



1905 Harney Street, Suite 700 | Omaha, NE 68102 | 402-345-5025 | www.aiminstitute.org

Change Management in Highly Integrated Organizations

21 Large Omaha Firms

Robert E. Sweeney, Ph.D.
June 2008

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I. INTRODUCTION

Managing change is a part of any organization.

For smaller enterprises, change is usually the responsibility of the founder, operating executive or an operational department. Change may be the product of an innovative mind, forced upon the organization by competitive or other forces outside its control, changes in ownership, new technology, legal or governmental regulatory requirements, or a variety of other forces.

Before the highly integrated business structures of the modern era, a department within the organization might choose to make a change. For example, the accounting department might install a new accounts receivable system. The staff in the computer department would work with the accounting department on largely a bilateral basis writing code and helping to install the new system. Frequently the change was simply the automation of transactions, leaving other manual and historical linkages with other systems within the department and users outside the department untouched. Change management was largely confined to a department or, if computers were involved, the change was limited to that functional department and the IT department.

Increasingly, business is operating on highly integrated electronic platforms, composed of an array of computer and communications technologies. They host all business applications as well as internal and external communications, handle all communications history and corporate data, maintain contact with all suppliers and customers, plus regulate and control business processes. This electronic platform is increasingly the focal point for the enterprise's security strategies, while being the point of greatest vulnerability for corporate espionage, vandalism or other loss.

Every department and nearly every individual within the organization is touched by this highly integrated network. A simple decision to drop or add a data item in some functional department may reverberate throughout the entire organization. Marketing may have just lost a key measure of market intelligence. Management may have encouraged the change to reduce operating costs, not knowing that the "cost-saving" change just triggered the demand for a new and redundant data store to collect the information from an alternative source, etc.

Likewise, hardware and network changes, the updating of equipment in a manufacturing division, new technology required to remain competitive in some business process, new governmental regulations, social changes, etc. all have caused changes that reverberate throughout the enterprise.

Recently, the AIM Institute surveyed 21 companies in the Omaha metropolitan area with revenues in excess of \$100 million to document how they manage change. The survey identified seven different dimensions or strategies to manage change. Those dimensions were:

- Business Process Management
- Business Process Reengineering
- Business Analysis
- Business Process Improvement
- Requirements Analysis
- Change Management
- Project Management

For each of these dimensions of change, the survey questionnaire asked, “Who has responsibility for the management of these business needs?”

- Information Technology
- Other Departments or Divisions
- The Enterprise

Finally, the respondents were asked to characterize the relative responsibility for the change by the IT department, Other Departments or Divisions, or The Enterprise. That responsibility was characterized as:

- Own
- Influence
- Support
- Participate
- Sponsor/Champion

Respondents were asked to mark all that apply. In many cases, the response — measured in percent — exceeded 100%, indicating, for example, that the information technology department and other departments may both consider ownership of change management issues reflecting in some cases dual “ownership” and in some cases, perhaps, conflict between departments about who’s in charge.

In general, among the reporting firms the data reveals that in many cases the IT department “owns” a change. In other situations, the primary “ownership” rests with the affected department or division with IT’s role characterized as “influence” and “participation”.

II. CHANGE MANAGEMENT

- 1. Business Process Management (BPM)** refers to activities performed by businesses to optimize and adapt their processes.

Although it can be said that organizations have always used BPM, there is a new impetus based on the advent of software tools known as Business Process Management Systems (BPMS). These tools allow for direct execution of the business processes without costly and time-intensive development of the required software. In addition, these tools can monitor the execution of the business processes, providing managers with the means to analyze their performance and make changes to the original processes in real-time. Using a BPMS, the modified process can then be merged into the current business process atmosphere.

Whereas Business Process Reengineering (popular in the 1990’s) dealt with one-off changes to the organization, Business Process Management deals with the continuity and embedding of process orientation in the organization. Business Process Management has evolved as technology has caught up with management processes to the point that technology should no longer be the limiting factor in BPM.

The following was the response of 21 large Omaha firms relative to Business Process Management.

| Responses of 21 Omaha “Large Firms” – Business Process Management | | | |
|----------------------------------------------------------------------|------------------------|--------------------------------|------------------------|
| Who has responsibilities for the management of these business needs? | Information Technology | Other Departments or Divisions | Enterprise |
| Business Process Management | 28.6% Own | 38.1% Own | 14.3% Own |
| | 38.1% Influence | 19.0% Influence | 19.0% Influence |
| | 47.6% Support | 19.0% Support | 14.3% Support |
| | 38.1% Participate | 33.3% Participate | 19.0% Participate |
| | 19.0% Sponsor/Champion | 33.3% Sponsor/Champion | 19.0% Sponsor/Champion |

2. **Business Process Reengineering** is a management approach that examines aspects of a business and its interactions, aimed at improving the efficiency of the underlying processes. It is a fundamental and radical approach that is achieved by either modifying or eliminating non-value adding activities. The key steps involved in a BPR are:

- Defining the purpose and goal of the BPR project.
- Defining the scope of the project so as to include (or exclude) activities. A flowchart of activities can assist to define the scope of the project.
- Identifying the requirements that will meet the needs of the clients.
- Assessing the environment – the position of competitors, prospective changes in technology, legislation or socio-economic factors.
- Redesigning the business processes and activities in light of the above.
- Implementing the redesigned processes.
- Monitoring the success/failure of the design.

Business Process Reengineering is also known as BPR, Business Process Redesign, Business Transformation, Process Change Management.

The following was the response of 21 large Omaha firms relative to Business Process Reengineering.

| Responses of 21 Omaha "Large Firms" – Business Process Reengineering | | | |
|----------------------------------------------------------------------|------------------------|--------------------------------|------------------------|
| Who has responsibilities for the management of these business needs? | Information Technology | Other Departments or Divisions | Enterprise |
| Business Process Reengineering | 23.8% Own | 42.9% Own | 19.0% Own |
| | 33.3% Influence | 28.6% Influence | 28.6% Influence |
| | 47.6% Support | 19.0% Support | 23.8% Support |
| | 47.6% Participate | 38.1% Participate | 19.0% Participate |
| | 19.0% Sponsor/Champion | 33.3% Sponsor/Champion | 19.0% Sponsor/Champion |

3. **Business Analysis** helps an organization improve how it conducts its functions and activities in order to reduce overall costs, provide more efficient use of scarce resources, and better support customers. It introduces the notion of process orientation, of concentrating on and rethinking end-to-end activities that create value for customers, while removing unnecessary non-value added work. The person who carries out this task is called a Business Analyst or BA.

Business Analysis is also a structured methodology that is focused on completely understanding the customer’s needs, identifying how best to meet those needs, and then “reinventing” the stream of processes to meet those needs. Its purpose is to develop business process improvement (BPI) as a key strategy and a management tool, capable of supporting the organization’s vision, mission, goals, and objectives and to promote the effective use of technology throughout the organization.

The following was the response of 21 large Omaha firms relative to Business Analysis.

| Responses of 21 Omaha “Large Firms” – Business Analysis | | | |
|----------------------------------------------------------------------|------------------------|--------------------------------|------------------------|
| Who has responsibilities for the management of these business needs? | Information Technology | Other Departments or Divisions | Enterprise |
| Business Analysis | 47.6% Own | 42.9% Own | 23.8% Own |
| | 33.3% Influence | 33.3% Influence | 28.6% Influence |
| | 52.4% Support | 33.3% Support | 23.8% Support |
| | 52.4% Participate | 42.9% Participate | 19.0% Participate |
| | 19.0% Sponsor/Champion | 38.1% Sponsor/Champion | 28.6% Sponsor/Champion |

4. **Business Process Improvement (BPI)** is a systematic approach to help any organization make significant changes in the way it does business. The organization may be a for-profit business, a non-profit organization, a governmental agency, or any other ongoing concern. BPI works by:

- Defining the organization’s strategic goals and purposes. (Who are we, what do we do, and why do we do it?)
- Determining who the organization’s customers (or stakeholders) are. (Who do we serve?)
- Aligning the business processes to meet the customer’s requirements. (How do we do it better?)

The goal of BPI is a radical change in the performance of an organization, rather than a series of incremental changes (compare Total Quality Management). Michael Hammer and James Champy popularized this radical model in their book, *Reengineering the Corporation: A Manifesto for Business Revolution (1993)*. Hammer and Champy stated that the process was not to impose trivial changes, such as 10 percent improvements or 20 percent cost reductions, but was meant to be revolutionary.

Unfortunately, many businesses in the 1990’s used the phrase “reengineering” as a euphemism for layoffs. Other organizations did not make radical changes in their business processes, did not make significant gains, and wrote the process off as a failure. Yet others have found that BPI is a valuable tool in a process of gradual change to a business.

The following was the response of 21 large Omaha firms relative to Business Process Improvement.

| Responses of 21 Omaha “Large Firms” – Business Process Improvement | | | |
|----------------------------------------------------------------------|------------------------|--------------------------------|------------------------|
| Who has responsibilities for the management of these business needs? | Information Technology | Other Departments or Divisions | Enterprise |
| Business Process Improvement | 23.8% Own | 52.4% Own | 28.6% Own |
| | 47.6% Influence | 19.0% Influence | 19.0% Influence |
| | 61.9% Support | 28.6% Support | 19.0% Support |
| | 47.6% Participate | 28.6% Participate | 19.0% Participate |
| | 33.3% Sponsor/Champion | 47.6% Sponsor/Champion | 28.6% Sponsor/Champion |

5. **Requirements Analysis** is the essential first steps in systems engineering and software engineering. Requirements Analysis encompasses all of the tasks that establish the instigation, scope and detailed definition of the new or altered system. Requirements Analysis is an important part of the system design process, whereby requirements engineers and business analysts, along with systems engineers or software developers, identify the needs or requirements of a client. Once the client’s requirements have been identified, the system designers are then in a position to design a solution.

Requirements Analysis is also known under other names:

- Requirements engineering
- Requirements gathering
- Requirements capture
- Operational concept documenting
- Systems analysis
- Requirements specification

The following was the response of 21 large Omaha firms relative to Requirements Analysis.

| Responses of 21 Omaha “Large Firms” – Requirements Analysis | | | |
|----------------------------------------------------------------------|----------------------------|--------------------------------|----------------------------|
| Who has responsibilities for the management of these business needs? | Information Technology | Other Departments or Divisions | Enterprise |
| Requirements Analysis | 61.9% Own | 28.6% Own | 14.3% Own |
| | 14.3% Influence | 33.3% Influence | 28.6% Influence |
| | 38.1% Support | 19.0% Support | 19.0% Support |
| | 42.9% Participate | 57.1% Participate | 14.3% Participate |
| | 14.3% Sponsor/ Champion | 33.3% Sponsor/ Champion | 23.8% Sponsor/ Champion |

6. **Change Management** can take many forms and include many change environments. The most common usage of the term refers to the Organizational Change Management.

Organizational Change Management is the process of developing a planned approach to change in an organization. Typically, the objective is to maximize the collective benefits for all people involved in the change and minimize the risk of failure from implementing the change. The discipline of change management deals primarily with the human aspect of change, and is therefore related to pure and industrial psychology.

Many technical disciplines (for example Information Technology) have developed similar approaches to formally control the process of making changes to environments.

Change Management can be either *reactive*, in which case management is responding to changes in the macro environment (that is, the source of the change is external), or *proactive*, in which case management is initiating the change in order to achieve a desired goal (that is, the source of the change is internal). Change Management can be conducted on a continuous basis, on a regular schedule (such as an annual review), or when deemed necessary on a program-by-program basis.

Change Management can be approached from a number of angles and applied to numerous organizational processes. Its most common uses are in information technology management, strategic management, and process management. To be effective, Change Management should be multi-disciplinary, touching all aspects of the organization. However, at its core, implementing new procedures, technologies, and overcoming resistance to change are fundamentally resource management issues.

The following was the response of 21 large Omaha firms relative to Change Management.

| Responses of 21 Omaha "Large Firms" – Change Management | | | |
|----------------------------------------------------------------------|------------------------|--------------------------------|------------------------|
| Who has responsibilities for the management of these business needs? | Information Technology | Other Departments or Divisions | Enterprise |
| Change Management | 52.4% Own | 33.3% Own | 23.8% Own |
| | 33.3% Influence | 28.6% Influence | 23.8% Influence |
| | 47.6% Support | 19.0% Support | 19.0% Support |
| | 38.1% Participate | 52.4% Participate | 23.8% Participate |
| | 28.6% Sponsor/Champion | 28.6% Sponsor/Champion | 23.8% Sponsor/Champion |

7. **Project Management** is the discipline of organizing and managing resources in such a way that these resources deliver all the work required to complete a project within defined scope, time and cost constraints. A project is a temporary and one-time endeavor undertaken to create a unique product or service. This property of being a temporary and one-time undertaking contrasts with processes, or operations, which are permanent or semi-permanent ongoing functional work to create the same product or service over and over again. The management of these two systems is often very different and requires varying technical skills and philosophy, hence requiring the development of Project Management.

The first challenge of Project Management is ensuring that a project is delivered within the defined constraints. The second, more ambitious challenge is the optimized allocation and integration of the inputs needed to meet those pre-defined objectives. The project, therefore, is a carefully selected set of activities chosen to use resources (time, money, people, materials, energy, space, provisions, communication, quality, risk, etc.) to meet the pre-defined objectives.

The following was the response of 21 large Omaha firms relative to Project Management.

| Responses of 21 Omaha "Large Firms" – Project Management | | | |
|----------------------------------------------------------------------|------------------------|--------------------------------|------------------------|
| Who has responsibilities for the management of these business needs? | Information Technology | Other Departments or Divisions | Enterprise |
| Project Management | 61.9% Own | 23.8% Own | 28.6% Own |
| | 42.9% Influence | 33.3% Influence | 9.5% Influence |
| | 57.1% Support | 38.1% Support | 14.3% Support |
| | 52.4% Participate | 61.9% Participate | 38.1% Participate |
| | 38.1% Sponsor/Champion | 23.8% Sponsor/Champion | 19.0% Sponsor/Champion |

III. SUMMARY AND CONCLUSIONS

The presence of the information technology department in each of these dimensions or strategies of change shows the important role that IT plays in every facet of the business. It is no longer simply a department operating within the organization. IT now plays a critical role in the majority of the major business functions within a company.

Areas where this influence is most pronounced were Requirements Analysis, Project Management, and Change Management. Over 50 percent of survey respondents indicated that IT “owns” these processes within their organizations revealing the fundamental role that IT plays across all departments within a company. Because so many of the core business processes are dependent upon this digital backbone, IT has become a business partner, helping all departments achieve their goals, rather than just a support structure within the organization.

In only the change strategy Business Process Improvement did respondents report that management in other departments or divisions “own” the strategy for change over 50 percent of the time.

IT support of change was also relatively high, as measured by the terms “influence,” “support,” and “participate.” For most of the seven different dimensions or strategies for change, the respondents indicated that IT’s participation levels or percentages were above those of Other Departments or Divisions and for Enterprise level leadership.

The increased focus on the broadening role of the IT department has changed the face of the traditional IT worker. No longer considered just a haven of programmers and hardware engineers, today’s IT department must be made up of professionals who are able to operate at many levels and across disciplines in order to deliver solutions necessary to keep their organizations competitive.

There is no job function in which this is more evident than that of the project manager. Project management has been generally considered an IT function in recent years. The skills most sought after in a good project manager are the business intelligence necessary to help make decisions that are best for the company plus the technical and communications skills necessary to deal with the engineers and developers at a detailed level. This individual often has a formal IT background, but it is not uncommon now to see IT project managers come from accounting, engineering, sales, or some other part of the business.

As organizations continue to invest more in their digital backbone, their reliance upon employees with IT skills will continue to increase. This does not necessarily mean the size of their IT departments will increase; it means that the overall IT knowledge present in the organization will increase. These individuals may be officially part of the accounting department, upper management, or research and development, but their jobs, and a part of their skill set to excel at those jobs, will be in information technology. This is having a profound effect on the education system as high schools and colleges struggle to maintain the necessary pipeline of students to satisfy the need for workers with sufficient IT skills, no matter their primary occupational emphasis. Conversely, cross-departmental requirements dictate that today's IT specialist must not only be skilled in his or her chosen IT specialty but must also be able to communicate effectively with all levels of the organization.

Each day, it is becoming more important that the enterprise have a sufficient quantity and quality of workers with the solid understanding and knowledge of IT required to support and optimize the capabilities of the ever increasingly complex digital infrastructure.