to failure rates strongly and consistently define change management as comprising significant elements beyond training and communications. Our initial concern, however, was that there may be a general perception that change management is predominantly concerned with training and communications. Further, that such artificial delimitation of change management may contribute to change initiative failure rates by evading the greater concerns and by providing incomplete information. In order to validate our initial concern, and to develop a substantive research question, we conducted a pilot study (Yin, 2011;  suad, 2010).

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Methodology

The pilot study approach may be used to define or refine an initial research question (Yin, 2011; van Teijlingen and Hundley 2004;  suad, 2010). Our pilot study comprised a document analysis of a sample of change management job advertisements in Australia to identify which change management-related skills were being sought. Our purpose was to try to identify any patterns that would confirm or negate our original observations, and to help develop a research question for a subsequent, substantive study. The sample was all publicly advertised "change" jobs, in both the public and private sectors, in Australia for the month of May, 2015. We identified 36 jobs on a number of job search and recruiting web sites. Documents collected included the job advertisements, related role descriptions (if provided) and, where available, selection criteria. An initial classification of the main items in the documents identified job title, role context, e.g., project-based or corporate, contract or full-time, reporting relationship and duration, job scope and accountabilities. Next, a key words and phrases analysis was conducted for each item, with particular focus on the job scope and accountabilities. In the interests of space, a summary of the results is presented in Table I.

The 36 identified roles included change managers (17), change manager (transformation) (one), change analysts (two), consultants (two), communications managers (four), senior change manager (one), transformation and capability manager (one), training and change manager (one), senior transformation manager (one), change lead/portfolio change lead (three), change and stakeholder project manager (one), business process change analyst (one), education and culture Change coordinator (one). The most commonly listed skills requirements were communications (27: 75 percent), stakeholder management (26; 72.2 percent) and training (17: 47.2 percent). Table I shows that 20 of the 36 (55.6 percent) advertised change jobs were in IT projects. A further 5 (13.9 percent) were in IT-related roles or in programs that included IT initiatives. Of the remaining 11 roles, 7 (19.4 percent) clearly defined the scope as enterprise-wide. Therefore, 69.5 percent were directly IT or IT-related. The remaining eight roles included two that were specifically communications, and the scope and focus was unclear.

The second finding from the analysis was that, even in the three roles specifically described as “transformation,” neither leadership nor culture were stated as a skills requirement. In context, “leadership” was assumed to include leadership alignment, coaching and related leadership support skills. “Culture” was, however, listed as a skills requirement in four of the other advertised roles.

A third finding was that 25 of the roles were short or medium length contracts; three were listed as permanent; the remaining eight could not be clearly defined as contract or otherwise. The three permanent roles were for consulting firms as a consultant or senior consultant/manager in client service. These findings indicate that change was perceived, for a large element of this sample, as a short-term intervention. What remains unclear from these findings is how these organizations intended to address embedding and sustaining change after the change contracts were completed.

A fourth finding was that 24 (66.7 percent) of the roles were three or more organizational levels removed from the decision makers. These levels included portfolio and program directors, PMO directors or managers and project managers. It is reasonable to assume that an additional four-eight (two communications managers; consultant; process change analyst; change managers) were also at least two-three levels removed from decision makers. These findings indicate that, for this sample, the ability of change practitioners to influence decision making was inhibited by their access to the decision makers. This ability was further impacted by the stark exclusion of “leadership” as a skills requirement for the roles.

Our initial conclusions from this pilot study were:

- (1) change management may be perceived as a commodity skill that can be contracted on a short-term basis;
- (2) change management may be perceived as predominantly comprising communications, stakeholder management and training;

Table I.
Summary of change
role advertisement
analysis

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No. of roles	No. of contracts	IT	Training	Stakeholder management	Communications	Leadership	Culture	Readiness assessment	Impact assessment	Internal change education	Other
36	25	20	17	26	27	1	4	10	16	3	6

Notes: From: CareerOne, SimplyHired, Indeed, Australia JobSearch, PeopleBank, Hays, Hudson, Talent2, Adzuna, RegionUp, RecruitNet, Morgan McKinley, Bluefin, Indeed, Ambition, Greythorn and Ampersand

- (3) change management may be perceived as a set of finite tasks with measurable outcomes that fit logically into a program or project structure and schedule; and
- (4) on IT projects, change management may be organizationally and structurally removed from decision makers.

Our pilot study provided sufficient evidence to support further, quantitative research. Consequently, we developed an initial research question:

RQ1. Is there a relationship between the perceptions of change management and failure rates of IT initiatives?

The pilot study also indicates a lack of clarity about how leadership issues are being addressed on IT-related change initiatives, and by whom? We suggest that, while this would be addressed as part of the proposed larger quantitative study, there is an immediate need for a process to improve the quality of leadership decision making on IT-related change initiatives. It is not our intent to add another change model to an already extensive list. However, as Brown (2014) suggests, existing change models may be deficient in how they address factors contributing to change initiative failure rates, including leadership decision making. Neither do we suggest that existing decision-making models are inadequate. The literature on ethical decision making is extensive. Lehnert et al. (2015) observed that there were four extensive meta-reviews in the *Journal of Business Ethics* alone that identified close to 400 empirical studies of ethical decision making. In their discussion, the authors cite Bartlett's (2003) call to address the theory-practice gap between business ethics literature and the practice of ethics in our organizations. They further refer to Ferrell *et al.*'s (2013) suggestion that future research of ethical decision making should be based on managerial, organizational and societal relevance. Yi-ming (2015) described the development of Jones' 1991 Ethical Decision-making Model (EDM) and compared it to Kelley and Elm's 2003 approach, both of which focussed on the influence of moral intensity (MI) and Organizational factors (OF). Jones proposed an "issue-contingent," based on previous work by Dubinsky and Loken (1989), Ferrell and Gresham (1985), Hunt and Vitell (1986), Rest (1986), and Trevino (1986). Snowden and Boone (2007) present the Cynefin "Leader's Framework for Decision-making" based on complexity science. Notwithstanding this extensive, excellent research, there remains a need to further explore its application to leadership and change in IT projects.

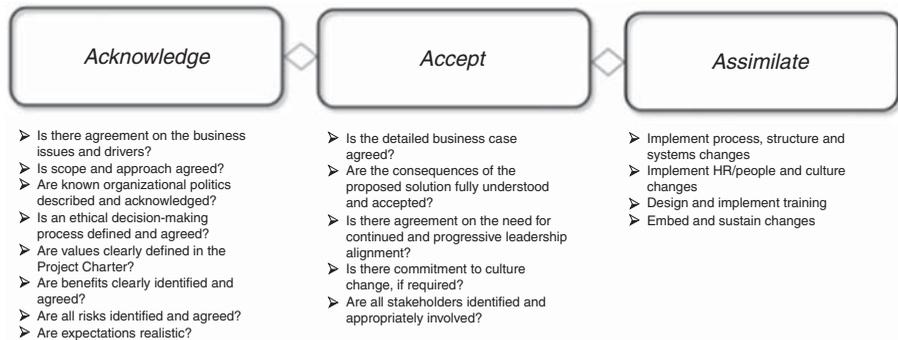
Decision making is a consequential activity which is a core leadership competence (Lipshitz and Mann, 2004; Rilling and Sanfey, 2011; Woiceshyn, 2011), equally as pertinent to project-oriented decision making as to management and leadership generally. Our purpose, then, is to provide an approach to improving the quality of leadership decision making that can be applied as part of existing models and methodologies, or as an individual management tool.

A leadership decision-making framework

The Framework, shown in Figure 1, was originally designed as a change management model (Brown *et al.*, 2014). Experience in applying the model, however, demonstrated that it is equally effective as a leadership decision-making framework.

The most critical element of the Framework is the series of "Acknowledge" activities. The aim of this process is to, at a minimum, "force" acknowledgment of relevant ethical, political and other values-based issues. The suggested process is, as Figure 1 shows, a series of questions and considerations designed to generate

Figure 1.
A leadership
decision-making
framework



Source: Brown *et al.* (2012)

discussion and agreement. The theoretical underpinnings of the Framework combine the role of ethics in improving the quality of leadership decision making (Brown, 2014; Rausch *et al.*, 2011) by decreasing levels of uncertainty and equivocality in the process (Sonenshein, 2007). Consequently, an expected outcome of the Acknowledge process is decreased levels of uncertainty and equivocality about the values foundation of the issue or project. We propose that this part of the Framework could be used as an individual checklist, as an organization-wide decision-making process or as a tool in a change initiative, facilitated by a change practitioner. If appropriate agreement cannot be reached, then the “Stop-Go” decision is triggered. A critical success factor in applying this Framework is the ability and willingness to initiate the “Stop-Go” decision if the expected outcomes of each group of activities are not achieved. This is, in our view, a critical first step in addressing some of the factors that contribute to change failure rates. An intentional design characteristic of the Framework is that the “solution” is not considered in detail until the “Accept” process.

The aim of the Accept process is to achieve a high level of understanding of the consequences of proposed solutions, consequence specificity. As with the Acknowledge process, an expected outcome of the Accept activities is acceptance of the consequences of the proposed solution, leading to a decrease in uncertainty and equivocality. We suggest that this is where many current change models and frameworks begin, particularly those that emphasise leadership alignment, with the result that alignment is achieved around the solution and not the business drivers and issues. An agreed solution may not necessarily satisfy the original business drivers and issues. The Assimilate process focusses on implementing the actions required to achieve the accepted consequences of the decision or changes and embedding them in the organizational culture.

We suggest that the Framework could be effectively applied as part of an existing model or methodology, or as a “stand-alone” process for individual leaders. While it can obviously be tailored by users, we caution against diluting the focus on relevant ethics and values that is central to its design.

Discussion

In retrospect, the evolution of our Framework from a change model to a leadership decision-making framework reflects the real issues facing the practice of change management. We have an abundance of effective models and

methodologies, and we have abundant research and knowledge of the factors contributing to change failure rates. Further, through the efforts of our professional bodies, program and project management associations, academia and of cumulative experience, change management, in varying levels of scope, is a major consideration in the majority of initiatives. Those same efforts, however, may have inadvertently highlighted a range of issues which cannot be enveloped in the theory-practice gap debate.

We intentionally adopted a Radical Humanist approach to this paper, reflecting our philosophical view that the status quo of inappropriate leadership ethical behavior and change initiative failure rates cannot continue. Notwithstanding that we can only dream of a more ethical society, and of leaders and managers who are consistently more successful at achieving the same moral standards as the rest of society (Ciulla, 2005), we contend that a concrete first step is to address the quality of leadership decision making. Further, that the initial focus needs to be on IT-related change initiatives. One outcome of that improved quality, we suggest, is that there may be greater consideration of the full scope of change management in recruiting, hiring and positioning decisions. We contend that, notwithstanding the lack of a commonly agreed definition of change management, there is sufficient understanding that it involves more than training and communications. The underlying issue, we believe, is a lack of willingness to address the related leadership and cultural issues such as organizational politics, or, perhaps, the threat of losing control of those issues. Either way, we suggest that the ethical alignment of leadership and change discussed by Burnes  (2011) can only be achieved by firstly improving the quality of leadership decision making.

If the discussion we are trying to generate is to be effective, we first must create a common frame of reference between all stakeholders. As with all communication, there are barriers, or “noise,” that need to be identified and addressed. One of these barriers may be the attractiveness of commercially available, and successfully marketed, change methodologies as appropriate to all projects. Many organizations mandate the use of a particular methodology in all projects, and require certification in that methodology as a selection criteria in job advertising. This is not an indictment of any particular methodology, but, in our opinion, it contributes to the commoditization of change management, as these approaches are, by definition, process-focussed and project-oriented. We suggest that, by default, these types of methodologies encourage the “deliverables” or “product” project mentality which, in turn, determines the positioning of change in a reporting relationship to project or program managers. Thus, the difficulty in influencing decision makers is perpetuated. The discussion about structural positioning of change practitioners on IT-related projects is not without some irony in that these projects and programs are increasingly commonly labelled as “change initiatives.” Following our own Framework, the first step in creating a common frame of reference is to identify and acknowledge the issues. Premature debate about model vs methodology will only perpetuate the “solutions” mentality that our Accept process is designed to avoid. We contend that the common frame of reference for the discussion must be based on an agreement that we have allowed ourselves to become a commoditized service rather than a professional discipline.

There are ethical questions that we, as change practitioners, cannot abrogate and for which we have to look deep within ourselves to answer. First, “How acquiescent are we willing to be to the common perceptions of our discipline?”

We contend that it would be appropriate for each of us to challenge recruiting agencies to work with us to educate their clients on change management success factors and scope of practice. Further, we suggest that it would be equally appropriate to negotiate a detailed “Scope of Practice” statement in our employment contracts which includes the full range of our activities and their contributions to project success. Next, “To what extent are we impacting the reputation and practice of change management by accepting short-term, deliverables-based contracts?” We all have to make a living, and these contracts can be lucrative but we are not convinced that they represent the true practice of change management. Finally, “To what extent are we willing to push for values-based decision-making and transparency on our projects?” These perceptions may not only restrict our scope of practice, but can also leave us vulnerable to suggestions of under-performance when projects fail to deliver. The onus is on the community of practice of change management to both reflect on, and address, the current status of our discipline, and to develop strategies to influence, as far as possible, the larger practice of responsible and ethical leadership.

Further research

We believe there are a number of areas for further research. First, as stated earlier, we have developed an initial research question on which to design a larger quantitative analysis of the relationship between perceptions of change and change initiative failure rates. A second area of significant research opportunity is the effectiveness of the leadership decision-making framework presented in this paper in improving the quality of leadership decision making.

Conclusions

Our purposes in this paper were to begin the discussion about re-positioning change management in projects and, to propose a framework for improving the quality of decision making in IT-related change initiatives that may contribute to that re-positioning. We proposed that there may be an existing perception of change management that influences how and where change practitioners are hired and positioned on IT-related change initiatives. Further, we suggested that change management could be perceived a commodity, and that this perception may contribute to change initiative failure rates. Moreover, it is unclear how and by whom leadership issues on change initiatives are being addressed. Our limited pilot study provided evidence to support further quantitative research. Consequently, we developed an initial research question, i.e. “Is there a relationship between the perceptions of change management and failure rates of IT initiatives?”

The combination of the current decline in ethics and ethical behavior in business, the concern over the ability of current leadership theory to address contemporary issues, and the continuing high failure rates of change initiatives, creates a sense of urgency driving a need for a practical approach to addressing one of the core elements of these factors, leadership decision making. Consequently, we presented a Leadership Decision-making framework, designed to improve the quality of leadership decision making. We further suggested that the efforts to reposition change management begin with IT-related change initiatives.

There are obviously no clear, simple answers. We contend that, while we fully support Burnes *et al.* (2011) in their call for greater alignment between leadership

and change, we must be building a strong, personal ethical foundation for our own practice of change management. Each of us has to make our own decisions, just as the mortgage salesmen, bankers and investment brokers did before the Global Financial Crisis (GFC).

References

- Armenakis, A. and Bedeian, A. (1999), "Organisation change: a review of theory and research in the 1990s", *Journal of Management*, Vol. 25 No. 3, pp. 293-315.
- Q4** ~~Awal, D., Klingler, J., Rongione, N. and Stumpf, S. (2006), "Issues in organizational culture change: a case study", *Journal of Organizational Culture, Communications and Conflict*, Vol. 10 No. 1.~~
- Q5** Bartlett, D. (2003), "Management and business ethics: a critique and integration of ethical decision-making models", *British Journal of Management*, Vol. 14, pp. 223-235.
- Bechtold, B.L. (1997), "Chaos theory as a model for strategy development", *Empowerment in Organizations*, Vol. 5 No. 4, pp. 193-201.
- Bennis, W.G. (2000), "Leadership of change", in Beer, M. and Nohria, N. (Eds), *Breaking the Code of Change*, Harvard Business School Press, Boston, MA.
- Q6** Brown, D. (2014), "An exploration of the role of ethics in leadership decision-making in Queensland Government Owned Corporations", PhD thesis, University of Southern Queensland.
- Burnes, B. (2014), *Managing Change*, 6th ed., Prentice-Hall, Essex.
- Burnes, B. and By, R.T. (2011), "Leadership and change: the case for greater ethical clarity", *Journal of Business Ethics*, Vol. 2012 No. 108, pp. 239-252.
- Q7** Change Management Institute (2010), *Challenge of Change: Australia*, Change Management Institute, Sydney.
- Ciulla, J. (2005), "The state of leadership ethics and the work that lies before us", Vol. 14 No. 4, pp. 323-335.
- Cooke, D., Gelman, L. and Peterson, W. (2001), *ERP Trends*, The Conference Board of Canada, Ottawa.
- Dubinsky, A.J. and Loken, B. (1989), "Analysing ethical decision-making in marketing", *Journal of Business Research*, Vol. 19 No. 2, pp. 83-107.
- Eser, B., Hage, B., McKenna, M. and Wilckzynski, H. (2007), *Performance-Improvement Initiatives: Three Best Practices for Project Success*, Booz Allen Hamilton Inc., Atlanta.
- Ferrell, O.C. and Gresham, L.G. (1985), "A contingency framework for understanding ethical decision-making in marketing", *The Journal of Marketing*, Vol. 49 No. 3, pp. 87-96.
- Ferrell, O.C., Crittenden, V.L. and Crittenden, W.F. (2013), "Theoretical development in ethical marketing decision-making", *AMS Review*, Vol. 3 No. 2, pp. 51-60.
- Q8** Hunt, S.D. and Vitell (1986), "A general theory of marketing ethics", *Journal of macromarketing*, Vol. 6 No. 1, pp. 5-16.
- IBM (2008), *Making Change Work. Continuing the Enterprise of the Future Conversation*, IBM Global Services, NY.
- Kezar, A.J. (2001), *Understanding and Facilitating Organizational Change in the 21st Century: Recent Research and Conceptualizations*, Vol. 28 No. 4, Jossey-Bass, San Francisco, CA.
- Kotter, J.P. (1996), *Leading Change*, Harvard Business School Press, Boston, MA.
- Kotter, J.P. and Cohen, D.S. (2002), *The Heart of Change: Real-Life Stories of How People Change Their Organizations*, Harvard Business School Press, Boston, MA.

- KPMG (1997), *Canada Survey*, KPMG, Toronto.
- Lehnert, K, Park, Y and Singh, N. (2015), "Research note and review of the empirical ethical decision making literature: boundary conditions and extensions", *Journal of Business Ethics*, Vol. 129, pp. 195-219.
- ~~Lipshitz, R. and Mann, L. (2004), *University of Melbourne Collaborative Research Grant*, Melbourne Business School, Melbourne.~~
- Maak, T. and Pless, N.M. (2011), "Responsible leadership: pathways to the future", *Journal of Business Ethics*, Vol. 98, pp. 3-13.
- OASIG (1995), *IT Failure Statistics*, OASIG, London.
- ~~Persaud, N. (2010), "Pilot study", in Salkin, N.J. (Ed.), *Encyclopedia of Research Design*, SGAE Publications, Thousand Oaks, CA, pp. 1933-1934.~~
- Peters, T. (2006), *Re-imagine! Business Excellence in a Disruptive Age*, Doring Kindersley, London.
- Pettigrew, A.M. (1997), "What is processual analysis?", *Scandinavian Journal of Management*, Vol. 13 No. 4, pp. 337-348.
- Plinio, A.J., Young, J.M. and Lavery, L.M. (2010), "The state of ethics in our society: a clear call for action", *International Journal of Disclosure and Governance*, Vol. 7 No. 3, pp. 172-197.
- Project Management Institute Inc. (2004), *A Guide to the Project Management Body of Knowledge*, 3rd ed., PMBoK Guide, Project Management Institute Inc., PA.
- Qassim, A. (2010), *Why Information Systems Projects Fail: Guidelines for Successful Projects*, Information Technology Department, State Audit Institution, Oman.
- Rest, J. (1986), *Moral Development: Advances in Theory and Research*, Praeger, New York, NY.
- Rilling, J.K. and Sanfey, A.G. (2011), "The neuroscience of social decision-making", *The Annual Review of Psychology*, Vol. 62 No. 2011, pp. 23-49.
- Robbins-Gioia, LLC (2001), *A Guide to ERP Success*, Robbins-Gioia, LLC, Alexandria, VA.
- Senge, P.M. (2000), "The puzzles and paradoxes of how living companies create wealth: why single-valued objective functions are not quieted enough", in Beer, M. and Nohria, N. (Eds), *Breaking the Code of Change*, Harvard Business School Press, Boston, MA.
- Snowden, D.J. and Boone, M.E. (2007), "A leader's framework for decision making", *Harvard Business Review*, pp. 69-76.
- Sonenshein, S. (2007), "The role of construction, intuition, and justification in responding to ethical issues at work: the sensemaking-intuition model", *Academy of Management Review*, Vol. 32 No. 4, pp. 1022-1040.
- (The) Standish Group (1995), *Chaos, The Standish Group Report*, The Standish Group, Boston, MA.
- Trevino, L.K. (1986), "Ethical decision-making in organisations: a person-situation interactionist model", *Academy of Management Review*, Vol. 11 No. 3, pp. 601-627.
- ~~van Teijlingen, E.R. and Hundley, V. (2004), "Pilot study", in Lewis-Beck, M.S., Bryman, A. and Liao, T.F. (Eds), *The SAGE Encyclopedia of Social Science Research Methods*, Thousand Oaks, CA.~~
- Woiceshyn, J. (2011), "A model for ethical decision making in business: reasoning, intuition, and rational moral principles", *Journal of Business Ethics*, Vol. 104, pp. 311-323.
- Yi-ming, Yu (2015), "Comparative analysis of Jones' and Kelley's ethical decision-making models", *Journal of Business Ethics*, Vol. 130, pp. 573-583.
- Yin, R.K. (2011), *Qualitative Research from Start to Finish*, Guilford Press, New York, NY.

Further reading

- Brown, D., Gordon, R. and Rose, D. (2012), "The BGR model for leading change", *International Journal of Learning and Change*, Vol. 6 Nos 1/2.
- Rashman, I., Erin, E. and Hartley, J. (2010), "Organizational learning and knowledge in public service organizations: a systematic review of the literature", *International Journal of Management Reviews*, Vol. 11 No. 4, pp. 463-494.
- Rausch, E. and Anderson, C. (2011), "Enhancing decisions with criteria for quality", *Management Decision*, Vol. 49 No. 5, pp. 722-733.

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