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THE OCM CAPABILITIES SUPPORT MODEL FOR MANAGING CHANGE IN THE UNITED STATES INDUSTRY

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The article introduces a new approach to managing change in the United States industry. In the United States, managing change is a subject of a separate discipline called Organizational Change Management. Organizational Change Management studies and manages human behavior and the ways to influence it and steer it in the desired direction when a change occurs. In the United States, this discipline is independent and fairly mature. In other countries, however, this field may be considered as a part of project management, organizational development, or industrial psychology.

In this article, before introducing a new model for managing change, the author provides a definition of Organizational Change Management and reviews its purpose, benefits, key pillars (components), and the risks of ignoring or underestimating OCM. This discussion provides those who are new to change management with a framework for their understanding of the proposed OCM model.

Next, the author introduces the OCM Capabilities model for supporting change management activities in a company. The United States industry is going through a transition and is experiencing its own challenges right now. One of these challenges is a conflict between a growing demand for OCM services and a conservative approach to funding OCM activities. The proposed model allows companies to efficiently address these challenges. Target audiences for this article include senior management, members of the Planning and Project Management Organizations (PMO), training teams, organizational development consultants, and project managers.

Keywords: new model for managing change, Organizational Change Management.

Someone once said that a perpetual change is the most stable process out there. In the industry, a change is introduced as a means of implementing an innovation. Companies constantly and routinely make changes to organizational structure (employees, their roles and responsibilities), systems (equipment), and processes/procedures/policies/operating models. To achieve its goals, a change must be managed. In the United States, managing change is a subject of a separate discipline called Organizational Change Management. This discipline studies and manages the ways to influence human behavior and steer it in the desired direction to ensure an innovation is adopted. In the United States industry, Organizational Change Management is fairly mature. Many companies either employ their own Organizational Change Management professionals or hire consultants in that area to support company initiatives. Lately, however, the United States industry is going through a transition and is experiencing its own challenges. One of these challenges is a conflict between a growing demand for OCM support and a conservative approach to funding Organizational Change Management activities. The current support models in that field seem to be struggling with providing a solution to this challenge. The proposed OCM Capabilities Support Model allows for efficiently addressing this challenge.

What is Organizational Change Management?

In order to learn about the proposed model for managing change we must first understand what Organizational Change Management is. Organizational Change Management (OCM) is most commonly defined as a coordinated practice or structured approach to ensure the effective transition of individuals, teams and organizations from the current state to a desired future state. It ensures a solution that is applied to support the new state is embraced, adopted, and used proficiently. In the US industry, Organizational Change Management is a separate discipline. In some countries, a responsibility for successful adoption of a change resides with Project Management. In the United States, Project Management only ensures the solution is designed, developed and delivered successfully. Unlike Project Management, Organizational Change Management focuses on ensuring adoption of a solution and overcoming employee resistance.

PROSCI, world's leading organization that develops change management methodologies and tools defines Organizational Change Management as a "discipline that guides how we prepare, equip and support individuals to successfully adopt change in order to drive organizational success and outcomes" [1].

In other words, Organizational Change Management is a discipline that allows for steering employee behavior in the desired direction that ensures the company in general reaches its goals.

The notion of Organizational Change Management as a separate discipline independent from Organizational Psychology, Industrial Psychology, and Organizational Development has evolved gradually. Starting back in the sixties of the XX century, the American industry has started collecting data on how people adapt to new ideas and technologies. The first formal model describing employee reaction to change has been published after 20 years of research, in 1982. It took the industry another 10 years to establish that there is a strong direct relationship between a successful implementation of a change, employee productivity, and the use of formal methods of managing change. The industry took the hint. In the early 2000, the industry has formalized the role and responsibilities of an Organizational Change Manager. Shortly thereafter, colleges started offering a formal training in this area. Today, many companies have a formal Organizational Change Management practice or hire Organizational Change Management professionals to support company projects.

Purpose of Organizational Change Management

Why does the industry need OCM? The answer is simple: because change is a means of perpetuating innovation. In many cases, changes impact employee life and work. Employees are conservative. They do not like changes and respond in ways that are not conducive to innovations. They have every right to be threatened by a change: in most cases, an innovation may have an impact on employees, and that impact might not necessarily be positive. Employee response to a change is a passive or active resistance, lack of adoption, or both. At the time of change, employee productivity drops while turnover, stress, health issues, and conflict rates increase exponentially. This adversely impacts company's bottom line. OCM is necessary because it manages employee resistance, helps support change, and promotes employee behavior that is most conducive to an innovation. Specifically, OCM helps to proactively address employee attitudes and behaviors, prepare employees for a change, and avoid the risk of negative processes occurring in a company.

As shown in Fig. 1, from a statistical standpoint, there is a direct and strong relationship between company performance and OCM practices.

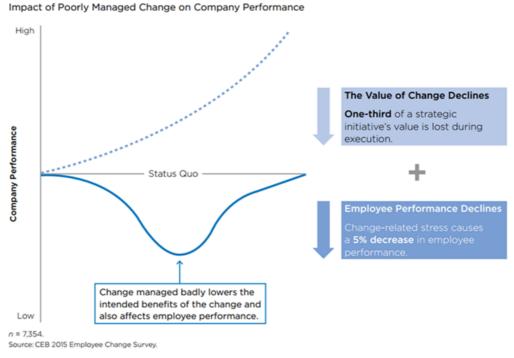


Fig. 1. Impact of poorly managed change on company performance

As you can see, the success of a project that leads to an innovation depends on the quality of an OCM effort on that project. A poorly managed OCM effort invalidates and nullifies project value. In other words, the presence of a properly managed OCM may just mean the proverbial "make it or break it" when it comes to a project and a company's success.

Key Processes of Organizational Change Management

It is important to understand the key processes that OCM employs to accomplish its goals. This provides a framework for the understanding of what an OCM professional manages. The OCM Capabilities Support Model introduced in this article represents an efficient way of managing OCM efforts as part of company projects. The key to that efficient way of managing change lies in the understanding of which team members are better aligned with the key OCM processes depending on a project type. In other words, it is important to understand that, depending on various factors, OCM can be performed by either OCM professionals or other project team members. Which practices comprise OCM?

The diagram on Fig. 2 shows the six key areas (practices) that comprise OCM.



Fig. 2. Key processes of Organizational Change Management

Managing Stakeholders

Stakeholder management processes entail identifying and classifying all project stakeholders who may be impacted by the upcoming change. OCM offers an intervention that allows for indoctrinating an employee in the desired behavior. For an OCM Manager to understand which intervention to use for each particular employee group, employees need to be identified and broken into these groups. Employees can be broken into groups using various factors. Examples of these factors may include:

- Employee division or department
- Employee role on a project (e.g., change target, change leader, change agent etc.)
- Impacts of change (how much future employee behavior changes from its current state as a result of introducing a change) (e.g., major impact, some impact, minimal impact, no impact)
- Reaction to change (which behavior that employee group demonstrates with respect to change) (e.g., oppose change, support/follow change, become a change enthusiast)

There may be other factors that influence how an OCM Manager classifies employees. This classification allows an OCM Manager to break employees into groups and determine an OCM approach to each group. Depending on a group, that approach might range from a heavy communication coupled with close monitoring of employee readiness for change to merely keeping employees in the loop. The approach to OCM determines the type of OCM intervention (communication, engagement, and training) that will be the most efficient in indoctrinating employees into a change.

Identifying Changes and Impacts

Change analysis allows for determining and documenting the gap between the current state and the future state in the areas of organizational structure, processes, or systems/equipment. Each of the changes might have an impact on employee behavior. The role of an OCM professional is to identify and document all impacts and determine their criticality for the success of a project or/and a company in general. Naturally, an OCM approach will reflect the most critical impacts that should be addressed first.

The effort of identifying changes and change impacts is coordinated with project managers, subject-matter experts (SME), and company Leadership.

Planning and Executing Communication

OCM employs the current research in human behavior to ensure efficiency of its methods. These methods include a broad use of social and professional (including corporate) media, creating and maintaining change networks to support employee activities during and after projects, and active engagement of change enthusiasts (also called Change Champions). Other OCM methods include using targeted messaging, dedicated SharePoint sites, presentations, campaigns, posters, broadcasts, employee training, and other engagements. These methods are very efficient in ensuring employees are aware of the upcoming changes and are adequately prepared for them.

Assessing Change Readiness

OCM professionals are judged by the results of their work. These results may include the amount of resistance to a change that employees demonstrate and the level of change adoption. There are a variety of methods OCM employs to determine the degree of employee readiness for a change. These methods range from surveying employee populations to collecting objective data from the existing sources maintained by other organizations. For example, the number of employee calls to Technical Support or HR will help evaluate how adequately employees are prepared for an innovation and the changes that support the innovation. The goal of OCM is to ensure that, as the result of the chosen OCM interventions, the majority of employees show adoption of an innovation, compliance with the desired behavior and rules, and commitment to change.

Ensuring Knowledge Acquisition via Education and Training

Employees need to demonstrate proficiency in following the new processes and using the new systems and equipment. OCM professionals either develop or coordinate development of various training or self-education solutions that allow employees to reach the desired proficiency level.

Ensuring Sustainment of an Innovation

OCM is responsible for ensuring that an innovation introduced in a company continues to function after the initial effort to introduce it is completed. The innovation sustainment phase of an initiative occurs after that initiative has completed. That phase may entail various OCM activities. These activities range from organizing a refresher class to various forms of additional communication. For example, a communication may include the answers to the most frequently asked questions that employee ask of the Technical Support or HR organizations. OCM does not seize when an initiative comes to an end. Rather, it continues to monitor employee behavior after an innovation is successfully implemented. OCM professionals then intervene as needed to ensure the desired employee behavior perpetuates.

As you can see, an OCM Manager is engaged in the planning and execution of various changemanagement activities. Naturally, the scope of this engagement and the amount of time spent on these activities vary depending on the nature of the project.

Risks of Ignoring or Underestimating OCM

Whenever an innovation introduces changes to employee life and work, the adoption of the innovation becomes a critical factor to the success of that innovation in a company. Each initiative must have an OCM component to it if the Leadership is at all concerned about the adoption of innovations. Yet, quite surprisingly, some Leaders choose to resist any OCM involvement. These Leaders underestimate the value of OCM and the risks that the lack of an OCM effort entails. What are the key risks of ignoring or underestimating OCM? The diagram on Fig. 3 shows the most common human reactions associated with a change. The purple line shows the typical human reactions that follow the changes shown on the transformation path (in blue).

First, a lack of understanding of a change leads to miscommunication and speculation. OCM builds employee awareness of a change. To ensure employee awareness, OCM delivers information about the upcoming innovation and its impacts to employee work and personal life. Furthermore, OCM trains employees to help them understand and adapt their behavior to meet the requirements of the upcoming innovation. Both awareness and understanding contribute to employee adoption of an innovation. A lack of awareness and understanding leads to uncertainty and fear. The lack of information communicated by a reliable and controlled source is compensated with information from other, much less reliable sources. Misinformation leads to speculation. Misinformation and speculation translate into a lack of the Leader-

ship's control over how and by whom that information is used. Organizational risks resulting from the lack of such control range from reputational losses to the company to a loss of expertise and the increase of capital expenditures toward developing new talent. A company might need to invest extra efforts in preventing its trade secrets walking out the door with the departing talent. In either case, a company is risking a negative impact to its overall capitalization and its position on the market.

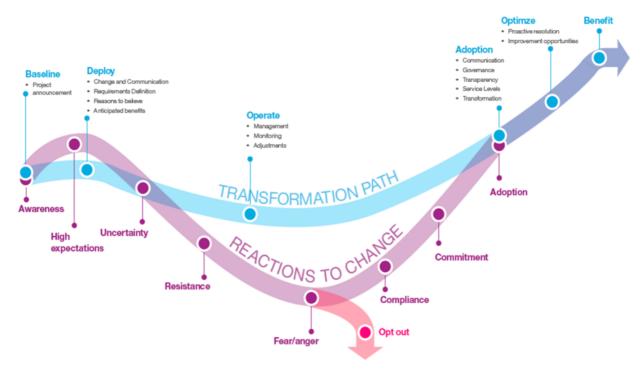


Fig. 3. Transition Cycle

Second, the lack of awareness and understanding of an innovation decreases employee participation. This risk entails a decrease in employee productivity and a major gap in the feedback loop. Every administrator is aware of the negative impact of low employee productivity on a company's standing in the industry. Breaking the feedback loop due to employee apathy and indifference leads to employee mistrust in company Leadership and in future innovations. By allowing employee participation to lapse companies are looking at direct and negative impacts to their bottom line.

Third, with a widening gap in the feedback loop, risks and issues are overlooked. This inevitably leads to delayed and missed initiative deadlines and budget overruns. A poorly motivated workforce is less likely to be loyal to the company. Why would anyone risk his or her neck reporting an issue when they do not trust their employer to properly address that issue in the first place?

Forth, the picture is even grimmer when it comes to stakeholder expectations. They are either not met or poorly managed. It would not be long before all these factors lead to company mismanagement. It is not merely sufficient for a company to innovate to survive. It is equally critical for a company to communicate to all stakeholders about an innovation's impact to their life and work.

The risks of ignoring or underestimating OCM to the company are so great that, for a company, it comes to a choice of "either manage change or seize to exist". The practice of innovating may be an awesome thing, but let's not forget that it has got a human component to it. Unless it is supported by employees, an innovation will never be successful.

The OCM Capabilities Support Model for Managing Change

Companies cannot ignore OCM as part of their development strategy if they want to continue to stay in business. How exactly a company is building its relationships with the OCM organization depends on an industry and the nature of the company's business. Naturally, there is a variety of ways a company and its OCM organization may interact with each other. The most common of these ways are summarized in OCM models. As with any formal discipline, Organizational Change Management prac-

tices have produced a number of management models. For a discussion on the key management models in this area you may refer to my recent article that discusses the role of an Organizational Change Manager, goals and common methods of managing change [2].

So, why is there a need for a new model right now? What is happening in the US industry today that calls for a new approach to OCM? There are two key factors that contribute to this need.

Currently, the United States industry is undergoing a transition. This transition has mostly been precipitated by the latest recession. Today, it is not merely sufficient for business clients and stockholders to demand a higher return on investment. Nowadays, a greater return has to be coupled with a higher risk visibility and a sane risk management policy. In a company, the first step toward achieving a better return on investment while reducing risks is to take the portfolio and demand management process under control. The portfolio and demand management process entails collecting, analyzing, and evaluating data on initiatives and innovations that a company chooses to fund and implement. This process allows for a visibility into changes therefore allowing Senior Leadership to decide which innovation is better aligned with the company's sustainability and growth strategy and therefore should be funded. When greater control over the portfolio and demand management process is implemented, OCM organizations have to transition from the one-off operating mode to the mode of systematically supporting company innovations. In the absence of a systematic approach to portfolio and demand management, OCM support on most of the initiatives is typically random. When OCM support of an innovation is random, a demand for OCM support is created by Senior Leadership by giving OCM organizations orders on which innovations to support. A greater visibility into a portfolio of innovations increases the demand for OCM services. In this new operating mode, OCM organizations have to make their own decisions on which company innovations to support. This signifies a paradigm shift in the OCM business: from "order takers" to a mature OCM practice of "decision makers". The same transition that had led to a higher demand for OCM services, however, had led to a greater distress in OCM organizations. Why has this occurred?

In the new reality of greater visibility into a return on investment, the new challenges for OCM include tighter budgets and a conservative approach to funding OCM activities and staffing OCM organizations. This conservative approach has resulted in some OCM organizations being chronically underfunded and understaffed.

Systematic portfolio and demand management practices in the industry brought most company initiatives and innovations into Senior Leadership's spotlight. This practice has revealed that a company might have a great many initiatives that might require OCM. In a large company, the initiative count that might require OCM may literally be in the hundreds or even thousands. No matter how large an OCM organization is that organization will not have sufficient resources to support every single innovation.

So, what have we ended up with? On the one hand, a larger number of innovations might require OCM support. On the other hand, the underfunded and understaffed OCM organizations simply cannot sustain OCM activities and offer OCM support to every initiative. A company cannot underestimate OCM, but the reality is that it is physically impossible to provide OCM support for every single initiative in the company. Such is the reality in the US industry today. This is a dangerous paradox. Every initiative must consider OCM as vital for its success. Yet not every initiative can physically be supported by an OCM organization. Let's not forget: many initiatives that OCM Managers support require a full-time engagement. In other words, the amount of time that an OCM Manager must spend planning and executing OCM activities on an initiative amounts to roughly 35-40 hours or more per week. There are simply not enough OCM resources to go around. This is the "perfect storm" outlook. The existing OCM support models fail to provide a solution to this challenge. That is why a call for a new OCM model is in order. The new model has to help OMC organizations to efficiently manage the talent while providing an adequate OCM support.

Is there a model out there that can be applied to every innovation and help a company to evaluate which level of OCM support is required from the OCM organization? Enter the OCM Capabilities Support Model. The OCM Capabilities Support Model allows for supporting a larger number of initiatives from an OCM standpoint utilizing the existing talent, without dropping the ball.

So, why does the OCM Capabilities Support Model succeed where other OCM models fail? What does this model offer that other OCM models do not? The OCM Capabilities Support Model offers:

• A differentiated approach to OCM Support

- A flexible approach to the planning and execution of OCM activities, including a distributed approach
 - Transparent criteria that allow for determining the level of OCM Support on an initiative

The current models of OCM support assume that all projects receive support from a dedicated OCM professional. This specialist is charged with planning and executing all OCM and communication activities. On many initiatives, the same specialist is also planning and executing all personnel training activities as well. In many cases, the same professional also plans and executes all activities to measure change adoption and employee resistance, such as creating and processing employee surveys. But in reality an OCM professional can only be supporting a limited number of initiatives without compromising the quality and timeliness of OCM deliverables and deadlines. The OCM Capabilities Support Model assumes that each initiative's OCM needs are unique, and not every initiative requires a full-time dedicated OCM professional support. The new approach is in proactively determining which of these OCM activities must in fact be executed by a dedicated OCM professional and which can be performed by other team members who have neither a formal educational background nor an OCM experience.

The OCM Capabilities Support Model establishes three levels of OCM support: High, Medium, and Low. The diagram on Fig. 4 explains the OCM support levels.

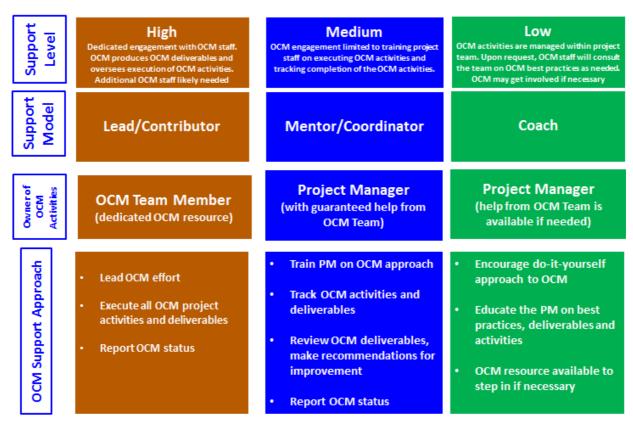


Fig. 4. OCM Support Levels

What is the difference between the support levels? The key differences are in:

- The OCM professional's role
- The OCM professional's responsibilities
- The responsibilities of other members of the initiative's team

The High level of OCM support is identical to the traditional OCM support approach. At this level, an initiative is supported by a dedicated professional who is a member of the OCM team. The OCM professional's role on a team is that of the OCM Lead. That professional is accountable for the planning and execution of all OCM activities. As the OMC Lead, that professional tracks and reports the status of all OCM activities to the Leadership. S/he may also manage other members of the OCM and Training teams, such as a communications expert, instructional designer, or instructor. On the other hand,

the OCM professional is also an individual contributor on such projects. As such, s/he produces all OCM deliverables.

At the Medium level of OCM support, the role of the OCM professional is that of a mentor to other team members. In this scenario, the OCM professional seldom performs the planning and execution of the OCM activities. Instead, that professional trains and mentors others on how to plan and execute these activities. This support level assumes that, with adequate training, other team members, such as a Project Manager, are capable of carrying out the responsibilities for the OCM activities traditionally planned and executed by the OCM professional. Naturally, other team members' expertise may be in the functional areas other than OCM. The OCM Capabilities Support Model does not assume that, by some kind of miracle, these team members will instantly acquire a broad expertise in OCM. This level of OCM support assumes that within the limited OCM boundaries of a specific initiative, the OCM delegates will perform at an adequate level that will allow for the innovation to be implemented successfully. Their OCM expertise will not extend beyond the specific project's completion date. It is unlikely that these OCM delegates will perform at an adequate level as OCM professionals with another project or at another company. Once trained by an OCM professional, the delegates will plan and execute either all or most of the OCM activities that we have discussed in the Key Processes of Organizational Change Management section. We assume that project managers and other team members, including requirements analysts, training specialists etc. are, with the appropriate training and oversight, capable of performing stakeholder analyses, identifying and documenting changes and their impact on company employees and other stakeholders, writing communications, organizing training etc. Their performance, however, will require a lot of oversight by the OCM organization. The good news is, in this OCM support model, the OCM professional will also closely monitor their performance as OCM delegates, review the OCM deliverables they produce and make recommendations for their improvement. Finally, the OCM professional will report the status of the OCM activities to the Senior Management and should be ready to step in as a full-time dedicated OCM resource at a moment's notice as needed.

The Low OCM support level is somewhat similar to the Medium support level in a sense that the OCM professionals, once again, delegate their OCM responsibilities to other team members. Unlike the Medium OCM support level, however, that level of OCM support encourages the "do-it-yourself" approach to a project's OCM support. The OCM professional plays the role of a coach to other team members. Once the initial OCM training is complete, the OCM professional steps back to focus on other priorities. The team continues to plan and execute all OCM activities, produce OCM deliverables, and report OCM status without expecting any further support from their OCM coach. Of course, the OCM professional will be available to step in if necessary, but the assumption is, no further help will be required from the OCM team.

Neither the Medium nor the Low OCM support levels entail a full-time dedicated OCM resource being a part of a team. These support levels rely on a so called distributed approach to the planning and executing of all OCM activities. Many initiatives do require a full-time OCM engagement. Some initiatives, however, do not require a dedicated OCM professional. Not all initiatives are born equal, and the level of OCM support must to be adequate for the needs of a particular initiative. If a team can sustain them, OCM responsibilities can be shared and distributed among other team members. These responsibilities can be decentralized and executed by many instead of being planned and executed from a centralized location by a single dedicated OCM professional or the OCM team.

The OCM Capabilities Support Model is flexible enough to allow for the OCM support levels to transform along with the project's changing OCM needs. An initiative, for example, may have several phases. Initially, that initiative may require a High level of OCM support and a dedicated OCM resource to manage all its OCM activities. As a project manager gets more familiar with OCM practices, receives OCM training by OCM professionals, and gets to observe their work, s/he may decide that the next phase may require a different level of OCM support. Another reason for switching to a different level of OCM support is when an initiative itself transforms due to a changing scope, complexity etc. An OCM professional may need to step up her/his involvement in an initiative to the High OCM support level to ensure the innovation receives an adequate OCM support. By the same token, that engagement may be scaled down.

As you can see, OCM support levels will influence and determine the role which an OCM professional plays on a project, their responsibilities, as well the responsibilities of other team members. But

how would a team know which OCM support level is appropriate? OCM professionals rely on predetermined criteria that unequivocally determine the required level of OCM support.

The OCM Capabilities Support Model offers a set of transparent criteria to determine the level of OCM support and clearly delineate the role an OCM professional plays on an initiative. The chart on Fig. 5 OCM Support Matrix provides the criteria and the ranges that help to determine the appropriate OCM support level. The OCM Support Matrix uses the point system to calculate and determine the desired level of OCM support.

0.500	OCM SUPPORT LEVEL				
Criteria	HIGH	MEDIUM	LOW		
Project scope	Global	Regional	Local		
	(Enterprise-wide)	(Impact selected regions only)	(Impact groups within single region)		
	Points = 3	Points = 2	Points = 1		
Project size	New System or Process Implementation Major Enhancement to system of process Multiple global systems of processes Points = 3	System or process enhancement Points = 2	Minor system or process enhancement Points = 1		
Project duration	About 12 months and over	Within 9-12 months	Within 3-9 months		
	Points = 3	Points = 2	Points = 1		
Number of users impacted	Enterprise (60-70,000)	Within A Region (~20,000)	Group (Under 20,000)		
	Points = 3	Points = 2	Points = 1		
Project complexity	High complexity	Medium complexity	Low complexity		
	Points = 3	Points = 2	Points = 1		
Compliance requirement	Project is compliance-related	Project is not compliance related	Project is not compliance related		
	Points = 3	Points = 2	Points = 1		
Sustainability requirements	Rely on extensive network Points = 3	Functional Experts with limited backup Points = 2	Functionally managed, backup is readily available Points = 1		
Level of OCM support and OCM support model are determined by points	High >20 points Lead - Contributor Model Dedicated engagement with OCM staff. OCM produces OCM deliverables and oversees execution of OCM activities. Additional OCM staff likely needed	Medium 14-20 points Mentor-Coordinator Model OCM engagement limited to training project staff on executing OCM activities and tracking completion of the OCM activities.	Low 7-13 points Coach Model OCM activities are managed within project team. OCM staff may train the team on OCM best practices as needed/upon request. OCM may get involved if necessary (switching to the Mentor-Coordinator Model)		

Fig. 5. OCM Support Matrix

The OCM Capabilities Support Model uses a set of seven criteria to determine the OCM support level. These criteria are:

- Project Scope
- Project Size
- Project Duration
- Number of employees and other stakeholders impacted
- Project Complexity
- Project's Compliance requirements
- OCM Sustainability requirements

Each criterion is assigned a certain number of points, ranging from 1 point on the lower end of the scale to 3 points on the higher end. For example, an Enterprise-wide project with a global impact receives 3 points for scope. A project which only impacts a single organization within a certain county or city receives 1 point. In a similar fashion, a project with duration of 12 months or longer receives 3 points for the duration criterion. A project that is only planned for 3–9 months or under 3 months receives 1 point for duration. An OCM professional can easily determine the appropriate OCM support level by tallying up the total project's OCM support score. A total score of 20 and up means that the project is very complex, global in nature, will service the entire employee population across the globe, will take upwards of a year to complete etc. A total score of 20 puts a project into the High OCM support level category. That project requires a dedicated OCM support specialist or a support by the OCM team. That

person or a team of OCM professionals will plan and execute all OCM activities associated with that initiative and produce and manage all OCM deliverables. A total score of between 14–20 points indicates that a project requires a Medium OMC support level. The score ranging between 7 and 13 indicates a Low OCM support level.

These criteria are transparent. Any initiative manager or OCM professional can use them to determine the project's OCM support needs. A couple of side notes, however, are in order.

First, the absolute majority of these criteria are simple concepts, approaching a binary "yes" or "no" in their simplicity level. For example, it is simple to determine whether an initiative has been started to make a process, organizational role, or technology compliant with a requirement set forth by a regulator (the "compliance requirement" factor). Initiative complexity is the only exception to that rule. How do you determine whether an initiative is simple of complex? Initiative complexity is not a simple concept (smile)! It is comprised of multiple factors that contribute to complexity. These factors are summarized by the chart on Fig. 6: Project Complexity Level [3, 4]. It is important to understand how initiative complexity is determined. Our intuition tells us that an initiative that is managed by an experienced manager, has a homogeneous team, uses a formal and proven process will be less complex than an initiative that does not have all of these features. But when it comes to determining the level of OCM support and the cost associated with it, we cannot rely on our intuition alone, can we? Let's refer to Fig. 6.

Complexity Dimension	Low Complexity	Moderately Complex	Highly Complex
Team Composition and Performance	Strong project leadership Team staffed internally, has worked together in the past, and has a track record of reliable estimates Formal, proven PM, BA, SE methodology with QA and QC processes defined and operational	Competent project leadership Leam staffed with internal and external resources; internal staff has worked together in the past, has a track record of reliable estimates Contract for external resources is straightforward; contractor performance known Semi-formal methodology with QA/QC processes defined	Project manager inexperienced in leading complex projects Complex team structure of varying competencies, (e.g., contractor teams, virtual teams, culturally diverse teams, outsourced teams) Complex contracts; contractor performance unknown Diverse methodologies
Urgency and Flexibility of Cost, Time, and Scope	Minimized scope Small milestones Schedule, budget and scope are flexible.	· Schedule, budget, scope can undergo minor variations, but deadlines are firm · Achievable scope and milestones	· Over-ambitious schedule and scope · Deadline is aggressive, fixed and cannot be changed · Budget, scope & quality have no room for flexibility
Problem and Opportunity Clarity	Clear business objectives Easily understood problem or opportunity	Defined business objectives Problem or opportunity is undefined	Unclear business objectives Problem or opportunity is ambiguous and undefined
Solution Clarity	Solution is readily achievable using existing, well-understood technologies and processes	· Solution is difficult to achieve or the technology and processes is proven but new to the organization	· Solution requires groundbreaking innovation · Solution is likely to be using immature, unproven or complex technologies and processes provided by outside vendors
Requirements Volatility	Strong customer/user support Basic requirements understood, Straightforward, stable Low complexity of functionality	· Adequate customer/user support · Basic requirements understood, but are expected to change · Moderately complex functionality	· Inadequate customer/user support · Requirements are poorly understood, volatile, and largely undefined · Highly complex functionality
Level of Organizational Change	· Impacts a single business unit	· Impacts a 2-3 business units	· Large-scale organizational change that impacts the enterprise Spans functional groups or agencies · Shifts or transforms the entire Enterprise/organization
Risk, External Constraints and Dependencies	Considered low risk Some external influences No challenging integration issues No new or unfamiliar regulatory requirements	Considered moderate risk Some project objectives dependent on external factors Challenging integration effort Some new regulatory requirements	Considered high risk Overall project success depends largely on external factors Significant integration required Highly regulated or novel sector
	· No punitive exposure	· Acceptable exposure	- Significant exposure

Fig. 6. Project Complexity Level

Project complexity is a concept that is comprised of several factors, such as:

- Team composition, including the background and experience of project managers and team members
- The use of formal, proven methods or processes
- Flexibility of scope, cost, and schedule
- Clarity of a problem and a solution
- Clarity and volatility of requirements
- Complexity of system functionality, process, or organization
- Risk, external constraints, and dependencies

OCM professionals use a simple questionnaire to determine initiative complexity. This questionnaire is used to ask questions, such as "Is the project manager strong and experienced in leading complex projects?" and document the answers. The chart on Fig. 7 Project Complexity Level Cheat Sheet represents a simplified view of the criteria contributing to a complexity level. These criteria allow us to assign project complexity to the high, medium, or low group. That group, in its turn, is factored in when using the OCM Support matrix to determine the appropriate level of OCM support. Generally speaking, more complex initiatives may require a higher OCM support level.

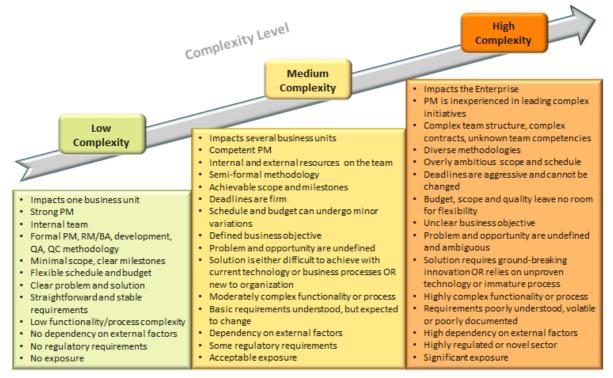


Fig. 7. Project Complexity Level Cheat Sheet

Second, the criteria shown in the OCM Support Matrix may look like they are skewed toward a specific industry and company size. Specifically, they may look like they are geared toward new technology or process implementations in a large company (global company with a large number of employees). Most of the criteria, however, are universal enough to be applied to an innovation in any industry or any size company. Depending on an organization's size, you may need to replace the data ranges used in the OCM Support Matrix with data ranges that are more applicable to your industry and tailored to a specific company size. Your company might not be global, nor might it have regional organizations. In this case, data ranges that show a breakdown to smaller organizational units (Division, Department, and Group) may be more appropriate. Depending on the size of your company and the industry, you might also need to replace the number of impacted users with the number of your employees and initiative stakeholders that is scaled down or up to your organization's size. Other than that, all criteria should be applicable to any industry. The important thing is to have a set of criteria with the appropriate data ranges in place to help you determine the appropriate OCM support level.

Summary

This article introduced the OCM Capabilities Support Model. The OCM Capabilities Support Model offers a solution to the challenge the US industry is currently experiencing. That challenge is in the gap between a growing demand for OCM support and the inability of OCM organizations to meet industry demand due to conservative funding. The approach to OCM summarized in the OCM Capabilities Support Model entails:

• Engaging with an initiative's management early, before that initiative starts. This will be easier to accomplish if the company's Portfolio and Demand Management process entails engaging the OCM

team at an early phase. Ideally, OCM engagement with an initiative should occur when the cost is being estimated. OCM professionals will help to determine which level of OCM support will be appropriate for an initiative.

- The level of OCM support determines whether additional resources will be required. The cost of additional talent may contribute to a higher initiative cost if that initiative requires a dedicated, full-time OCM professional. On the other hand, if OCM responsibilities are shared with other team members, the cost of engaging the OCM team may be lower.
- Assessing and documenting initiative's parameters, such as scope, size, duration, complexity and others.
 - Determining the required level of OCM support and classifying it as high, medium, or low.
- Providing education and training to the team members engaged in the planning and execution of OCM activities that is adequate for the level of OCM support and the role they will play on that initiative. The amount of training due to the team members may range from high-level/awareness (when a dedicated OCM professional will plan and execute all OCM activities) to very hands-on (when a team will embark on the OCM planning and execution tasks).

This approach makes the OCM Capabilities Support Model an efficient solution to the US industry's challenge. It allows the industry to do more with less: efficiently support multiple initiatives and industry innovations without putting a strain on OCM organizations.

References

- 1. PROSCI. Available at: https://www.prosci.com/change-management/what-is-change-management.
- 2. Stul M.Ya. [Technologies of Management of Innovations: Experience of the USA]. *Bulletin of Saratov State Social-Economic University*, 2015, no. 3 (57), pp. 61–67. (in Russ.)
- 3. Kathleen Haas. Introducing the New Project Complexity Model. Available at: https://www.projecttimes.com/ rticles/introducing-the-new-project-complexity-model-part-i.html.
- 4. Gelrud Ya.D., LoginovskiyO.V. *Upravlenie proektami: metody, modeli, sistemy. Monografiya* [Project Management: Methods, Models, Systems: Monograph]. Chelyabinsk, South Ural St. Univ. Publ., 2015. 330 p.

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МОДЕЛЬ УПРАВЛЕНИЯ ПРАКТИКОЙ ВНЕДРЕНИЯ ИННОВАЦИЙ В ОРГАНИЗАЦИЯХ И НА ПРЕДПРИЯТИЯХ В США

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Рассматривается модель управления внедрением инноваций на предприятиях и в организациях в США. В США управление этим процессом изучается дисциплиной, которая называется Organizational Change Management (ОСМ). ОСМ изучает методы управления поведением сотрудника предприятия или организации в условиях внедрения инновационных изменений. Эта область практики достаточно хорошо изучена и широко применяется в индустрии США. За пределами США, однако, эта область не является самостоятельной и считается частью таких дисциплин, как управление проектами, организационная и индустриальная психология и организационное развитие.

Перед тем, как начать рассмотрение модели управления внедрением инноваций, автор рассматривает понятие ОСМ, значение ОСМ в процессе управления, его основные компоненты и риск, который возникает, если значение ОСМ недооценивается. Это введение в ОСМ поможет тем, кто не знаком с этой дисциплиной, понять смысл ОСМ перед тем, как начать рассмотрение модели управления. Предприятия и организации в США нуждаются в новом

подходе к существующим вызовам. К числу таких вызовов относится конфликт между возросшей потребностью в услугах ОСМ и консервативным подходом к финансированию отделов ОСМ.

Рассматриваемая модель предлагает новый эффективный подход к разрешению этого конфликта. Статья рассчитана на руководство компаний, управляющих среднего звена, сотрудников отдела обучения персонала и отдела PR / отдела по связям с общественностью, консультантов по организационному развитию и менеджеров проектов.

Ключевые слова: модель управления внедрением инноваций, управление организационными изменениями.

Литература

- 1. PROSCI. Source: https://www.prosci.com/change-management/what-is-change-management.
- 2. Стуль, М.Я. Технологии управления нововведениями: опыт США / М.Я. Стуль // Вестник Саратовского государственного социально-экономического университета. 2015. № 3 (57). С. 61–67.
- 3. Kathleen Haas. Introducing the New Project Complexity Model. Source: https://www.projecttimes.com/articles/introducing-the-new-project-complexity-model-part-i.html.
- 4. Гельруд, Я.Д. Управление проектами: методы, модели, системы: моногр. / Я.Д. Гельруд, О.В. Логиновский; под ред. д-ра техн. наук, проф. А.Л. Шестакова. Челябинск: Издат. центр $\mathit{HOVp\Gamma V}$, 2015. 330 с.

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ОБРАЗЕЦ ЦИТИРОВАНИЯ

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