Schatz Happens
A New Organizational Change Approach

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Abstract

This paper explores a potentially new approach (model) for managing change in a fast-paced, chaotic environment. We are using a basic software architecture model to explain a change model. This model has an adaptive program layer ("App", in software terms) to detect and process the changes, and it has an adaptive-learning operating system layer (OS, another software term) to implement the change.

Our change model is built on 7 core organizational operating systems (OS) areas and an organization App that scans the environment, processes incoming changes, projects, or initiatives, and generates feedback to create a learning-adaptive system. Our approach to dealing with complexity is to battle it with simplicity. Keep moving, experiment, and learn as fast as you can. As the system learns, changes will be made to the App/OS based on empirical data and experience.

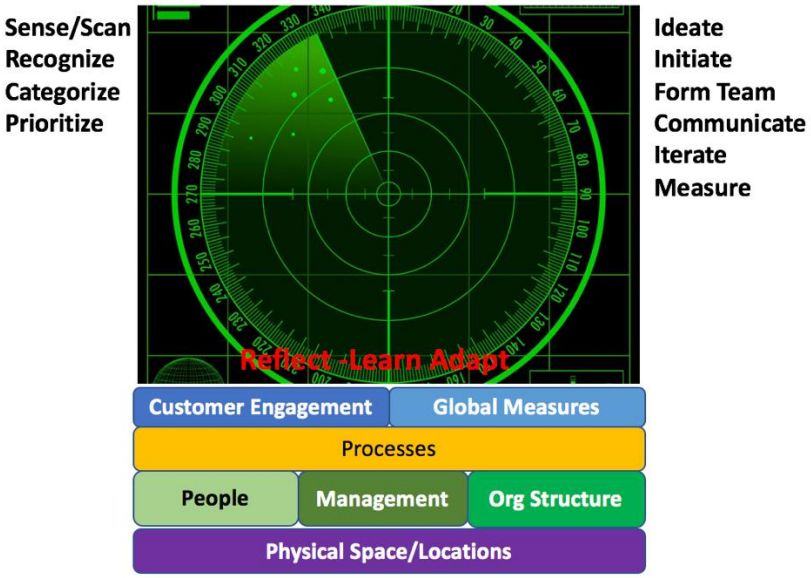
Background

Every generation seems to claim that change is happening faster than it has ever done in any other time in human history. If every generation lays claim to that distinction, then one can only conclude 1) It's not stopping; and 2) It always appears to be coming faster. We would suggest that maybe the people who claim it is coming faster are just worn down like rocks in a river bed. We have been in the software product development industry for 35 years and have seen amazing technologies move from impossible ideas to staples of how we live today. We have dealt with constant change in technology, products, organizations, physical space configurations, processes, measurements, tools, customer needs and expectations, and most importantly people. What we have developed over the course of our careers, through both personal and professional training and experience is an ability to adapt to rapidly changing situations. We have come to realize that these changes come in many different types and sizes, they are driven from a myriad of sources, and there is no cookbook recipe to handle them. Different conditions combined with different players makes the number of factors and potential responses innumerable. For the past 15 years, we have been consulting and training people in high-tech organizations how to adapt to this rapid change environment so that they can achieve their ultimate goal, which is to make their customers happy (or more directly, make more money!). The basis for our consulting is drawn from researcher Schatz being a pioneer in the Agile software development movement, which has now become mainstream. We have also intently studied and practiced approaches such as Scrum, Lean, Total Quality Management (TQM), Theory of Constraints, and OODA (from military) all coming from the works of people like Deming [1]), Drucker [2], Ohno [3] and Goldratt [4]. That

all led us to study change leadership and our work was heavily influenced by the works of Lewin [5], Kotter [6], Maslow [7], Schein [8], and Bridges [9], as well as our GE Management Training.

All this study and practice created new patterns that provided us a better toolbox to draw on when any situation which emerged and required quick action. The software industry has been pushed to its limits over the past 20 years and is just trying to pull itself up while continuing to meet the ever-increasing customer demand for new and interesting solutions to workplace challenges. This has created tremendous friction in organizations doing this type of work. In addition to the heavy demand, we've also have a highly mobile and distributed workforce. People move in their careers more than in the past, and companies employ people in global development centers to continue to meet demand. A model can be helpful to know what to look for as we assess an organization's capability to survive in their environment and seize future opportunities. So, our model is based on what we've learned in practice, and our experiences-academically, and empirically. It is built to be adaptive and can address different types and sizes of changes. It is not a silver bullet, and it requires a different way of thinking. As Albert Einstein said, "We cannot solve our problems with the same thinking we used when we created them."

Schatz Happens Change Model



We are using a basic software architecture model to explain a change model. This model has an adaptive program layer ("App", in software terms) to detect and process the changes, and it has an adaptive-learning operating system layer (OS, another software term) to implement the change.

Our change model is built on 7 core organizational OS areas and an organization App that scans the environment, processes incoming changes, projects, or initiatives, and generates feedback to create a learning-adaptive system. We refer to this as a Simple Adaptive System (SAS) organization to handle a Complex Adaptive System (CAS) of changes. Our approach to dealing with complexity is to battle it with simplicity. Keep moving, experiment, and learn as

fast as you can. As the system learns, changes will be made to the App/OS based on empirical data and experience. Any change to one area will most likely impact one or more of the others. A few of these areas are different than other models we've looked at, or at least put much more emphasis on what we feel is critical. First, we've included physical space as this can affect the interactions and communications between people. The space needs to be versatile as it may have to shift rapidly to get people in the right conditions to achieve an objective, this also includes people's location on the planet. This is opposed to the current way where companies lock themselves into a specific philosophy and build out workspaces in a very inflexible configuration. Second, we've included customer engagement, because in today's world, if you don't learn how to engage your customers in your process, you simply won't survive. Engaging customers, building empathy, and learning to listen to the market has proven to be the best approach in Product Development activities today. And third, Management...which is not new, but they must take a radically different approach where they become facilitators and guides for the whole system. They must see the organization as a system not just their individual parts, Systems Thinking. They must operate from a perspective of the system being OUR organization instead of MY department. The following describes each of the components of the organizational OS and the workflow of the App.

Organization Operating System (OS)

People – the people area, a focus of management, continues to monitor if we have the right people to handle the work. It takes care of recruiting, development, growing leadership capabilities, and clearly defining roles/responsibilities as work is initiated. If we don't have the right people, we must quickly act to train, move, or replace. The preference would be to train and build the capabilities we need since each person is an investment, but if there's an anchor holding us back, cut the chain!

Physical Space / Location – the physical space and location of where people work is critical to how they feel and the speed at which they can communicate. Some work can be done more effectively by individuals primarily working alone, but most work today requires intense problem solving and fast communication by one or more small cross-functional teams. The physical space must be configured to support the nature of the work and the organization of the people. It therefore should be flexible to support whatever situation we find ourselves in. This extends to the location of people. Many companies are feeling the pain of having locally optimized functions in the company by having people in different countries to lower cost or gain access to skills. Now that the pressure is elevated to solve problems and produce products/services faster, the system cannot respond. Teams must be collocated to get fast communication, so forming teams in locations would be a better solution.

Customer Engagement – we need to engage with customers in their environment to understand their problems and opportunities. We also need to engage them in the product development process to get feedback as we go, so we can quickly course-correct. This is a key aspect of Lean and Agile practices. Customers want to be involved, and without them, who are we anyway?

Organization Structure – the way we organize people to attack a problem, or complete a project or initiative, must be aligned to the nature of the work. When problem solving, dealing

with complex situations, or launching an initiative, the work crosses functional boundaries. When performing a single function operation that is well-known and predictable, the work is completed within that function. Our organization structure must match the nature of the work, and if the work changes so must the structure. It must adapt as necessary, which relies on management not owning people, but developing disciplines that are needed to achieve positive outcomes.

Processes – the processes we use to turn supply into value to the customer will need to adapt to the type of work. They will have to continuously improve to adapt to current best practices in the industry that the organization serves. This includes how the process is supplied, the methods, tools, and technologies that are used to transform the inputs into value, and how it delivers that value to its customers.

Global Measures – a key to an organization performing well and engaging employees and customers is knowing what success is and how it is measured across all the operations of the business. This is an important distinction from individual and function goals which have driven silo-based organizations. Customers are best served by cross-functional teams aligned to a universal goal that drives successful outcomes, not just increased output, or local efficiencies.

Management – the strategies and alignment of people towards achieving global measures requires a new type of management system. Managers must shift from focusing on their own group's goals to focusing on how their people contribute to the global measures. Taking a team approach where managers work together to ensure that all the components of the OS above are aligned. They work to deploy the right people in the right environment, and support them by removing obstacles, and continually driving growth and innovation.

Application Program (App)

Sense or Scan – scanning the environment actively, and constantly, looking for opportunities, projects, changes

Recognize / Categorize / Prioritize – like a radar system, quickly recognize, categorize, and prioritize incoming changes, opportunities, and projects. Build prioritized queues. For known work, go to Initiate. For unknown, unfamiliar items, go to Ideate and prepare for initiation

Ideate (if unknown) – use design thinking methods to come up with ideas about how to handle something we've never seen before, or are new to handling. Prepare people and organization to handle something new. This is where we may need to make some mistakes and focus on learning as fast as possible.

Initiate – any initiative should start out with three critical components. A vision statement for the initiative, a set of outcome goals that contribute to the global measures, and an identification of constraints (scope, cost, time) that must be considered.

Form Team – from a single team to a collection of teams, put the right people on the job and keep them focused on the initiative with as little distraction as possible. This will ensure that value or improvements are realized in the least possible time.

Communicate – with the team formed, communication is critical. Make sure there is alignment on the vision, goals, and constraints. Keep the work visible, and conduct a daily stand-up to maintain focus, and identify obstacles as quickly as possible.

Iterate – get moving quickly, focusing team efforts on making progress and learning. Working short time-boxes and reviewing progress regularly is extremely effective. Getting feedback from end-users or constituents early and often will help extenuate learning.

Measure – measure progress towards project or initiative goals so we have situational awareness of where we are, and if any adjustments need to be made to trade off scope, cost, or time. When a project or initiative is complete, continue to measure outcomes and contribution to global measures.

Reflect – conduct retrospectives after each project or initiative to review key learnings.

Learn-Adapt – prioritize ideas for improvements coming from projects and initiatives and adapt processes to drive continuous improvement of best practices across organization.

This model is intended to be an ongoing change model, setting an organization up to be able to handle a continuous flow of incoming changes, initiatives, and projects of various sizes, speeds, and frequencies. Like most models, this is most effective as a diagnostic tool, keeping the focus on the core operating structure of the organization and its ability to succeed in its environment. Each of the OS and App areas can be used to generate a series of questions, as well as provide the context for OD intervention techniques.

Organizational Development Influences

Some of the models from our research resonated with us and helped shape our model. The Contingency Theory Model (Lawrence and Lorsch, [10]) and the Congruence Model (Nadler and Tushman, [11]). The Contingency Theory views organizations as open systems where the focus is on how it interacts with its environment. These relationships both internally and externally are key factors in determining the correct structure and leadership strategies for an organization to meet the overall goals. A similar contingency theory model was the SARFIT (Structural Adaptation to Regain Fit) theory by Lex Donaldson [12]. Donaldson saw organizations in a continuous flux between being fit and misfit. He argues that there are three contingencies that effect an organization's performance, 1) Organization size; 2) Task Uncertainty; 3) Task Interdependence. If any of them change, which they always do, then the organization becomes misaligned and performance can degrade. A change must be made to bring the organization back into fit. The Congruence Model looks at the organizational fit and how it deals with a dynamic environment, where there is constant change. This model looks at the basic role of the organization to take inputs, transform them via processes, and generate outputs. This

was like a model by W. Edwards Deming called SIPOC (Supply, Input, Process, Output, Customer) which also included the customer feedback into the model.

Peter Drucker [13], was influential in his discussions of management in the era of the knowledge worker. This began to shape the role of management when the shift began to be focusing on people as the primary means of creating a product or service. We particularly liked his quote about effectiveness vs. efficiency which we still use today, “There is nothing so useless as doing efficiently that which should not be done at all”. This is a critical issue in software product development organizations to this day. Drucker’s Management By Objectives (MBO) approach to keep a large organization working together towards a common objective is one area which we don’t agree with. Deming claimed that the MBO was one of the worst creations in companies. In theory, it would seem to work, but in practice, we have seen it fail. The reason is that managers will act in their own self-interest, and that of their department. MBO was supposed to keep everyone aligned, but when rewards are scarce, it creates tension among departments as each try to claim the scarce rewards. That’s why we have Global Measures in my model, so that all departments are focused on a single measure which would align more with Deming.

Karl Weick’s [14] view of organizations as sensemaking systems has always been interesting to us in management and decision-making. The concepts of the rolling hindsight where organizations, including the people in them, are constantly trying to make sense of what is going on in their work and environment to make it stable in their individual and collective minds. His 10 advice points for managers and others has stuck with us for over 20 years, providing great guidance in highly-uncertain environments.

1. Don’t panic in the face of disorder
2. You never do one thing all at once
3. Chaotic action is preferable to orderly inaction
4. The most important decisions are often the least apparent
5. There is no solution
6. Stamp out utility
7. The map is the territory
8. Re-chart the organizational chart
9. Visualize organizations as evolutionary systems
10. Complicate yourself!

These were always good reminders of our role as a leader, how we can shape our behaviors when changes are coming at a fast rate, and the sobering reminder, that we don’t have, nor will we ever have, all the right answers (and always far less than we might think we do).

Conclusions

What we’ve attempted to do here was present a model for how we think about change and change leadership based on our own experiences in the Software Product Development field. The model has two main structures for creating/managing/adapting to change. One layer, The App, is looking outward trying to sense, identify, classify, initiate possible changes or opportunities in our environment/domain. The other layer, the operating system, has all the infrastructure to process changes, and ensure that we are creating the best environment to allow necessary work to get done in a timely manner so that value can be generated as quickly as

possible and put in the hands of customers. Both layers must continuously adapt based on learning in the organization. Leadership will be challenged in high-change environments to keep stress levels down in themselves and the people they lead. Changes will come in many shapes and sizes, some will be expected and planned for, others will be unexpected. They will not come one at a time and wait in line for the organization to pick them up. There will be times when it feels like a barrage, times when they come in slow, and times when it seems like nothing is changing. A pattern of behavior and a model for detecting and managing change that everyone in the organization is aware of will help reduce panic from setting in. The model is an adaptive framework and can utilize many of the OD practices and interventions that we've discussed in this paper, as well as the Systems and Design Thinking methods from the research.

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