

Change Management

Erin Dekker, Julia Paredes, Hasitha Anisingaraju, Sonny Ng, Jose Luna
Schulich School of Engineering
University of Calgary
Calgary, Canada

Abstract—Change management is a principle that describes a method for change in a workplace environment. This paper discusses the history of change management, the significance it plays in our lives and the most common approach to it.

Keywords—change Management; History; Negotiation

I. INTRODUCTION

This report discusses the most important aspects of change management because change is a part of our daily lives. The first topic discussed is defining change management, focusing on how it applies in industry. Following that is the history of change management, detailing how things have changed since its introduction in the 1980s. Next, the report discusses why change management is a necessary part of our world. It is then explained how to recognize when it is required. Next the most effective form of change management is explained: negotiation. Finally, the different focuses required for negotiation with people in the workplace were explained

II. WHAT IS CHANGE MANAGEMENT?

Change Management is an idea that everyone is familiar with on a subconscious level. Considering that the words "change" and "management" are key elements in the daily lives of people, this is fairly logical.

Change is "to make different in some particular manner" [1, First definition]. Though difficult, it is a concept that is natural, both culturally and biologically, to people. Change is considered a basic aspect of people and is even an aspect of societal progress. Nietzsche accurately described the need for change when he said:

The snake which cannot cast its skin has to die.
As well the minds which are prevented from
changing their opinions; they cease to be mind
[2, First paragraph].

Management is "... the conducting or supervising of something..." [3, First definition]. Like change, the idea of management is also heavily present in our lives. For example: home, school, and work environments all require proper management to function correctly and efficiently.

Considering the definitions given above, it is possible to get a basic understanding of change management. However, the term is primarily used in business environments. As a result, change management's definition required more specificity. It is defined as follows:

"Change Management is managing the process of implementing major changes in information technology, business processes, organizational structures and job assignments to reduce the risks and costs of change and optimize its benefits." [4, Page 22, 1]

This definition indicates that the key idea of change management is to improve the processes required to implement change within a particular setting. This makes the concept very useful for areas where change is constant or naturally difficult, such as software development projects. The nature of software means that changes happen fairly constantly so it stands to gain much from proper change management.

III. HISTORY AND BACKGROUND

Change Management is a relatively new concept. It first started being openly discussed in the 1980s, but it has become much more prominent within industry as time has passed. One of the individuals who first seriously discussed change management was Julien Phillips in 1983. He also produced a model for it. However, the idea did not immediately take off [5].

At the time, creating and implementing changes was done from a top-down approach. Leaders of prominent business had become unhappy about the failure of this approach, and were open to a new idea [6].

Some companies like GE, Ford and AT&T started adopting Change Management ideas in the 1980s [7], but the idea was very limited in its understanding at that time. Only a few consulting firms, textbooks, and online resources were available. With the changes in communication technology during the 1990s, the concept received a great amount of exposure and many business started to embrace it for their projects.

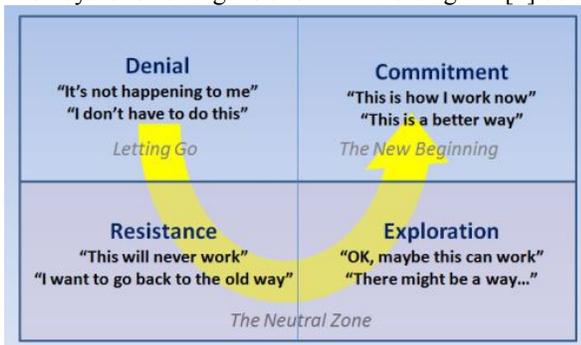
During the 2000s, Change Management became the standard for handling change in the business environment. The frequency that this methodology was applied also increased heavily over the decade. In 2003, 34% of business stated that Change Management was actively applied. By 2011, this number had increased to 72%. [7]. The number of firms offering change management services also saw a marked increase during this period. By 2011, 320 firms had been identified as offering this type of service [7]. The end of the 2000s saw the creation of the Association of Change

Management Professionals, an organization that tried to further advance Change Management as a discipline [8].

The creation of the ACMP, and the ever-increasing acceptance of the concept and its application for improving changes in the business setting, points to a further improvement and strengthening of the field. Change management is an idea that is here to stay, since changes will always be a part of society. Many fields, particularly the young discipline of software engineering, have benefited and will continue to do so.

IV. WHY DO WE NEED CHANGE MANAGEMENT?

Change is dealt with on a daily basis. It is a part of our lives in many different levels of magnitude. Change can be as simple as having something new for breakfast, or as complex as reconsidering the requirements for a project involving multiple multinational corporations. In spite of the multiple ever changing aspects in and around our lives, change is often questioned and resisted. This is because change often requires that people do something they have not done before. [9] People are often unsure as to how to approach change. A common cycle for change is shown in the diagram [1] below.



Change is often questioned because it can be fairly stressful, and may push people out of their comfort zones. However, change is often required, and may be exciting. This excitement pushes people towards the change. For the reasons discussed above, change requires proper management and organization. There are similarities in the approach of change, regardless of the reason that it is required or the type of change being dealt with.

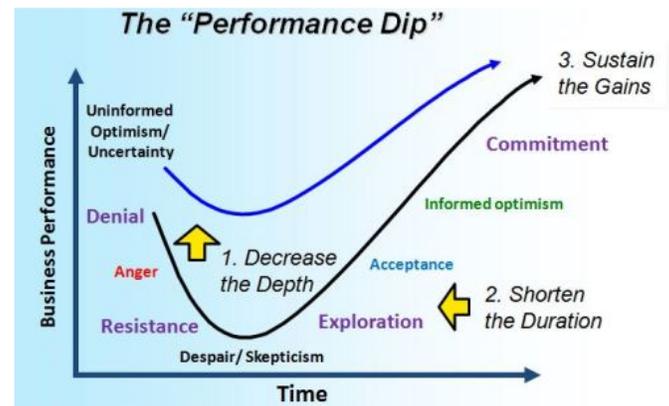
Some might say that change is inevitable. However, learning how to manage it effectively can result in us benefitting from the change. [11] There are many possible approaches to change management. One important component of all approaches is to dedicate a team to be responsible for conducting change properly, effectively and according to plan. For the organization implementing change, this ideal team would consist of representatives from every department. Following that, a proper plan must be executed with the appropriate tasks and deadlines. [11] This is the core concept of change management.

Change management will be used to thoroughly evaluate the task at hand. For instance, key features such as, "who will implement it and who will it effect?" [Item 2, 11] should be

carefully considered. Evaluating and re-evaluating everything before documenting the process will be helpful with change negotiation and when implementing the change [11].

Individual behaviour plays a key role in change, and in change management. The following diagram [1] shows how individual behaviour affects the overall performance of the business. The people involved in this process might stay better motivated if an inspirational role model [12] was to be introduced. This is to reflect Gandhi's ideology, "Be the change you want to see in the world." [Page 7, 12] Having role models express what is to be done, and how it is to be done, through their actions, could aid in other's ability to maintain their interest in implementing change. The leaders in such a procedure should be influential. An organization leader should try to do three things; they are:

1. Decrease the depth of the performance dip.
2. Shorten the duration of the performance dip.
3. Sustain the gains in performance after the initiative is complete. [9]



Successful implementation of system change is essential in the provision of safe, quality care to consumers. Implementation of improvement projects and sustaining the resulting change can be a difficult process. It has been stated all too often that quality improvement projects fail on a regular basis. The individual or the teams introducing change have a challenging task. Change management is one component of a successful project. [9]

For change to be effectively implemented, motivation, communication, guiding principles, evaluation, resistance, and a pilot are essential and inevitable.[9] Therefore, change management is required.

V. WHEN DO WE NEED CHANGE MANAGEMENT

An important part of managing change is being able to acknowledge when it is required. The initial stage is to be able to recognize the signs that a company needs change management. The next step is to know when the change is

going to be more efficient and less discomforting for the people involved than any alternatives.

It is necessary to be aware of all the psychological factors that may affect the company's employees when changes occur [13]. It is certainly mandatory to make this change as smooth as possible and to be aware that this smoothness is only going to be the case when there is willingness and flexibility in the company. This means that a company should always be proactively seeking change in order to adapt to different scenarios, and they should have an organizational schema that allows them to quickly adapt and improve their organization. However, one should not assume that their company culture will welcome change anytime [13].

Businesses nowadays are expanding and growing at rapid rates. Thus it is common that a particular structure or model will not continue to work as efficiently as before. A company may need to hire more employees, or change the way things are being done in order to stay competitive [14]. Sometimes the changes must be done in order to expand and have more opportunities, and sometimes a manager may want to change things in order to have a better working environment. Some of the changes may be planned or not, but either way the company must watch out for some of the forces that seem to oblige a company to change. These forces are: demographic, technological, social factors, political pressure and internal forces. These forces are a strong indicator that the need for change exists [15]. When a company is presented with any of these factors, they should embrace change and work towards a new desired organizational or personal state. Managers should take these events as a signal of the need for change [16].

Companies need to develop internal mechanisms that will facilitate planned change in order to deal with the external forces mentioned above [15]. One of these forces may be the technological advances that are usually used to increase productivity. Companies always have to stay on top of technology because it can make them operate more efficiently, thus making them more competitive. "Technological capabilities give an organization an enormous capacity to change itself in order to exploit market opportunities" [Technological Capabilities, Page 11, 16]. Technology will certainly aid a company to develop products more quickly and to increase their quality. When technological advances occur, it is important that the company is able to embrace them, and that their employees feel comfortable with these changes. After all, it is worth nothing to use these technologies if the employees will not support these systems.

Other external factors may include the demographic characteristics of the workforce. When a company has a diverse force, it can use this to their advantage because it can produce many different perspectives from their employees. However, it is not easy to manage diversity, and companies need to ensure that they have a corporate culture that can handle this diversity.

Furthermore, there are other signs inside a company that will indicate the necessity to introduce an expert in change management. One of these signs is that leaders are clearly not supporting a project. The key to successful change is to have a

leader that is not reluctant to change; a leader that propagates and encourages the need for it. Leaders need to proactively support a change because people will simply follow what the leader says and does. Introducing change management will help leaders to learn how to influence others to support the change, as well as what actions they have to take in order to be more effective. Moreover, an expert in change management will help to communicate successfully with all the employees. They will help to develop a "proactive communication strategy aligned with the project and organization's vision" [Sign 2, 14]. Change management will help to identify the information that needs to be delivered to different people in the organization in times of change.

Other internal forces that drive change are interpersonal conflicts between managers and subordinates, as well as employee turnover rates. These are clear indicators that the working environment is not positive for all of the employees. These observations can help a manager understand the perspective of their employees towards the company. These observations also indicate that human resources must be included in the planning of the organization.

Human resources are an organization's most important asset. Ultimately, an organization's distinctive competencies lie in the skills and abilities of its employees [Human Resources, Page 10, 16].

For this reason it is crucial to reinforce new behaviours. With positive reinforcement, one can make the wanted change to not be transitional, and thus, avoiding people to go back to old habits or behaviours in the workplace.

VI. TYPES OF NEGATION

VII. TYPES OF NEGATION

Change management is a system that is used to complement change, most often in a workplace. The most common and successful implementation technique is negotiation. Negotiation needs to be approached slightly different depending on who you are negotiating with. There are three common types of people that you may need to negotiate with in your workplace: a superior, a colleague, or a subordinate.

A. General Description

Negotiation is "a non-individual decision-making procedure, where two or more parties resolve a disagreement or determine outcomes of mutual interest via exchanging thoughts, advices, ideas, arguments and suggestions" [Chapter 3, Page 74, 17]. The previous mentioned parties can be individual entities, teams, or organizations. A potential problem arises from the fact that no one can achieve their goals without the agreement of everyone else. The outcomes of the dispute tend to involve resource apportionment and an outlined sequence of action to take in the future.

In a negotiation, parties exchange offers. If these offers are mutually agreeable, an agreement may be reached. Therefore,

the specific offers exchanged in a two-sided, multi-issue negotiation potentially influence the parties' expectations in the outcome of the negotiation. These expectations are the parties' main reference points and bargains and suggestions are evaluated as gain or loss relative to their initial reference point [18]. According to Hayek,

The origin of preferences and their stability over time varies widely across fields: economists, for example, usually assume preferences to be an underlying property of any individual and to be stable over time. If an agent's choice changes over time, then either the production technology available or the information at hand have changed- preferences do not [Chapter 2, page 15, 18].

Hayek adds,

Another perspective on preferences takes a more psychological view: Preferences are constructed by the time an agent faces a choice situation. In this perspective, preference construction is a mental process highly dependent on the context of the decision environment. Therefore, preferences are not (necessarily) stable over time—preferences change along with the context. The context includes, for example, the framing of a decision as winning or losing, the arrangement along with other choices, and the social situation [Chapter 2, page 15, 18].

Preference is a modeling device that simplifies what negotiators want to achieve as a final goal. This final goal may vary with different possible outcomes. Thus, preferences are needed to understand the behavior of a negotiation process, considering the sooner the parties find an agreement, the final outcome may come sooner. Bazerman points out the significance of preferences when he explains,

People make mistakes. More interestingly, people make a variety of systematic and predictable mistakes. The predictability of these mistakes means that once we identify them, we can learn to avoid them. Identifying and understanding systematic mistakes may lead to improved negotiation processes as well as facilitate the engineering of negotiation support systems. One possible systematic bias in negotiations regards attachment and the endogeneity of reference points and preferences" [Chapter 1, page 1, 17].

The mistakes that people made led teams and organizations to experience conflicts where a negotiation is needed in order to change how the management of the team is being conducted. A negotiation with superiors, colleagues and

subordinates is rather inevitable. At the same time, all individuals have different needs and different reference points whenever analyzing an outcome. This difference of opinions may differ in status position within the team, since we need collaboration of individuals who are our superiors, in other case individuals who are our subordinates and finally colleagues in our same status.

When two or more parties need to achieve a decision but have opposing ideas, they negotiate. They may not be sitting around a bargaining table; they may not be offering unambiguous suggestions or concrete counteroffers; they may even be making announcements proposing that they are on the same side. But as long as there exists a dissimilar inclination for a final goal, the parties have to negotiate to reach an agreeable outcome.

Kristensen and Garling concluded, the preceding perspective on negotiations is a rather broad characterization of a communication process. They explain that, negotiation is characterized by the fact that:

- Agents believe that they have conflicting interests.
- Intermediate solutions or compromises are possible.
- Communication is possible.
- Parties may make provisional offers and counteroffers.
- Offers do not determine outcomes until they are accepted by both parties [19].

B. Negotiating with Superiors

Studies have shown about everybody must negotiate with a superior at some point in their career, whether it be for a raise, an assignment or a change management regarding a new idea for a project. Kevin Corley a management professor from Arizona State University suggests that the best way to approach a superior is by thinking, "how can I get them to see my position satisfying their interest?" [20] A possible way to answer this question is to write a proposal for your superior framing how your theory will make their life will be easier. This makes them much more willing to listen, to work with you, and even to agree to your proposal. If your superior tends to negotiate, you don't automatically accept the first offer. They have assumed that there is something better to sweeten the deal. The first proposal you bring to the table, is probably not going to be the one that they accept. By providing some alternative ideas you can achieve your interest and hopefully your boss' interests as well [20].

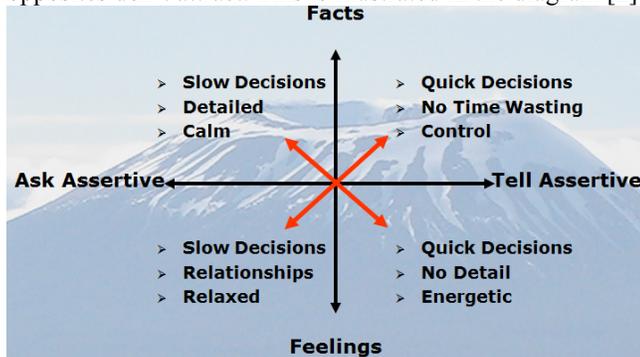
C. Negotiating with Colleagues

Dr. Lee Buddress, suggests, "Internal business negotiations surely occur more often than external ones. Purchasers frequently find that the primary negotiation takes place internally rather than with suppliers. Therefore, they may also be more important." [slide 3, 21]

Negotiation gives you as little as you can while getting as much as you can. Whenever negotiating with a colleague, the

main goal between the individuals will take place where they consider alternatives to arrive at mutually agreeable solutions and/or objectives.

According to Michael Babineaux, the keys to successfully negotiate with colleagues are to find an agreement that mutually satisfy both parties and to develop or strengthened a relationship. In order for colleagues to get along together, personalities are an important factor, keeping on mind, opposites don't attract. This is illustrated in the diagram [2].



According to Jacqueline Miller, "In order to be an effective negotiator, we must:

- Learn to recognize differences among our colleagues and their behaviour styles
- And adjust our own behaviour to negotiate more effectively"

In order to successfully negotiate with our colleagues; Michael Babineaux advises to follow 6 steps:

1. Describe positions
2. Offer to negotiate
3. Invent options
4. Evaluate alternatives
5. Pick the best
6. Plan implementation [21]

Describe position will strive for look for interest behind positions, where more discussion regarding the theme the better understanding will be reached. Stephen Covey suggests, "The psychological equivalent of air is to feel understood." [21] People tend to seek approval by society and parents when they are teenage or child, nerveless this need to feel approve does not change with the pass of years, this 'feel' may diverge within different adult's personalities, but whenever working on teams, the majority will feel as an accomplishment when his/her point is been taken on consideration, and in order to be fair with our colleagues, paying extremely attention when a person describes his/her position is a fundamental key of respect and to start the negotiation with the right foot and the right environment.

Offer to negotiate, after you have heard your colleagues' point of view regarding their feelings about the theme, it is crucial to take the lead, where you try to find a suitable solution for the best of the team. Another option after listening your colleagues describing their position, it is to collaborate,

teams always have their leaders, if you are not the leader, it may be a better choice to collaborate and strive for the best of the team again, since the wealth of the team is always the priority.

Invent options, after listening the many offers within your team, if there is no answer that solves the initial problem, creates new solutions will be vital, these solutions will integrate interest within the members and advance preparation to solve the initial problem. In order to invent options, the members should brainstorm their ideas to come up with new ones as a team, where everybody thinks out of the box and everybody is respectful with their equals. [21]

Evaluate alternatives, this is the point where criteria within the team members are joint, the unacceptable alternatives will be eliminated by weighting a decision analysis done by the members.

Pick the best, this step needs to be though carefully since it's the most important point, considering the team's prosperity will focus after a proper negotiation.

Plan implementation, after an idea from negotiation is evaluated, the last step is to implement it; in this step the team will organize itself to set who will do what by when, this set is based on following up a plan, where a small negotiation may be require or where the members volunteer themselves.

Michael Babeneux's 8 final thoughts when negotiating:

- Warn people: by using agendas, written requests
- Time request: first thing for a morning person
- Sell benefits/penalties: what is it for them?
- Ask for more: settle for less
- Timetable/deadline: let them know
- Sympathy & guilt: don't let me down
- Make it easy: don't put obstacles in their way
- Give rewards/recognition: appreciation breeds cooperation, considering there is always tomorrow. [21]

D. Colleague vs. Superior Negatiation

Even though negotiation is still a strategy that can produce better quality agreements that last, it is only useful whenever one party has something to gain by getting the other party to agree to a particular suggestion. The main features that differ from negotiating between a supervisor and a colleague are:

- People deal with colleagues as if they were outside competitors.
- Unresolved issues are passed on to a higher-level manager who must use valuable time becoming familiar enough with the details of the problem to make a decision that should have been reached at a lower level.
- Agreements are reached but not implemented.
- Meetings proliferate and take longer, involve more key contributors, and produce fewer results.

- Tough issues are not dealt with because managers fear open conflict.
- Units that need to coordinate their efforts compete or act independently [22].

E. Case Study: Colleague

As an example of situation where two colleagues negotiate, let's analyze the following case:

An operations manager asks for 1,000 hours of maintenance, and the maintenance manager offers 800 hours. They talk at some length about the problems they each have and what they need to solve them. The operations manager learns that the maintenance manager has extra personnel available during the day shifts when the machines are most heavily used, but is short of help at night when more of the machinery is available for maintenance. The operations manager also learns that union work rules force the maintenance manager to assign two skilled mechanics to certain jobs, even though one of them merely pushes a button to stop and start the machinery. The maintenance manager learns that the operations manager always has apprentice machine operators who are not fully occupied and who need to learn as much as possible about the machinery they will be operating.

On the basis of this information, the two managers reach an agreement whereby the operations manager reschedules production so that more machines are available for maintenance during daytime shifts and provides an apprentice operator to start and stop the machinery that maintenance mechanics are working on. The operations manager is confident that all maintenance needs will be met, and the maintenance manager believes that, with the help promised, the work can be completed in less than 800 hours [22].

F. Negotiating with Subordinates

When negotiating with subordinates, the supervisor performance expectation should avoid being incongruent with the subordinate capability, attempt to negotiate face-to-face since it has a better impasse regardless of the amount of concession needed. When the supervisor's pre-negotiation expectations are significantly higher than the subordinate's performance capability, there tends to be a lot of confusion. The negotiators anchor on their positions, and create distributed justice regarding concerns and perceptions of forcing behaviour. Whenever participants negotiate in an environment that is not face-to-face, the subordinate tends to perceive more task-related conflict, and this issue discourse positively influenced post negotiation performance. On the other hand, when a face-to-face performance is employed, there is less interpersonal conflict, which increases satisfaction and led to higher post negotiation performance [23].

In summary, the more severe that the differences are in the initial negotiation, the more likely a standoff is to result. When pre-negotiation expectations are similar, and there is a full understanding of what each individual must perform, there is

not a perception of forced behavior within the teams and everything will move much more smoothly.

I. CONCLUSION

Negotiation with different people in our workplace environment is a necessary occurrence. This is the example of change management that we are most likely to see on a frequent basis. It was explained how to recognize the situations where change management is needed. The importance that change management has in our lives, and why it is a necessary part was explained. The history of change management, and how it developed was discussed in detail. Because change management is a mandatory part of our daily lives in the workplace, this is an important topic.

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