

The Seven Habits of Highly Effective Programs

Practices you need to change your organization with information technology

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Abstract — Organizations strive to change and improve themselves to sustain competitive advantage. In many cases, these changes are enabled and underpinned by information technology. The implementation of IT-enabled change is challenging for all organizations.

This paper examines seven habits that change leaders can develop in their IT-enabled change programs to increase their chances of success:

- Lead and manage the change
- Focus on processes
- Implement the right system
- Give people the skills to succeed
- Manage the program effectively
- Build a good relationship with suppliers
- Communicate!

The paper will be of interest to program managers running IT-enabled change programs in technology companies, and executives who need to initiate and sponsor them.

Keywords — Change management, information technology, systems implementation, business improvement, IT-enabled change programs

I. INTRODUCTION

During eight years of leading IT-enabled change programs, the author has recognized seven habits worth cultivating to increase the chances of project success:

- Lead and manage the change
- Focus on processes
- Implement the right system
- Give people the skills to succeed
- Manage the program effectively
- Build a good relationship with suppliers
- Communicate!

The first step, “Lead and manage the change”, is treated more extensively than the remaining six, as it is the least well understood by most program managers.

II. LEAD AND MANAGE THE CHANGE

In [1], John P. Kotter sets out eight steps that are required to achieve transformational change:

- A. Establish a sense of urgency
- B. Create a guiding coalition
- C. Develop a vision and strategy
- D. Communicate the change vision

- E. Empower employees for broad-based action
- F. Generate short term wins
- G. Consolidate gains, produce more change
- H. Anchor new approaches in the culture

Although they were originally formulated for guiding organizational change programs, they are equally applicable to IT-enabled change programs of any size.

This paper will consider what each of these steps means for an IT-enabled change project, suggest good practice and point out any obvious pitfalls. Where possible, it will also note how success can be measured for each step.

A. Establish a sense of urgency

A change program is only necessary where there are significant problems to be solved, or opportunities to be addressed. The first step in the change process is to generate understanding and agreement on these issues across the full stakeholder community, followed by a sense of urgency to do something about them.

Establishing a sense of urgency requires the problems or opportunities to be documented and agreed by the management stakeholders, particularly those whose active sponsorship and participation will be required later for success. Once urgency has been established in this group, the change leader must communicate extensively with all of the other stakeholders to generate similar feelings in this much wider group. A carefully considered communications approach will be required, with monitoring to check its effectiveness.

In one project, the observation of an engineer new to the organization was used to add to the sense of urgency:

“Having previously worked for Company X it was a great shock to find such a difference in how they handled documentation to how we do. At Company X it was possible to find any documentation from any part of the company on any subject usually in less than a minute (people would complain if it took more than a couple of minutes).”

A typical pitfall during this first step is to do enough work to establish understanding of the issue, but without establishing urgency. For example, managers agree that new project management processes and systems are necessary, but don’t agree that this is one of the most urgent issues that the organization faces. If there is no

urgency established at the management level, there will be none at the operational level, and the change may face enough indifference and resistance later to defeat it.

B. Create a guiding coalition

Once urgency has been established in a large enough group of influential people, some of them need to be brought into the change program to form it, guide it and champion it. This group needs to have enough power to drive the change effort and make it stick.

Such a coalition is formed once there is a group of influential people covering relevant parts of the organization. They must be enthusiastic about the change, actively involved in shaping it, communicating the vision to their own people, and enrolling others into the program.

Without applying these tests, it is easy to confuse a program oversight board with a guiding coalition. The change leader thinks the board is there to make the program succeed. The board believes that its role is to keep the program on track and ensure that it delivers on its promises.

C. Develop a vision and strategy

A clear vision helps to guide the change effort and show what things will be like when the change is complete. This vision must be compelling for most stakeholders. It must also be easy to communicate rapidly, and capable of guiding appropriate actions without extensive clarification. Any set of words which fails these tests is not a vision. Practical guidance on the development of strategic vision can be found in [2].

This step is complete when the guiding coalition all feel that the vision is appropriate and compelling, it has been test marketed successfully with selected stakeholders, and the coalition are eager to go out and sell it. There should also be a strategy formulated which shows how the vision might be realized, and indicates what is required from stakeholders to realize it.

D. Communicate the change vision

Establishing a sense of urgency requires a program of communication with all stakeholders to establish agreement on the issues, and their strategic importance to the organization. Now that the guiding coalition has developed a compelling vision and strategy, this needs to be taken back to all the stakeholders to generate buy-in for action.

Communication of the vision and strategy is a task for the guiding coalition. It is important that people hear this from influencers in their own group, not just from senior managers or other outsiders. This step is complete when the vision has been communicated to all stakeholders, and

monitoring indicates that enough of them have understood and bought into it.

The vision and strategy will require constant reinforcement via multiple channels of communication. This reinforcement must be a key component of the overall communications program for the organization. Change leaders usually under-estimate the effort and cost required for complete and successful communication of the vision. Without sufficient effort it will be difficult to achieve enough buy in, even with a compelling vision.

E. Empower employees for broad-based action

Effective completion of the first four steps will unfreeze the organization, creating an extensive group that understands the issues and buys into the strategic plan for fixing them. In this step as many stakeholders as possible need to be empowered to act. This means removing organizational barriers, aligning incentives to action and neutralizing discouraging supervisors. For more extensive discussion of this, see [1].

Success at this stage is highly dependent on the work of the guiding coalition, and their ability to influence those with the power to remove organizational and personnel obstacles. Without a clear vision and strategy for the organization as a whole with which the change program connects strongly, it is unlikely that this step will succeed. The senior executives who will need to provide support and help for the program will not have any incentives to do so.

This step is complete when the number of people in the stakeholder community who are actively and positively participating in the project is high enough to overcome any remaining doubters and resisters.

F. Generate short term wins

When identifying the original issues that the change program is to address, it is important that some of these should be items that can be addressed early on and accepted by the stakeholder community as short term wins.

For example, integration of the timesheet module of an enterprise project management system with the general ledger application might allow project costs to be accurately tracked for the first time, generating a potential short term win. Such a win will only be widely accepted if the time is taken by the guiding coalition to explain in advance why the issue is important, and indicate when it will be solved. Short term wins that emerge without previous signposting are unlikely to win widespread acceptance.

By planning, communicating, achieving and celebrating short term wins the stakeholder community and the project team will see value coming from the

project and will be encouraged to pursue it more vigorously.

G. Consolidate gains, produce more change

It is easy to underestimate the tendency of organizations to move back into comfortable old habits as soon as the direct and constant stimulus for change is removed. Culture runs deep and is unlikely to be substantially changed by a single program. Any centers of doubt and resistance not co-opted during the previous six change steps may now seek to covertly neutralize the effects of the program.

During and after the program, the changes implemented must be closely monitored, and fine tuned if required. Executives must also make sure that people continue to have clear incentives to operate in the new way, even if the benefits of doing so seem self-evident.

This step needs to be started by the change program itself, but will need to continue for a long time after the program team has successfully disbanded itself. For this to be successful, the changes will need to pass into the ownership of a part of the functional organization.

H. Anchor new approaches in the culture

This step is not usually the direct responsibility of the program team, but is necessary to ensure that the changes introduced by the program are fully internalized into the company culture. Culture change will always come after everything else, and cannot be engineered in advance, no matter how desirable this might be.

III. FOCUS ON PROCESSES

The effectiveness and efficiency of an organization depends, among other things, on its business processes. Any major change program will have to modify existing processes, remove redundant ones, and create new ones.

Those organizations which already document all of their key processes, and continuously improve them, already have this habit and can worry about other things. But those organizations whose processes are ad-hoc and undocumented will need to tread with care when implementing IT-enabled change.

At the bare minimum, an IT enabled change program must do the following:

- List current and required business processes
- Create a process framework to identify new processes and their interaction
- Document process inputs, activities, outputs
- Identify improvements required

This information is required to select and implement the right system. It may also allow the change to be

completed on a process-by-process basis, creating short term wins in the overall program.

For example, when selecting a project management system, key business processes were sketched out using knowledge of the organization's structure and desired way of working. Vendors were then asked to demonstrate the performance of their software against these processes, making it very clear which products would fit within the organization. However, this process-based approach was not carried forward into the system implementation phase of the program, making this longer and more difficult than it needed to be.

IV. IMPLEMENT THE RIGHT SYSTEM

The right system is one that meets the needs of the business. In order to meet these needs they must first be agreed by the stakeholders, then documented in such a way that their delivery can be managed. The process of converting business needs into requirements for an IT system is a part of requirements engineering, often seen as a sub-discipline of systems engineering.

To implement the right system, the business processes must be broken down into a series of functional and non-functional requirements. Functional requirements are concerned with the things that the system must do. Non-functional requirements are principally concerned with how they are done, such as security, performance, scalability, reliability, maintainability.

It is well understood that a rigorous requirements definition is necessary for custom software development, but this stage is often missed out when selecting commercial-off-the-shelf [COTS] software. Without such a requirements definition, vendors will showcase their systems to best advantage and obscure issues that may return to haunt the program later.

The author has had success with the following approach for evaluating and selecting COTS software:

- Consult the user community extensively
 - Interviews
 - Questionnaires
 - Workshops
- Prepare a requirements specification
- Include this in a Request for Proposal to vendors
- Shortlist vendors from RFP response
- Form stakeholders into a vendor selection team
- Evaluate proposals
- Assess vendors against key business processes
- Select vendor

It is important to have vendors demonstrate against the organization's own set of key business processes. For example, when selecting enterprise project management software, there was little to choose [except price] between eight potential vendors on the basis of their RFP response. When the same vendors were evaluated against key

business processes, only two of the eight could operate in the manner required without extensive customization.

V. GIVE PEOPLE THE SKILLS TO SUCCEED

As the program changes existing business processes and introduces new ones, it will change the skills required to operate these processes. Sometimes it can reveal skills deficits that have long been present in the organization and need to be addressed for the program to succeed.

The program must build up an accurate picture of current skills in the relevant domain, together with the skills required for the change to be successful. This enables plans to be put in place to raise the skills to the required level.

It is important to understand the current skill base of the organization in the area relevant to the change, the skill base required for the change to succeed, then put in place plans to raise the skills to the required level.

This must happen at the beginning of the change program, so that any deficit can be agreed with stakeholders as one of the urgent issues to be addressed. Once a deficit is identified, the skills base of the organization can be raised as an integrated part of the overall change program.

For example, when implementing a document management system in a technology company, software engineers familiar with the concept of source code control had no problems applying the same principles to documents, whilst hardware engineers who were unfamiliar with this concept had much greater difficulties.

When a skills deficit goes unaddressed, issues will arise later in the change program. For example, when implanting enterprise project management software there was great resistance to the system after initial deployment, with many people offering the opinion that the particular system selected was the problem. Workshops to identify root causes revealed that most of the problems were due to lack of processes and the low level of project management domain skills in the organization.

VI. MANAGE THE PROGRAM EFFECTIVELY

Like any other time-limited activity, change programs require good project management to succeed. In order to manage a program effectively, it needs to be defined and structured, with clear stages and clear deliverables.

One globally established approach to this is the Project Management Institute's Project Management Body of Knowledge [PMBOK], which describes 39 linked project management processes, categorized into nine knowledge areas and five process groups [3].

An interesting feature of the PMBoK is that it strongly recommends that the product which the project is

intended to produce should have its own defined lifecycle, with clear phases and decision checkpoints. An example of such a product lifecycle, drawn from the world of integrated product development would be; Concept, Planning, Develop, Qualify, Launch and Support. More detail on these phases is available in [4].

Within each product lifecycle phase, the PMBoK's project management process groups are used to structure and manage activities, as shown on the diagram below. Key decision checkpoints [DCPs] are also added for structured management review of progress, and a formal decision to proceed or stop.



Fig. 1 : Example product lifecycle for IT enabled change

An IT-enabled change program has two products: the change itself, and the system required to support and deploy it. It is arguable that, for a large change program, both of these products should be planned and controlled separately but in an interlinked way. An example of this is shown below.

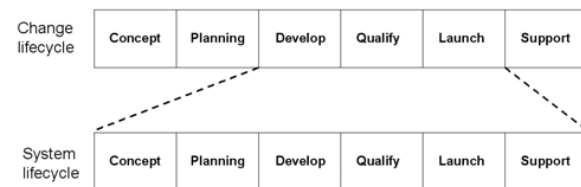


Fig. 2 : Separate but linked lifecycles for change and system

Both the PMBoK processes and the product development lifecycle will require certain deliverables during the execution of the program. A frequent program mistake is to plan only for final deliverables, but not for the many intermediate deliverables that are also required.

The author has seen and participated in a wide range of approaches to the management of change within engineering companies. The above model needs to be customized further for individual organizations but is a useful basis for planning and executing change programs.

VII. BUILD A GOOD RELATIONSHIP WITH SUPPLIERS

IT-enabled change programs are challenging and will go through difficult periods. When this happens, it is important to have good personal relationships with

suppliers to draw upon, and the backing of an appropriate contract.

Contracting with the vendor on the right basis is the bed rock of this relationship building. The product element of any contract is usually dealt with quite easily, while the service elements present more problems. If the vendor has a well-defined and complete service offering that has been successfully delivered previously, then a fixed price may be possible. If this is not the case, or there is uncertainty about the program requirements for consultancy support, then a well managed time and materials contract for service may be more appropriate.

Open and ethical behavior during contract negotiations will strengthen business and personal relationships, whilst the opposite will damage and weaken them. The consequences of this may not be felt until much later in the program. Development of good relationships takes effort and time, and this needs to be maintained throughout the program by regular formal and informal meetings.

Competitive advantage can sometimes be gained by deploying innovative software products. These are often supplied by small local companies, or perhaps subsidiaries of overseas companies. In these cases it is particularly important to understand what the strengths and weaknesses of the vendor are. Product companies will be strong at selling licenses, but may have underdeveloped service offerings. Service companies may present well, but lack the in-depth knowledge of the products that they are implementing. Larger service companies may deploy less experienced people during the program that those that presented during the pre-sales phase.

VIII. COMMUNICATE!

Most project and change management practitioners recognize the vital importance of good communications. Yet stakeholders in many organizations complain that they receive too little communication on issues of major concern to them. A successful IT-enabled change program will need to find a way to overcome this communications gap.

Project management best practice is to produce a communications plan. This describes the stakeholder groups, the communications mechanisms to be used, and the regular formal communications to be issued, such as progress reports and schedule updates. The communications plan is an important tool, but will not be sufficient in most cases to overcome the communications gap.

Such a communications plan does not cover the simple, important messages to be communicated to stakeholder groups, the schedule for delivering these, together with the people and mechanisms responsible for delivering them. In a world which is utterly saturated

with communications chatter of every kind, key messages will only reach stakeholders if they are carefully refined by the program team, delivered in a planned and timely fashion, and effectiveness is monitored.

This technique is similar to those used for news management by governments around the world with various levels of success. Unless care is taken that the messages communicated are complete and true, then stakeholders will realize that there is an attempt to “manufacture consent” [5] and will likely discount future communications from the program.

The effectiveness of communications in change and other types of programs might be a fertile area for further study by the academic community.

IX. CONCLUSION

This paper has introduced the Seven Habits of Highly Effective Programs, outlined what each means and provided some examples of their application in projects.

The reader is encouraged to benchmark their own IT-enabled change programs against these habits, and study further those which appear to be weak points for them. For new programs, the paper could be used as a planning support tool and a checklist to monitor them during their lifetimes.

Any attempt to take a more holistic view of IT-enabled change programs is likely to increase their chances of success, so the community of practitioners can expect to benefit from cultivating approaches such as these Seven Habits.

Comments on the paper are welcome via the web site <http://www.mcrowne.com>.

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