A Four Step Recipe

For Successful Implementation of Change Management Projects

Overview

This document focuses on the challenges when faced with an IT Change Management project. It defines a four steps approach towards success.

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Executive Summary

This document focuses on the challenges when faced with an IT Change Management project. It defines a four steps approach towards success.

It lists a number of good sense / good practise based on experience, and also some obvious or more sneaky pitfalls in a Change project, strongly focusing on the end user system adoption (early phase of the roll out) and end user efficiency (later and longer phase of system use).

It also links these challenges with solutions offered by Assima all along the Change chain.

Ultimate Challenge, Ultimate Solution

Ultimate challenge: improve the Business, grow revenue and profit, exceed expectations

Recognized path to glory: go more Digital, and improve IT processes throughout the organization

Pitfalls/Risk: IT system not properly designed, or not properly working, or not properly used

System in place to counter risk: are you doing enough?

In order to improve your Business, you will regularly go through Change Management projects which will reshape organization and processes. These projects are prone to resistance. For them to succeed, you ultimately need to:

- Ensure end user system adoption

- Increase end user efficiency

- Monitor the performance of users and system

- Enhance the system based on feedback

Change Management: The virtuous cycle for improving the business

Anticipation and Vision
(Now let's improve the system based on intelligence and feedback)

End user adoption
(This is my system; I use it every time I need it)

Performance monitoring
(I know what to improve for my system and my team)

End user efficiency
(Yes I can do this for you quickly)
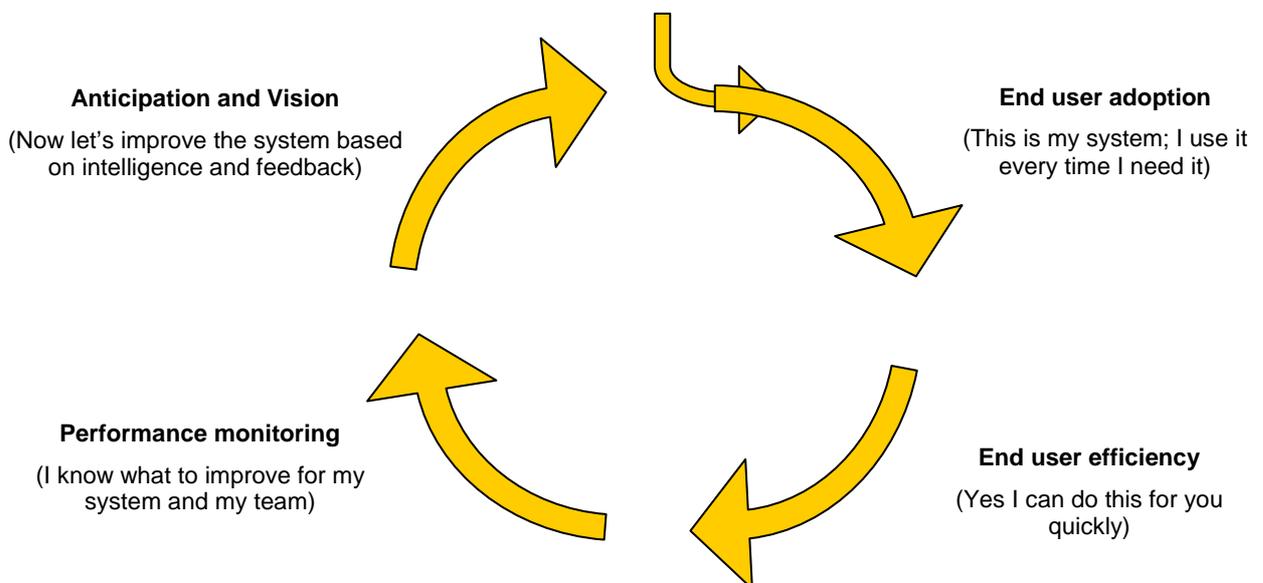
Assima provides the software infrastructure and the expertise to implement the virtuous cycle which will assist your business growth. The software backbone is based on a unique technology (software cloning) which captures system fingerprint and transforms this information into multiple output formats for the benefit of end users, IT and ultimately the entire business.

End User Adoption

No growth without clear processes, even less without end user adoption

End user adoption is crucial to your project. However good and performing your system is, it is a total waste of time and effort if it is not used down the line.

Good system usage is a permanent fight. Within your organization, there are certainly currently countless large or small quick process fixes in place, which originated from either the original system's dysfunction of lack of performance, or end user lack of understanding of its capabilities… These quick fixes are certainly still there years after, have replaced the corporate process, and contribute to block business growth and efficiency.

An example:

The initial situation: a company with dozens of subsidiaries all over the world in all currencies. Try to establish a unique financial system for improving financial analysis and communication.

The evolving situation: some subsidiaries find the corporate accounting system could not support the particular legal requirements of their country, so they decide to work on a different system better known locally.

Why this new situation: corporate system is inadequate (fix the system)? System was OK but communication to user was not good enough (fix end user adoption)? User did not know how to make system work (fix user efficiency)?

The consequence: the group company cannot consolidate all financial data in a timely manner and looses sight on group business performance. The right decisions cannot be taken due to lack of information

The future: local non corporate accounting systems are likely to be in place for years, local accountants do not want to hear about other systems/processes as they are comfortable with their working system. No easy fix in sight…

This example is one of many others. It can cost the company dearly in lack of performance (i.e., the production of the financial results for the sake of our example). It is a typical result of lack of preparation, communication, and end user adoption. Ultimately, the biggest problem with such situation is that it is here to stay as a derailed project, and it may take another Change project (including project planning, investment, efforts, and project drive to avoid an even bigger reluctance to change) to fix it.

That is why the price to pay to have it right first time is finally a small price to pay.

Pre Go-Live Preparation

Do yourself a favour: ensure you will have your system ready first

That is a basic golden rule, but it is so much not followed. The first and worst pitfall to end user adoption is a system which does not work as it should. If it s not doing he job when users are told to use it for good, no one will adopt it. End of story.

Fix your system first; ensure you have planned for testing, beta stages with real life data. Do not rush a system into production if it is not able to cope.

(future) AADS ensures your system is developed according to specifications

Get several allies early: involve key users in your system testing

When key users are involved, in a proper schedule, in ensuring the system will do the job when put in place, they will be your best advocate and will fight for end user adoption by preaching the good news to every future user way in advance of the system's go live date.

However, do remember the golden rule. Fix your system first... if key users are involved at a stage where the system is unusable, you're in for a rejection and you'll get opposition instead of allies.

(now) ATS generates automatic test scripts for your system

Plan ahead: do not leave it to the last moment

Communication and Training are the two most important phases for a successful end user adoption. Do not leave them to the last minute. This is always a difficult situation as the need for starting the creation of such material early is often balanced by the lack of access to a final working system, and the uncertainty caused by the ongoing change process. Are we not going to waste time on developing material too early if the system changes dramatically?

(now) ATS can help produce training and communication material even if the system is not fully ready

Address end users' reluctance to change: set a communication plan

Always the same motto: keep your end users aware of the steps put in place for the change project, and demystify the change. Deliver small pieces of information in a timely manner in order to keep change momentum and end user complicity. Make it fun to get a critical mass on your side.

A lack of communication plan may destroy all other greater efforts if end user reluctance and fears are left unmanaged, spiralling to the ultimate rejection of the system.

(now) ACMS manages your communication plans

Raise end users confidence: proper end user training

End user confidence comes with practise, nothing else. Do not underestimate the need for a practise environment. Do not replace it by flashy eLearning material or other online demonstration material. These are good supports for your communication plans, but not for this phase of proper training on the system.

Give me a Point & Click exercise in Chinese, where I require clicking in the red circle 20 times to go through all the steps of the process, and I will get top mark. Have I learned anything?

Give me a sandbox where I can try my understanding of the process, get it wrong, then right… There I will learn because I'm fully involved in solving the problem, and I do not fear breaking the system.

(now) ATS generates clones to replace your sandbox / training client

Establish a certification procedure for your end users

You have to know as accurately as possible how your end users are expected to perform, and will perform, on the system. You would not embark on a plane if the pilot had not received his proper certification and trained for months in flight simulators. Why would you accept more risk with the people piloting your system day to day?

Define the check list of what end users need to know when they use your system in production (the training course). Ensure a minimum level requirement (pass mark) is set for each processes to learn. Ensure all your end users requiring access to the system go through the training course. Ensure your training course is based on a training environment (the flight simulator, not the documentation, not the movie) to get the best learning experience out of it.

(now) ATS generates the flight simulator for your system

(now) ACMS tracks end user performance in the system's flight simulator, and produces ad hoc certificate

Post Go-Live Ongoing Challenge

Make your system available to certified users only

You know who is certified to use your system. Make sure only these users receive a login access to your system. You may also have several sub systems, in which case you shall grant rights to end users depending on their knowledge (certification) of those sub systems.

By dealing only with well trained users, you diminish the risk of system rejection and misuse.

(now) ACMS generates system login access based on certification (pass mark)

For all the good reasons: provide a performance support system

However good your communication and training plans are, the retention of knowledge and information evaporating with time is an issue you cannot oversee. Human beings forget. It's as simple as this. Also, you still have the issue of employee turnover, temporary staff, knowledge transfer, rare tasks to perform, etc…

Your system should not go live without an accompanying performance support system which embeds in the production system itself, all the best practise, all the common knowledge, all the questions and the answers. As applications grow in size and complexity, it is harder and takes longer to become an expert. Expertise can be replaced by guidance at the point of need, the role of a performance support system.

(now) APS provides a complete support system for your business applications

Monitor progress of end user adoption

Use of the system, and more generally end user adoption can and should be monitored. How do you know where you stand and what decision to make, if you do not get intelligence, if you do not understand what is happening with your live system?

You shall be able to get information such as "how long is the application used in a day?", "what type of transactions are used?", "Are they used according to pre-defined best practise?", "do we have productivity gaps between end users?", etc…

(now) APS provides feedback on end user efficiency and use of the system

(now) ACMS helps define monitoring campaigns

Target individuals based on system use and adoption criteria

Based on intelligence gathered on the use of the system, you can and shall define communication / training / performance campaigns or alternatively simpler quick fix information push delivered in the context (i.e., the application context, where is matters most ; the user context, to who it matters most).

That type of push of information ensures great share of knowledge among the user community, and ultimately a strong system adoption.

(now) ACMS helps define communication campaigns

(now) APS pushes dedicated content directly to the end user

Retrain your end users if you change your system again

It can be a huge gamble when you choose not to retrain your end users after a system change. Are you sure your system and processes are exactly the same, so you can afford not to retrain?

Let's take this analogy: you may have learned to swim, and you are at ease in your usual pool. Now, let's replace the pool by a lake, a river, a sea… are you still at ease, do you feel the same level of confidence? We did not change your knowledge, but the system in which you operate. Indeed, you may need retraining to swim across a large river.

(now) ATS follows your training requirements across systems and architectures

End User Efficiency

First, End User Confidence

Learn by doing, nothing like the real thing (or maybe a clone?)

How to raise end user confidence and ability to master the system? Top three answers are:

1/ practise; 2/ practise; 3/ practise.

Where/how do you practise? Not by watching a movie / demo. Not by reading a user manual. Not by attending point & click eLearning courses (or PowerPoint slides...). The right place to practise is within a training environment. It is where you can experience and learn.

The benefit of a training environment is to get trained end users (that is a crucial benefit!).

The drawback is the cost and complexity of setting up and maintaining the training client (the application, the network, the training database, the training storyboards, the reset of the database, and the risk that it all goes wrong on D day, due to the network, a change in the application, an expired set of data, etc…).

Software cloning is a good alternative to the training environment. So realistic that the end user feels he really is in the real application (or in the training environment), but at the same time, not requiring this large and costly infrastructure, and eliminating most of the risks.

(now) ATS generates sandbox from cloned processes of the real application

Next, End User Assistance

You do not need experts, you need efficient people

As described previously, IT systems are growing fast in size and complexity. It means expertise is harder and harder to get, and then to retain. But in most cases, expertise matters a lot less than efficiency. If I am able to perform a task correctly, it does not matter whether I qualify as an expert or not. What matters is that I could do the job according to expectation (quality, time, and cost).

Efficiency is greatly and positively impacted by a good performance support system (ePSS) which embeds all best practise and knowledge, and can restitute the relevant information in the context (what matters most to me at that moment).

Do not think pre go-live end user training is the one and only solution to end user adoption and end user efficiency. In the course of the Change Management project, the ePSS is as much a vital part as the training environment.

(now) APS captures 'fingerprints' of screens/transactions and delivers ad hoc and user-rated content at point of need

Training material becomes eLearning

At an earlier stage, the best practises have generally been captured on the system in numerous simulations used for end user training. The possibility of having multiple output formats for these best practises will greatly widen their use (hence ultimate end user efficiency) and it is generally coming with a low cost to produce, so let's have it!

As an example, the same storyboard can be used to produce a demonstration for a communication campaign, a sandbox format in a classroom training environment, a test script used during system validation phase, a user manual as a reference manual in production, a help to use alongside the system, etc… It is the same process which is described, but the output format has a strong influence on its condition of use.

(now) ATS generates multiple outputs (demo, practise, user manual, help, synopsis, etc…) of the same transaction

Training material becomes Performance support system

Training materials and problems arising in production environments do not go well together.

A good training material has to involve the end user by making him search for the solution (so he will remember it more when faced with the problem in production).

A good support material has to get directly to the solution of the problem and avoid any time wasting: concise and precise information is what is needed most when with dealing a live system in production.

As a result, it is important to make available further output format variations of the same best practises, which will be reused in a help on the job situation, but avoid the mistake of making a material available in the context just because it exists. If it is not a viable solution for the problem arising at that point, then let's not use it, and not make the ePSS more complex.

(now) ATS converts simulations into ePSS format

(now) APS imports ATS content for ePSS publishing

Finally, End User Knowledge Transfer

The system helps me (I'm efficient), I help the system (I share knowledge)

At one point, the knowledge of the good use of the system moves from the information captured in the formal documentation (all training and performance related materials created during the preparation of the system rollout) to the information known by the end users by practise and experience. As the system and the best practises slowly evolve together with time, the initial documentation becomes outdated and the knowledge only resides in end users heads. The effort of updating/redoing the documentation/materials is rarely an option from that point (too much cost, not much benefit).

You need to ensure that the performance system in place also has the ability to capture details which where not initially described (the end user can input information in the system, in the context) and restitute this information again in the context, for the benefit of the same user, or other peers. By capturing the evolution of the system and the knowledge shared by end users, you raise end user efficiency amongst non experts.

To get to this level of use, the ePSS must feel as an integral part of the system, part of the process, so the end user feels the benefit from capturing some knowledge in the system.

(future) APS allows personal eNotes edition right in the transaction, for further reuse/share of information

Auto-evolving performance system

The content available in the ePSS requires constant update for the following reasons:

- the actual system may be evolving, and the support system requires like for like adaptation
- the content that is delivered and ranked in the context may not be the most relevant at that point, and re-ranking may be necessary
- end user input in the system changes other content's relevance and ranking

Ensure your performance system captures these evolutions and does not get outdated with the ever evolving production system.

(future) APS gets end user rating of support content, enabling ePSS self tuning

Performance Monitoring

You have invested millions of dollars in an improved system, you are investing on a daily, weekly, monthly basis another set of millions of dollars in your people (the ones who interact with the system). The least you shall ask now is to get a monitoring system in place to ensure that you are indeed getting what you expected at the start of the investment decision.

How can you continue on the right path of the Change process of the organization if you cannot measure the past progresses, the current situation, and the future trends? Piloting Change with feelings has its very limits; all it is about now is measures, analytics and reports to get the right information for taking the right decision.

Monitoring the System

System's usage

The first and foremost basic measure to capture is system use. Is the system used? How long is it used per day per person? And what if I can increase system usage by 1% per day on all my population of users?

It can come sometimes as a surprise that the main system is the 4th application used in the day after MS Outlook (1st), Internet Explorer (2nd), and Excel (3rd). What does this mean to the business? Is the business efficient? Is the system in place not being bypassed by other workarounds (Excel sheets and emails)?

(future) ACMS can target user groups and set monitoring campaigns for a set time

(future) APS monitors system usage per end user

System's performance

System performance issues shall have been addressed a long time ago in the pre go-live testing phase. But does it mean there will not be any performance issue at all? It is very easy to set target metrics and verify that the production system complies with such metrics. Alerts can be set to warn of any significant deviance.

Safeguards are to be put in place to ensure the system is responsive and adapted to the organisation.

(future) APS can monitor system latency on population samples

Monitoring the Users

Analytics on Training

Assigning certificates to end users at the time of training, and keeping this information, constitutes a simple database of who has what skills in the organisation. This valuable information can help decide who can fulfil a particular temporary mission.

(now) ACMS keeps track of users scores at training time

Analytics on User Performance

Is this particular person using the system? Is he using it according to the known best practise? Is he requesting lots of help, or never? Is he known in the ePSS as an expert giving solutions to others? There's a lot of information that can be gathered and then interpreted. A better understanding of how the eco-system is used is a better view on how to improve it (improve the system itself, the processes, the communication with users, their training, their efficiency, etc...).

(future) APS gathers system use, and help requests type of information, per user

(future) ACMS shows trends, deviances, and further analytics

Training and Performance: 1+1=3

I may know who has what skills, and who has obtained what certificates. I may know who requires help at what step in the system, or who is the expert which could help this person. Unfortunately most of the time, there are walls between these two types of information. Training is processed by a training department depending from HR; help is processed by a support department depending from IT.

By mixing both types of information, here is what I could see that I cannot see otherwise:

- I can see that most users have a problem in a particular transaction, and none of them have been certified for it. Looks like we have a training problem that's been overlooked.
    - o I can also see we are wasting 2H per day per user on such transaction. Its costing big money, we need to rectify ASAP and (re)train on transaction X and Y.
    - o I can see that the effect is minor, just a variance on the accepted best practise, but nothing major, so we will just send best practise reminders at the point of need to correct this lack of efficiency, that should cure the problem.

- I can see most users have a problem in a particular transaction, but they are also certified. Do we have downtime problem with the application? Or is the transaction simply too complex and would probably need redesigning?

- I can see people have been trained on particular processes but are not using them in the real application

  o Do we have a problem of over scoping in training, thus wasting time and effort?

  o Do we have a problem of this process being done outside of the application? Is the system bypassed by another "rogue" one?

- Etc…

Answers to all these questions and more are plain obvious when training information and performance information are linked together. Suddenly, 1 + 1 = 3!!

(future) ACMS can help trigger alarms on suspect behaviours, events, practises

Performance Analytics

Define your metrics

At the start of the Change project, you have defined targets (system usage, higher volume order processing capacity, increased client satisfaction, better financial control, defined return on investment expectation, etc…). How will you know how/if all these targets are met. Some will be pretty obvious (the volume measure ones), some will be very foggy (the long term financial implication ones)

You need very clear metrics which will measure the effects of the Change. These metrics are formulas which only the business management can define. They will measure what is important for the business in the years to come. They will be reviewed regularly.

Set automated alarms

Real life information and metrics can help define the triggering of automated alarms.

  o Let me know if the system is used less than 2H per day on a certain user population

  o Let me know if people receiving certain type of information via the ePSS change their behaviour

  o Let me know of productivity gains greater than 2%

Draw conclusions and act upon them

With the help of a complete monitoring system in place, you can now interpret more easily higher level information, and draw quicker and more accurate conclusions, to further enhance current and future Change processes happening in the organisation.

Now you can anticipate and lead with a vision!

Anticipation and Vision

(Will be described at a later stage)

Linking it All Together: the Virtuous Circle

A set of good practises and solutions helps implement a virtuous circle within a Change environment. This virtuous circle is a fundamental step towards a successful and growing organisation. It revolves around four pillars which can break it, if not mastered:

- o Anticipation and Vision (the management)

- o Adoption (the employees)

- o Efficiency (the system and the organisation)

- o Performance monitoring (the system and the organisation, for the management)

Assima provides solutions which help secure the implementation of each of these steps. With a suite of interoperable products, it covers the full cycle and ensures its virtue.

ATS secures the end user training on large IT systems by replacing the training environment

APS ensures end user efficiency, system knowledge retention, and performance monitoring

ACMS gathers analytics from all moments of the Change project, and helps making the right decisions

Annex: Document History

Section Title	Location	Comment	Editor/Date	Version

Assima
Innovate & Accelerate

Assima creates technology solutions to support large scale application deployments, delivering measurable return on investment through increased user performance.

Assima's award winning software, training and change management solutions drive adoption, utilisation and organisational proficiency for all your business critical IT change projects.

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