

# Success Rates for Different Types of Organizational Change

by Martin E. Smith, PhD

**H**ow successful are organizations that attempt major change? Hammer and Champy (1993) claim that 70% of re-engineering projects fail. That estimate has been repeated by many authors. Advocates of particular change methodologies cite high rates of success to promote their approaches to change, while other consultants quote dismal estimates to convince clients to invest in change efforts. Thus, researchers use success measures to identify factors associated with both successful and unsuccessful change efforts. What does the professional literature tell us about the success of organizations attempting large-scale change? Does success vary by the type of organizational change attempted?

To answer these questions, we need a definition of change. By “major organizational change,” we mean any intentional change in the way the organization does business that affects the strategic position of the organization vis-à-vis its competition. Examples of major organizational change include:

- Business acquisition or merger
- Business expansion, such as new territory or line of business
- Culture change, such as developing a more customer-oriented workforce
- A new computer system

- Process improvement or re-engineering
- Re-structure of organizational units, such as downsizing
- Technology change
- Total quality management (TQM)-driven change
- Deployment of new business strategies

The purpose of this article is two-fold: to summarize published estimates of success rates for implementing various types of organizational change, and to offer cautions and guidelines for evaluating the applicability of these estimates to your situation.

## Published Estimates of Success

Business and professional publications were searched for reports about the success of various types of organizational change. Forty-nine reports were found (see Figure 1). From Figure 1, we see that some types of change are more researched than other types. There are at least five citations each for process re-engineering, TQM-driven change, mergers and acquisitions, restructuring (particularly downsizing), technology change, and software/systems development. Conversely, there are few comparative studies for culture change,

strategy deployment, and business expansion. Published research supports Hammer and Champy's (1993) claim that about 70% of re-engineering efforts fail, but the 30% success rate may not apply to all types of change. Culture change, for example, may be considerably more difficult than strategy deployment or restructuring.

Figures 2 through 11 present information about the types of change listed in Figure 1. In these tables, the left-hand column identifies the authors, and the next column describes the sample of organizations or respondents from whom data were collected. The third column identifies the data collection method, and the last column summarizes the findings.

**Strategy Deployment.** These projects were defined as building or changing the capabilities of the organization. Some efforts involve trying to improve what the organization already does; other efforts involve creating radically new strengths. While strategy deployment may involve other categories of change, the three reports under this heading all used the word "strategy" in their titles. With so few examples, it is hard to draw conclusions about this type of change effort, but it is interesting to note the three studies reported success rates within a narrow range of 50%–60%.

**Restructuring and Downsizing.** These projects involve rearranging organizational units and/or the workforce. Downsizing primarily refers to reducing the number of employees but also includes divestiture of company assets, that is, selling off a piece of the business. Re-structuring/downsizing has been widely studied. Quantitative measures of operational and financial performance are typically used. While the median success rate for this approach is among the highest for any change strategy, most of the estimates are in the range of 40%–50%.

**Technology Change.** This type of approach concerns the implementation of large hardware/software systems purchased from vendors. Success may be

Type of Change	Number of Studies	Sum of Sample Sizes	Median Success Rate
Strategy Deployment	3	562	58%
Restructuring and Downsizing	9	4,830*	46%
Technology Change	5	1,406*	40%
Mixed Collection of Change Efforts	1	23	39%
TQM-driven Change	5	863	37%
Mergers and Acquisitions	9	395*	33%
Re-engineering and Process Design	7	3,442*	30%
Software Development and Installation	6	31,480	26%
Business Expansion	1	200	20%
Culture Change	3	225*	19%
All	49	43,426*	33%

\*One or more reports did not state the sample size.

Figure 1. Summary of Organizational Change Efforts.

Source	Sample	Method	Success Rate
Conference Board study (Troy, 1994)	166 US & European companies	Survey about experience with organizational change	58% reported success in changing corporate strategy
Nutt (1999)	Executives and middle managers in 356 medium to large organizations in United States and Canada	Interviews	50% of decisions fail, as indicated by whether the decision was put to use
Aspesi & Vardhan (1999)	40 companies that pursue sound strategies	Case studies describing strategy implementation	60% delivered excellent results, defined as top quartile shareholder returns

Figure 2. Strategy Deployment.

Source	Sample	Method	Success Rate
<i>The Economist</i> (1989) (Tomasko, 1993)	135 companies that attempted massive restructure	Not described	Less than 50% achieved significant increases in their value relative to their competition
Cameron et al (1991) (Tomasko, 1993)	30 companies in the automotive industry	Four-year study	White-collar productivity improved little and admin costs remained far above global competitors
Bennett (1991) (Tomasko, 1993)	1000 actuarial companies that downsized	Survey	Improvements reported: productivity (22%), cash flow (25%), decisionmaking speed (15%), customer satisfaction (10%), product quality (10%), use of technology (10%), competitive advantage (19%)
1993 AMA survey (Mabert & Schmenner, 1997)	Firms that down-sized (sample not described)	Survey	50% increased operating profits, 36% increased worker productivity, 2.4% increased morale
1995 AMA survey (Mabert & Schmenner, 1997)	Firms that down-sized (sample not described)	Survey	51% increased operating profits, 34% increased worker productivity, 2% increased morale
1999 AMA Workforce Survey (AMA, 1999)	1192 large and mid-size firms.	Survey on US workforce trends	51% reported increased shareholder value. 49% increased operating profit over the survey period
Wall Street Journal (Laabs, 1999)	Companies that downsized (number not specified)	Not described	Only 33% of the firms had stock prices that were at least at the average for their industries two years after the downsizing
Wyatt Associates (Appelbaum et al., 1999)	1005 firms that downsized 1986-1991	Not described	46% reduced expenses, 32% increased profits, 22% improved productivity, 17% reduced bureaucracy
Society for HR Management (Appelbaum et al., 1999)	1468 firms that downsized	Not described	Less than 50% reported that productivity improved

Figure 3. Restructuring and Downsizing.

Source	Sample	Method	Success Rate
Conference Board study (Troy, 1994)	166 US and European companies	Survey about experience with organizational change	20% reported success in changing info technology
The Business Research Group ( <i>Computerworld</i> , 1994)	305 information systems managers	Survey (no details)	50% reported cost savings for new versus replaced client/server systems
Standish Group (Williamson, 1997)	Not described	Not described	Only 10% of SAP projects are completed on time
Conference Board and Price Waterhouse LLP (Stedman, 1998)	50 companies	Survey	Less than 40% were successful in implementing data warehousing. Behind schedule: 44%. On hold: 14%. Cost over-runs: 20%
Survey sponsored by MERIT (Dryden, 1998)	886 information systems managers	Survey	54% of ERP applications had no outages that caused significant revenue loss or loss of potential customers

Figure 4. Technology Change.

Source	Sample	Method	Success Rate
Templeton (MCB University Press Ltd., 1997)	23 major international companies	Survey	Executives in 39% of the companies judged change to be completely successful

Figure 5. Mixed Collection of Change Efforts.

Source	Sample	Method	Success Rate
McKinsey survey (Rommel et al., 1994)	141 European and Japanese companies in automotive supply industry	Companies scored on "process quality" and "design quality"	38% of the companies designated in top two categories, identified as "Prevention" and "Perfection"
Conference Board (1991) (Carr, Hard, & Trahan, 1996)	133 companies trying to institute total quality management	Satisfaction survey about TQM implementation	29% rated satisfaction with progress as high or very high
Prabhu et al. (2000)	294 manufacturing companies in the United Kingdom	Survey of business practices and results versus world-class standards	37% of TQM companies have achieved "world-class" or "potential-winner" status
Huq & Martin (2000)	7 hospitals attempting to implement TQM.	Case studies that documented TQM implementation process.	14% successfully implemented TQM based on researchers' ratings of case reports
Casadesus & Gimenez (2000)	288 Spanish companies	Indepth study, descriptive analysis, cluster analysis.	65% of the companies obtained very high levels of internal (e.g., management control) and external benefits, e.g., market share)

Figure 6. TQM-Driven Change.

reported in terms of project management, such as cost and time versus plan, or in terms of impact of the organizations' operations, such as downtime and operating expense. The few data available suggest that fewer than 40% of projects meet their project goals.

*Mixed Collection of Change Efforts.* One study (MCB University Press, 1997) could not be classified according to this article's categories. The authors of that study divided change efforts into four types: operational improvement, evolutionary learning, programmed change for radical shifts, and transformational change that has a goal of "an open-ended process of learning and self-renewal." Results

were expressed in terms of companies that succeeded in "the journey of change." Success was not estimated for the four types of change.

*TQM-Driven Change.* TQM efforts are aimed at the continuous improvement of the organization's operations. These efforts include the use of employee teams to generate and implement ideas for improving organizational performance; the use of the Baldrige Award criteria or the ISO 9000 guidelines to plan quality improvements; and the use of quality control tools, such as statistical process control charts, that aid employee efforts to improve the organization's performance. The theme is the gradual improvement of the organization, not radical or sudden change. Success measures tend to be ratings of satisfaction with the techniques employed with occasional use of operational measures. Degree of success varies widely across the reports.

*Mergers and Acquisitions.* This action involves the ownership and the operations of two companies being integrated to form one organization. Some mergers are called "synergistic" (Anslinger & Copeland, 1996) in that the acquiring company augments its capabilities with the assets of the acquired company, such as adding complementary products or gaining access to new customers. Other mergers allow the acquiring company to diversify into other industries and thus improve its financial strength. Extensive literature on mergers exists. Success is usually evaluated in terms of enterprise financial indicators. The range of success estimates is quite wide (16%–80%), and one study by the KPMG firm (*The Economist (US)*, 2000) found that many mergers actually destroyed shareholder value.

*Re-engineering and Process Design.* This term designates the design of a new business process or the radical redesign of an existing process. The goal here is to achieve levels of performance beyond the organization's current capability. Re-engineering is one of the more frequently researched types of organizational change. The majority of studies used satisfaction ratings as the measure of success. Cost reduction was cited in two studies.

*Software Development and Installation.* This category cuts across other types of change, but the authors describe the change effort from the perspective of developing and

installing the software. In terms of number of projects, this is the most widely studied category largely due to the research of one firm (The Standish Group, 1995; Johnson, 2000). Success is generally assessed in terms of project management criteria: on time, on budget, with the promised features and functionalities.

**Business Expansion.** This category includes approaches to expanding a business through product development, new lines of business, and selling to new markets. It could include new technology if the technology was an element in the plan to add new products or reach new markets.

**Culture Change.** These efforts are aimed at changing the prevailing behavior patterns of employees. Examples include reward-and-recognition programs for motivating employees to achieve desired performance; employee empowerment to make decisions that affect customers and other employees; and training employees to be more sensitive to diversity issues. While there may be substantial literature on culture change, there are few studies of the success that organizations have in achieving lasting change. Furthermore, the three studies identified in Figure 11 relied upon very subjective data to measure success.

## Interpretation Issues

How much weight should you give to one of these estimates? Consider these issues. First, any given organizational change probably involves several types of change. A merger, for example, will likely involve deploying strategy, changing the corporate culture, integrating software systems, and possibly redesigning business processes and deploying new technology. Research found that at least 40% of organizational changes involved more than one category of organizational change, and this percentage may well underestimate the overlap of change categories (Mourier & Smith, 2001). Combinations of change requirements may interact to obscure the impact of the type of change intervention that is the focus of the analysis. The message is: When analyzing others' research, look for a detailed definition of the particular type of change under

Source	Sample	Method	Success Rate
Mirvis & Marks (1992) cite 10 studies to support their estimate of the success rate	Most samples not described	Earnings before and after merger; market share; return vs. capital expense; stock price; operational efficiencies	Estimates of success ranged from 25%–33%
Anslinger & Copeland (1996)	Studied 21 companies that made 829 acquisitions	Analyses of financial performance ranging up to ten years	80% "earned their cost of capital." Acquirers averaged more than 18% per year in total return to shareholders over 10-year period
Sirower (Drake Beam and Morin, 1999)	Not described	Not described	Only 30% of mergers achieved anticipated value
KPMG report ( <i>The Economist (US)</i> , 2000)	Sample not described	Not described	Only 16% of mergers added shareholder value. More than half destroyed shareholder value; one-third made no difference.
Andersen Consulting report (Dinkin, 2000)	72 mergers in financial services industry across 19 countries	Analysis of financials from one year before to two years after the merger	33% of the merged companies were designated as "M&A value capturers" based on return on equity and revenue growth
Pricewaterhouse Coopers survey (Doucet, 2000)	125 companies worldwide	Survey (details not described)	70% said their deals fully achieved revenue and market penetration goals but 40% failed to realize anticipated savings
Conference Board survey ( <i>LI Business News</i> , 2000)	HR managers in 134 companies that had a merger since 1990	Respondents rated their experience with mergers since 1990	67% consider merger to be "very successful" or "successful"
Arthur Andersen survey (Ryan, 2000)	43 executives in 31 companies in communications, media	Survey (details not described)	37% without significant problems. 63% said that M&As caused a variety of "negative impacts"
ACG Network study (Cheung, 2000)	Not described	Survey (details not described)	Only 30% met expectations of architects

Figure 7. Mergers and Acquisitions.

Source	Sample	Method	Success Rate
A.D. Little survey (Caldwell, 1994)	350 executives involved in business re-engineering	Interviews	16% "fully satisfied" with results. 68% said that projects had unintended negative side effects
Conference Board study (Troy, 1994)	166 US and European companies	Survey about experience with organizational change	27% reported success in changing business systems/processes
Institute of Management Accountants ( <i>Computerworld</i> , 1994)	2200 members of the institute's Controllers Council	Survey (details not described)	25% said they were satisfied with their company's re-engineering efforts
Hall et al. (1994)	20 projects in different companies	"Detailed analysis," but few details given	Only six companies (30%) achieved an average of 18% reduction in business-unit costs
Strebel (1996)	Practitioners of radical corporate reengineering in <i>Fortune</i> 1000 companies. Number not given.	Not described	Success rates are well below 50%—as low as 20% in some companies
CSC Index, Inc. survey (Tenner & DeToro, 1997)	600 large firms in North America and Europe	Survey (details not described)	Companies pursuing cost reductions met their goals. 75% of those pursuing cycle time reductions and productivity increases achieved their goals
Schultz & Eierman (1997)	106 companies with at least 1000 employees. Usable returns were less than 10% of initial mailing.	Mail survey	57% classified their re-engineering efforts as successful

Figure 8. Re-engineering and Process Design.

investigation and a description of how the organizations compare to the definition.

The reader should also consider whether the researcher may be predisposed to a particular finding. If the estimate is published in a journal with the name of the intervention (e.g., TQM or re-engineering) in its title, then expect the estimate to reflect favorably on that type of intervention. The message is: "This 'stuff' works. Buy our publication for more information about it." If the estimate is reported by a consulting firm, then expect the estimate to reflect the difficulty of implementing a particular type of change (e.g., mergers). The message is: "This 'stuff' is tough. Don't try it on your own; let us help you." The latter case is often accompanied

by a case study demonstrating the efficacy of the firm's approach. The guideline here is: Consider the source's stake in the research when judging its credibility and then take a hard look at the methodology and the sample.

A third factor is the age of the data. The state of the art evolves over time. For example, the practice of TQM techniques is more sophisticated today than it was 15 years ago. You would expect greater success today than 15 years ago. This supposition is supported by Figure 12, which shows trends in published success rates for four types of organizational change. The implication is that more recent reports of success are likely to be more representative of current practice.

Source	Sample	Method	Success Rate
Sequent Computer Systems, Inc. (Moad, 1998)	500 information technology project managers	Survey	Only 24% reported no major project failures
The Standish Group (1995) and Johnson (2000)	8380 software projects described by 365 of information technology executives	1994 Survey supplemented with personal and focus group interviews	16% are fully successful in terms of time, budget and with the promised features and functionalities
The Standish Group (Johnson, 2000)	Approximately 7500 software projects	Survey in 1996	27% are fully successful in terms of time, budget and with the promised features and functionalities
The Standish Group (Johnson, 2000)	Approximately 7500 software projects	Survey in 1998	26% are fully successful in terms of time, budget and with the promised features and functionalities
The Standish Group (Johnson, 2000)	Approximately 7500 software projects	Survey in 2000	28% are fully successful in terms of time, budget and with the promised features and functionalities
Boston Consulting Group (Booker, 2000; Hayes, 2000)	100 users of enterprise software projects over previous three years	Interviews	Only 33% can be classified as success in terms of value creation, cost-effectiveness, tangible financial impact, and goal attainment

Figure 9. Software Development and Installation.

Source	Sample	Method	Success Rate
Puhlman & Gouy (1999)	Worldwide sample of 200 pharmaceutical companies	Survey about drug discovery, development, and production practices	20% were identified as "most innovative" based on product introductions and sales

Figure 10. Business Expansion.

Source	Sample	Method	Success Rate
Conference Board study (Troy, 1994)	166 US & European companies	Survey about experience with organizational change	32% reported success in changing vision, values, and culture
Bennis (Carr, Hard, & Trahan, 1996)	Study not described	Study not described	Only 10% of corporations that attempted to change management styles were successful in institutionalizing the new style
Smith & Mourier (2000)	59 North American managers who described a culture change	Survey about the factors affecting the success of organizational change	19% of the culture change efforts were rated among the top quartile of successful organizational change efforts

Figure 11. Cultural Change.

Next, examine the research methodology. At one end of the spectrum there are estimates based on what experts in the industry say. The report does not name or describe these experts, or even provide a count of how many experts. In contrast, two studies of mergers (Anslinger & Copeland, 1996; Dinkin, 2000) analyzed financial indicators over several years before and after the merger. Another worthy example is the ongoing research by The Standish Group (Johnson, 2000) into the factors that affect the success of systems development projects. The research involves a series of surveys of 2500 information technology managers repeated at two-year intervals. These surveys are supplemented with individual and focus group interviews. A third example pertains to TQM-inspired change efforts. Researchers (Huq & Martin, 2000) developed detailed case studies of vertical and horizontal samples of managers supplemented with analyses of financial and operational data.

Another important concern is the measure or standard used to distinguish successful from unsuccessful efforts. Figure 13 summarizes success measures reported in the 49 evaluations. The measures are grouped into seven categories. Rating measures are opinions about the success of the change effort. Project measures deal with how the change effort was managed. Operations measures quantify the impact of the change effort on the internal processes of the organization. Management measures describe the impact of the change effort on the behavior of the management team. Customer measures deal with the behaviors and opinions

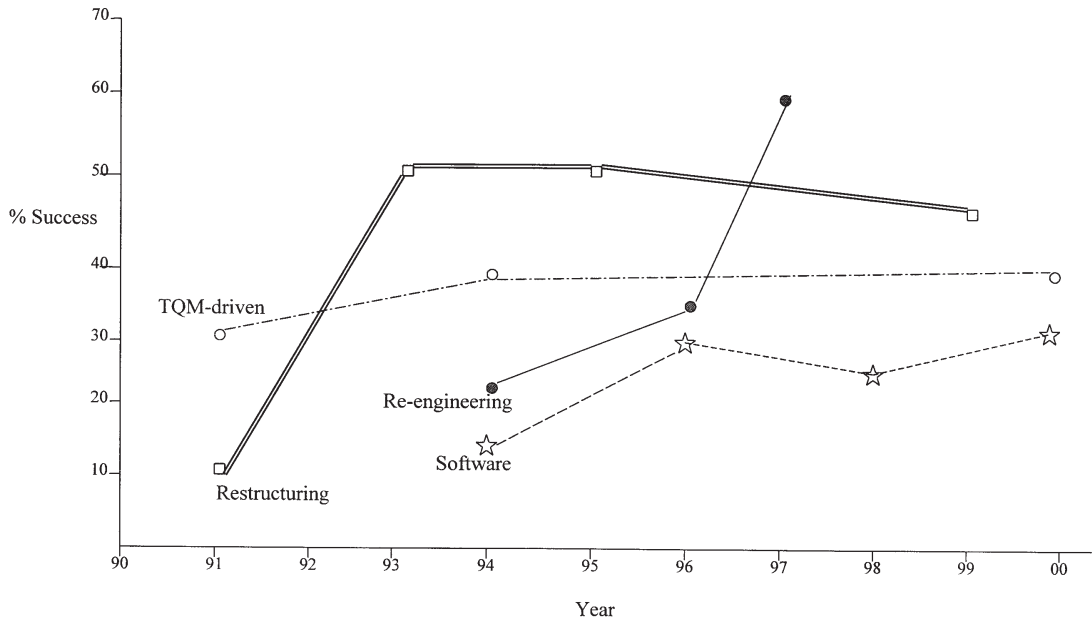


Figure 12. Success Rates over Time.

of the organization's customers. Enterprise measures include indicators of the financial and competitive health of the organization. Owner measures refer to the impact on shareholder value. Figure 14 lists examples for each category.

We see in Figure 13 that ratings and global measures (enterprise and owner) tend to produce higher estimates of success, while behavioral measures for management and for customers were less likely to show improvement. The implication is that the choice of measure may enhance the chances of a favorable result. A well-designed evaluation will include measures from several categories.

Finally, consider the characteristics of the organizations measured in the study. Are these the types of companies to which you want to compare yourself? The International Quality Study, sponsored by the American Quality Foundation (Ernst & Young, 1993), illustrates that the results obtained by some companies may not predict the results of other organizations. The research showed that success in adopting quality-improvement practices depended on the current level of business performance as measured by profitability, productivity, and quality. The investigators recommended that poorly performing companies concentrate on the development of people, customers relations, process improvement, and cost reduction. Recommendations for "medium" performers included improvement of vendor relations, employee training, and cycle time, as well as process simplification. The best-performing organizations were the only ones able to benefit from benchmarking and employee empowerment. Another example

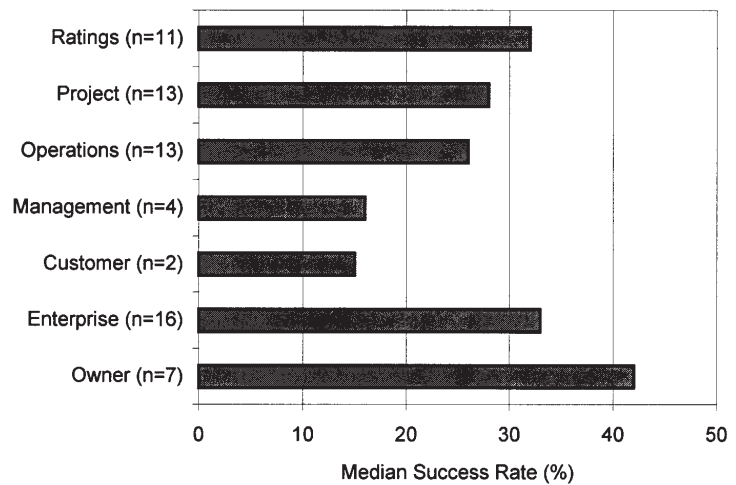


Figure 13. Success Rates by Type of Measure.

Category	Sample Measures
Ratings of Overall Success	Satisfaction with change, stakeholder expectations met
Project Management	Implementation scored against "world-class standards," project completed on time, on budget, with promised features; unanticipated negative consequences
Operations Performance	Cost reduction, cycle time reduction, productivity gain, product/service quality, rate of product introductions, rate of technology deployment, employee morale improvement
Management Behavior	Control, speed of decisionmaking, reduced layers of bureaucracy
Customer	Customer satisfaction, sales
Enterprise Performance	Earnings, ROE, revenue growth/loss, operating profit, market share/penetration, competitive edge, customer loss, cash flow, stock price
Owner	Shareholder value (dividend plus stock appreciation)

Figure 14. Sample Measures of Organization Change.

comes from Terziovski and Samson (2000), who found that larger manufacturers (with more than 100 employees) tended to gain greater benefits from TQM practices than small companies (fewer than 50 employees). Other organizational characteristics that could influence success in implementing change include personnel turnover, industry competitiveness, and how capital intense the industry is.

If you look for guidance from the literature on organizational change, ask yourself the following questions to ensure the applicability of the research to your situation:

- Did the research deal with the kind(s) of change that you are contemplating?
- Did the study include organizations of your size, as measured by the number of employees or gross revenue?
- Was your industry represented in the sample used for the research?
- Did the study include companies that were performing at your level in terms of profitability (or another appropriate measure for judging business performance)?
- Was the measure (or measures) of success used in the research similar to how you want to measure the success of any change that you are contemplating?

Considering these questions will help you sort through the variety of published studies to determine which, if any, are applicable to your situation. Armed with such information and perspective, you will be better equipped as you implement and navigate change for performance improvement in your organization. 🏡

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