

Agile and Organizational Change Management to Increase Project Success^{1, 2}

Paul Burton, PhD

Amberton University

Abstract

Project success requires the use of effective organizational change management (OCM) techniques, including stakeholder and sponsor management, change agent development, resistance management, and end-user adoption. These strategies and tools are essential for ensuring that projects are completed on time, within budget, and to the desired quality standards. However, while Agile methodologies have gained widespread popularity in product development and offer a range of core methods and processes to increase the chances of project success, they do not fully address best practices in OCM. This paper proposes a hybrid approach that combines the Agile and OCM frameworks in order to optimize project success. The suggested approach includes recommendations for addressing stakeholder and sponsor management, managing resistance to change, and developing strategies to ensure end-user adoption of project solutions after they are implemented. By focusing on the integration of Agile and OCM, organizations can significantly increase the likelihood of project success.

Managing Change

Challenges remain with managing change on projects, calling for further development of Organizational Change Management (OCM):

“Project managers claim to be agents of change, and the effective management of such change has been recognized as a factor contributing to project success. However, management of organizational change has received relatively little attention in project management research.

¹ *Editor’s note: Second Editions are previously published papers that have continued relevance in today’s project management world, or which were originally published in conference proceedings or in a language other than English. Original publication acknowledged; authors retain copyright. This paper was originally presented at the [15th UT Dallas PM Symposium in May 2023](#). It is republished here with the permission of the author and conference organizers.*

² How to cite this paper: Burton, P. (2023). Agile and Organizational Change Management to Increase Project Success; originally presented at the 15th University of Texas at Dallas Project Management Symposium in Richardson, TX, USA in May 2023; *PM World Journal*, Vol. XII, Issue VII, July.

Thus, there is lack of clarity concerning the relationship between and among change, project, and program roles. Previous research suggests that project managers do not necessarily have the required competence to perform the full spectrum of activities required to promote and implement organizational change. (Crawford, 2014).

Organizational Change Concepts

A core approach to OCM is provided through the concept of ADKAR, addressing the recommended stages to address a stakeholder's understanding and acceptance to change through a staged (ordered) approach of the individual's Awareness, Desire, Knowledge & Ability, and Reinforcement towards the change:

Awareness of the need for the change. This represents a person's understanding of the nature of the change, why the change is being made and the risk of not changing, and addresses the individual's "What's In It for Me" (WIIFM) considerations.

Desire to support and participate in the change, representing the individual's willingness to support and engage in the change. Desire is ultimately about personal choice, influenced by the nature of the change, influenced by the nature of the change, one's personal situation, as well as intrinsic motivators that are unique to each person.

Knowledge of how to change represents the information, training and education necessary to know how to change. Knowledge includes information about behaviors, processes, tools, systems, skills, job roles and techniques that are needed to implement the change.

Ability to implement the change through skills & behaviors represents the realization or execution of the change, turning knowledge into action. Ability is achieved when a person or group has the demonstrated capability to implement the change at the required performance levels.

Reinforcement to sustain the change represents those internal and external factors that sustain the change. Reinforcements could be the person's internal satisfaction with his or her achievements or other benefits at a personal level (Hiatt, 2006).

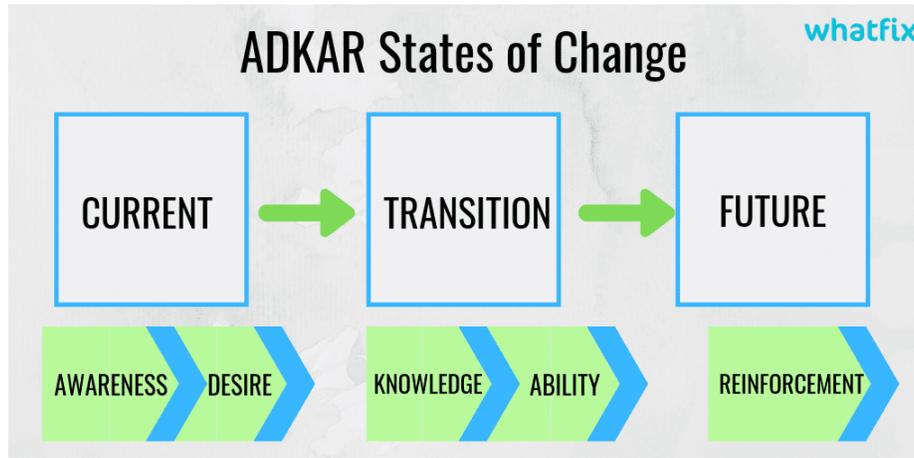


Figure 1.0 ADKAR Stages of Change

Kotter’s 8 Steps of Change

Kotter’s 8 steps provide a staged, linear approach to managing successful change. These steps include establishing a sense of urgency by analyzing competition and identifying potential crises; putting together a powerful team to lead change; creating a vision; communicating the new vision, strategies, and expected behavior; removing obstacles to the change and encouraging risk taking; recognizing and rewarding short-term successes; identifying people who can implement change; and ensuring that the changes become part of the institutional culture for long-term transformation and growth.

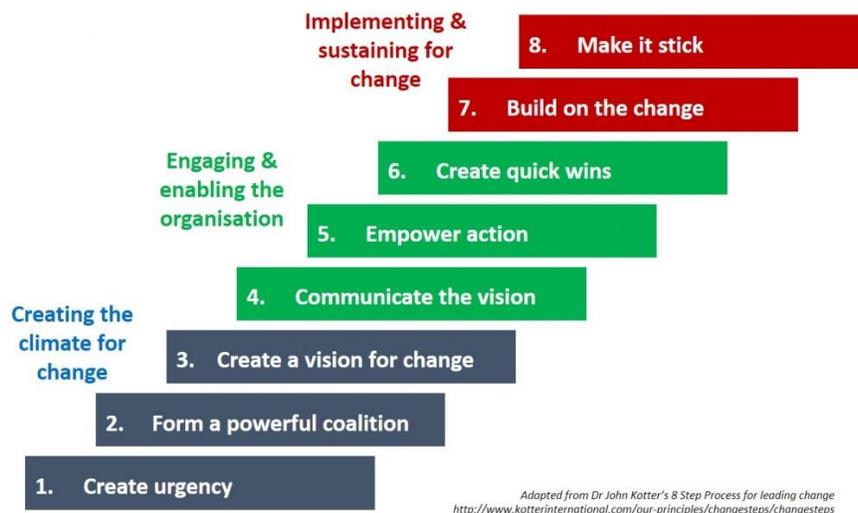


Figure 1.1 Kotter’s 8 Steps for Leading Change

The Satir Change Model

Originally developed for family therapy, the Satir Change Model articulates a linear, ordered stage of change that individuals experience, regardless of the type of change or situation. A core concept is the “foreign element,” where any new change encountered by the individual initially leads to a decrease in performance, due to misunderstanding. Individual performance naturally dips when this foreign element is introduced, such as a new computer system or business process. The “Transforming Idea” leads individuals towards acceptance. No matter how well-planned or well-orchestrated a change initiative is planned or developed, the individual will go through these stages regardless.

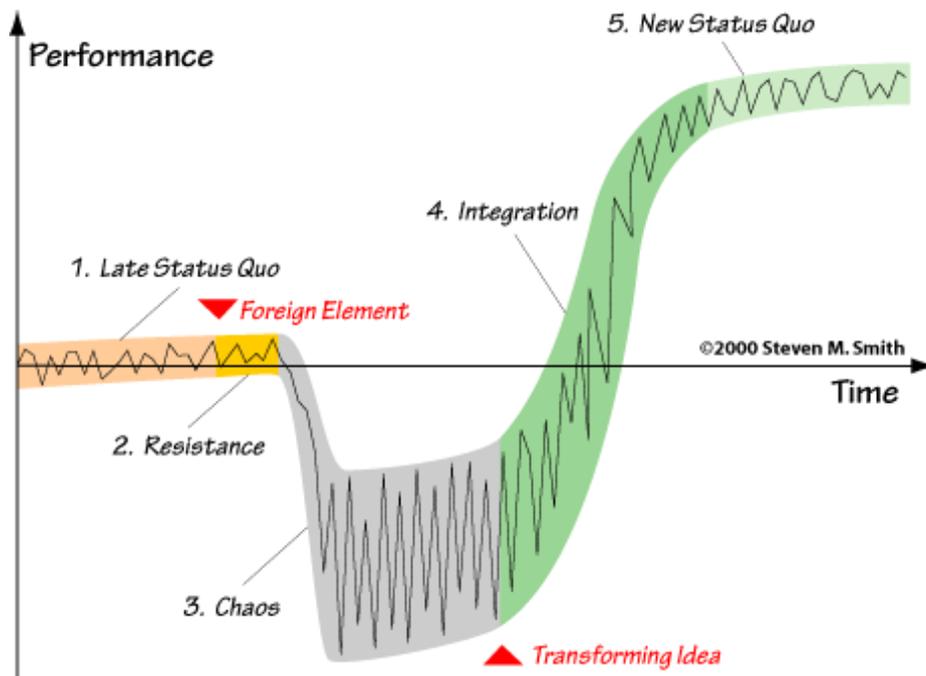


Figure 1.2 The Satir Change Model

OCM Models and Workstreams

Various models and workstreams have been developed to deploy and implement organizational change initiatives. Common workstreams include: Understanding stakeholder impacts, planning and administering communications, engaging stakeholders, organizational alignment, learning and development (training), and ensuring business readiness prior to deployment.

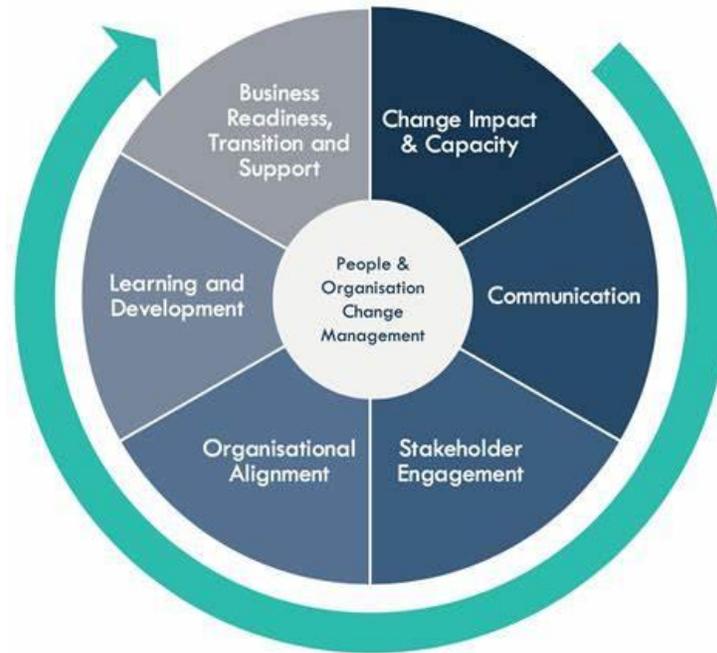


Figure 1.3 Organizational Change Management Model

Stakeholder Management

Stakeholder Management includes identifying all core stakeholders impacted by the change / project, analyzing what these impacts are in relation to stakeholder’s jobs, roles & responsibilities, and developing OCM initiatives to address these impacts to ensure user understanding and acceptance of the change / project. Impact Assessments are a crucial starting point to identify and prepare for how the change will impact core stakeholders. For example, with information technology projects, impacts are analyzed from a system and process perspective. Changes to the computer system(s) used by stakeholders are reviewed, as well as the business processes that these users employ to perform their jobs. These impacts form the “raw material” for OCM team members to plan change management initiatives to address these changes.

CHANGE IMPACT ASSESSMENT - PROCESSES				
Project Name: ERP MOON Implementation		Completed By:		
Project Manager: Mary S		Date:		
Process Name	Process Owner	Severity of Impact	As-Is	To-Be
Sales Leads Entry	Tom A	High	Sales team captures new lead in a shared Excel spreadsheet in the G drive	Sales team captures new lead by creating a new item in the ERP solution. Items can be linked to e-mail for follow up and quick tracking
Sales Leads Reporting	Tom A	Medium	Sales team reports on KPIs monthly by analysing the spreadsheet and producing a set of graphs	Sales team consults the ERP solution which will provide a real-time helicopter view of sales and automatically generate a set of standard reports
Project Costs Reporting	Mary G	Medium	The PMO contacts each project manager at the end of the month and asks for a table to be updated with the spend to date. The PMO compiles this information into a report pack that is distributed to senior leadership	The project managers update their spend to date directly in the ERP solution. The PMO will assess the quality of the data. Senior leadership team can consult the data at any point via self-service reporting
Timesheeting	Bob B	High	No time recording system in place	Everyone will record time spent in the week by project, using the timesheet solution available in the ERP

Figure 1.4 Impact Assessment Example

Power, Influence and Interest

A key component of stakeholder management is to identify core stakeholder characteristics. This included identifying their current level of power and influence within the organization, as well as their interest in the change / project. This information is crucial in the development of OCM initiatives to ensure they understand and support the change. In addition, specific stakeholders with sufficient power and influence can serve as core advocates of the change to ensure user adoption going forward. The OCM stakeholder strategy is developed based on these characteristics; for example, a stakeholder with high power and influence as well as high interest in the project will necessitate an OCM strategy to manage closely throughout the project lifecycle and thoroughly engage in project activities.



Figure 1.5 Power, Influence and Influence Approach

Managing Resistance

Part of stakeholder management is to manage resistance towards the change or project. The Impact Assessment should reveal the current level of acceptance towards the change or project, which can be classified as neutral, supportive, or not supportive (“resistant”). A primary goal of stakeholder management is to “move” the stakeholder from neutral / resistant to a “support” status. By moving stakeholders towards accepting the change, these individuals can become part of the “guiding coalition” to support the change going forward (Kotter, 2012).



Stakeholder Name	Current Position	Issues or Reasons for Current Position	Needed Position	Action Plan or Mitigation Strategy
Stakeholder 1	Support	• •	Support	• •
Stakeholder 2	Resist	• •	Support	• •
Stakeholder 3	Neutral	• •	Neutral	• •
Stakeholder 4	Resist	• •	Neutral	• •

Figure 1.6 Managing Resistance

Adoption

A central goal of Organizational Change Management is to ensure user adoption *after* the change / project has been deployed. User adoption refers to the simple realization that stakeholders will use the new solution(s) as designed. From this, key benefits of the change will be realized. Without successful user adoption, the entire change / project may not reach the intended goals originally planned for the stakeholders, such as increased efficiencies, reduced cost, or enhanced customer service, for example. Unfortunately, many change projects are myopic in the approach to primarily deploy the solution, with less attention or effort towards adoption post-deployment. Sadly, this can be due to poor project planning with little resources or budget reserved for post-deployment efforts.

The key focus areas of adoption include:

1. Define core adoption measures: With stakeholder input, define what measure(s) to monitor to ensure the solution is used as intended. Such measures could include a) using the system as designed for core business processes and procedures. For example,

prior to the change, users may have employed manual processes and procedures to complete their tasks, while the new solution will enable automated processes to complete these activities.

2. Baseline measures: After deployment, a baseline or current measure of performance should be documented as the starting point for improvements. This baseline measures is the current state of how the stakeholder is performing.
3. Measure progress: Typically 30-60-90 day measures are taken to compare to the previous baseline measures to reveal if progress is being made.
4. Develop improvement plans: In many cases, post-go-live measures show lack of adoption. Analysis is conducted to reveal the root causes of these measures and improvement plans developed with business subject matter experts, sponsors, and OCM representatives.

Agile Focus Areas

OCM integration topics are proposed with the following Agile principles and artifacts:

- Agile Manifesto
- Agile Principles
- User Stories
- Product Backlog / Product Owner

Agile Manifesto

Agile Manifesto

INDIVIDUALS & INTERACTIONS

over processes and tools

WORKING SOFTWARE

over comprehensive documentation

CUSTOMER COLLABORATION

over contract negotiation

RESPONDING TO CHANGE

over following a plan

That is, while there is value in the items at the bottom, we value the items at the top more."

<http://agilemanifesto.org/>

www.justplainagile.co.za | info@justplainagile.co.za | T: +27-21-554-1380 | C: +27-72-612-1914

Figure 1.7 Agile Manifesto

The core approach to ‘Individuals and Interactions over processes & tools’ is a standard Agile mantra within the context proposed: Working with the core Agile project “customer.” However, who this “customer” includes is often ignored, and in many cases, only 1-2 individuals. Often, the Agile team does not address other customers impacted beyond these core customer points of contact, and the responsibility of reviewing and confirming these impacts is solely the customer’s responsibility. “Customer collaboration over contract negotiations” has proven to effectively reduce red-tape, increase efficiencies and focus on value. However, this as well can be taken to extreme, where some valid documentation and approvals are recommended.

With User Stories, for example, the customer provides a “thumbs up” that the story is complete and ready for development. This approval is often verbal, which can lead to problems if these approvals are rescinded on a recurring basis. “Responding the change over

following a plan” is consistent with OCM goals and objectives, and OCM project planning and management is customizable based on predictive, Agile or hybrid methodologies.

Agile Principles



Figure 1.8 Agile Principles

Early / frequent product delivery and adapting to change have been proven effective approaches to engage feedback. “Business and developers cooperation” is a positive step towards technical and business integration; however as noted earlier, this “business” cooperation is unclear in terms of the scope of stakeholder involvement.

Definition of Done (DoD)

Initially the DoD was developed in terms of confirmed completion of software development, determined by team developers (unit tests completed, code reviews, etc.). The focus from team developers is a “check the box” approach where the Product Owner accepts the user story,” for example. However, DoD is a central concept to be rigorously reviewed by the business / customer as well, and falls in the purview of the Product Owner. Related to prior

comments regarding approvals, this DoD can be a challenge to confirm when competing demands are present.

Product Backlog

The Product Owner manages the Backlog content and importantly, the ranking / priority of these user stories. Of course this is managed repeatedly with again “the customer,” which can be unclear in some projects. While typically there is one or two primary customers as focal points for the Product Owner, with competing demands within the business this relationship can be compromised, and in some cases, break down. The Agile principle of welcoming change is a useful strategy during these challenges, but is not the solution to the problem of confused customers with Product Backlog changing every week. Agile / OCM integrations (mentioned below) include OCM lead(s) partner with the Product Owner and customer to aid in Backlog content verification and prioritization throughout the project lifecycle.

Agile / OCM Integration Recommendations

1) The following table provides a snapshot of Agile / OCM integration opportunities.

Activity / Artifact	Agile Role / Resp	OCM Role / Resp
Build & manage Impact Assessment	Product Owner: Reviews impacts with core “customer”	Partners with Product Owner and customer to build Stakeholder Map, engage stakeholders, comm & train on impacts
Create & approve User Stories	Development Team: Develop with core “customer”	Partners with customer on OCM initiatives supporting Stories
Manage Product Backlog / Grooming / Prioritization	Product Owner develops & manages with Customer	Integrates OCM Plans & activities on-going with updated Backlog
Stakeholder Management	Product Owner aligns with primary customer	Identifies and engages core stakeholders to support the primary customer / sponsor

Figure 1.9 Agile / OCM Integration Opportunities

2) Consider New Product Ownership Models

The typical 1:1 “One Product Owner / One Primary Customer” approach may be beneficial for smaller teams, but can be ineffective and inefficient for complex projects or programs with large stakeholder groups impacted by the change. Other more flexible models that enhance the ability to manage change include:

a) Fraternal Twins

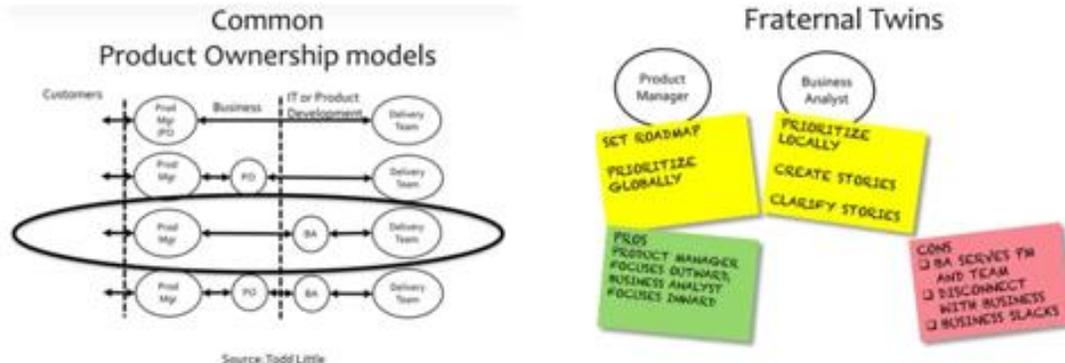


Figure 2.0 Product Ownership Model: Fraternal Twins

With this model, Product Owner partners with Business Analyst(s) on core activities, and split other Product Owner roles & responsibilities if required, such as the Product Owner managing the Product Roadmap while Business Analyst(s) take a more micro-level view of locally prioritizing user stories and feature development. A potential disadvantage of this approach occurs with the Business Analyst predominantly focuses on the internal Agile team rather than the business.

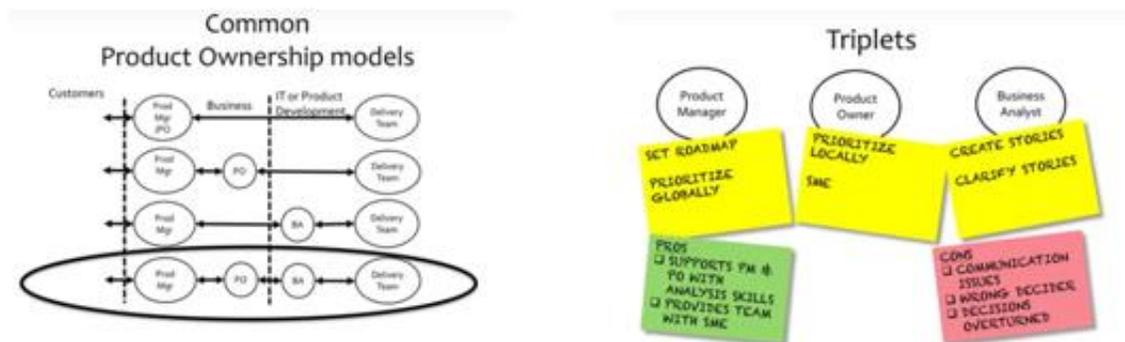


Figure 2.1 Product Ownership Model: Triplets

This model splits roles & responsibilities between a defined Product Manager, Product Owner and Business Analyst(s), which can further enable the ability to manager larger-scale, complex

changes impacting multiple stakeholder groups. A potential disadvantage of this model occurs when the Business Analyst does not have adequate decision-making authority.

Change Agent Networks

The prior “Guiding Coalition” previously noted includes selected individuals to serve as “Change Agents” across the impacted organization to support and sponsor the change. Sponsors select these Change Agents to represent core areas impacted by the change, including business processes & procedures, technical changes, etc. The Change Network ensures these impacted areas understand and in turn, support the change organization-wide.

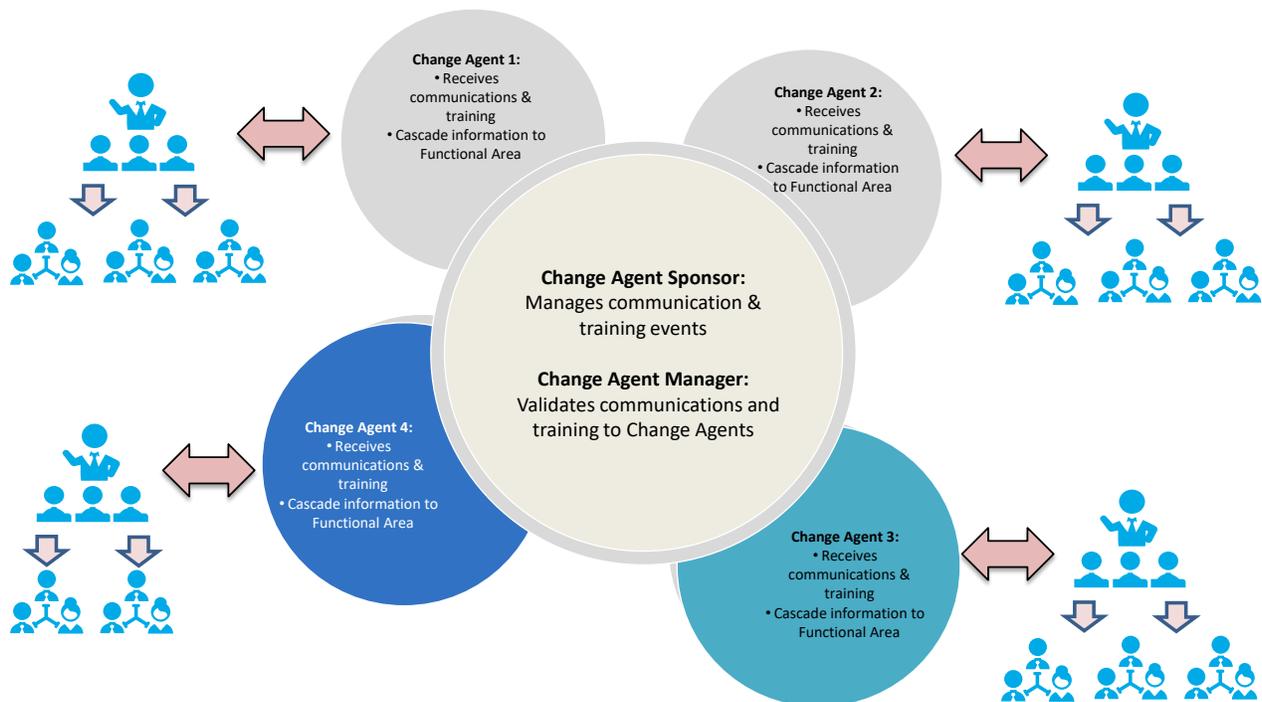


Figure 2.2 Change Agent Network

Change Adoption in Agile Projects

User adoption remains a core OCM workstream to ensure end users “use” the project solutions as designed post-deployment. This workstream is critical and addresses the potentially myopic view that emphasizes successful project deployment with less emphasis on success after the fact.

The OCM Lead should partner with the business project sponsors and Product Owner to develop and manage an Adoption Plan including:

1. Define metric(s) to measure post-deployment. These metrics should adequately measure “success” in the eyes of the Product Owner and primary business sponsors. This definition of “success” varies based on the need, but typically includes enhanced processes & procedures to increase efficiency, reduce costs and enhance customer service.
2. Plan the measurement process(es) to occur after project deployment. This includes validating the customer resource roles & responsibilities to conduct measurements, as well as validating the recommended performance improvement targets.
3. Conduct baseline measurements. Typically during the first month post-go-live, baseline (starting) measurements should be recorded. This sets the initial measurements serving as a baseline to be used in comparison to future measures.
4. Conduct recurring measures. Usually, these post-baseline measures are conducted at 30-60-90 day intervals.
5. Evaluate data. Analysis is conducted to validate results, including whether measures showed improvement or indicated areas requiring further modifications and improvements.
6. Report results. Data is presented to project and customer sponsors with validation of measurement successes, review of measures not meeting performance expectations and recommendations for improvement.

An example of integration OCM Adoption plans & activities within Agile projects is provided below. This example includes integrating Agile phases (similar to Scrum or SAFe methodologies) with a traditional “waterfall-based” OCM approach to ensuring successful adoption. The standard ADKAR stages are developed in a linear fashion and related to completion of sprints. Adoption steps and artifacts are developed throughout the agile lifecycle. This example also provides typical OCM work products beyond adoption, such as communications and training plans.

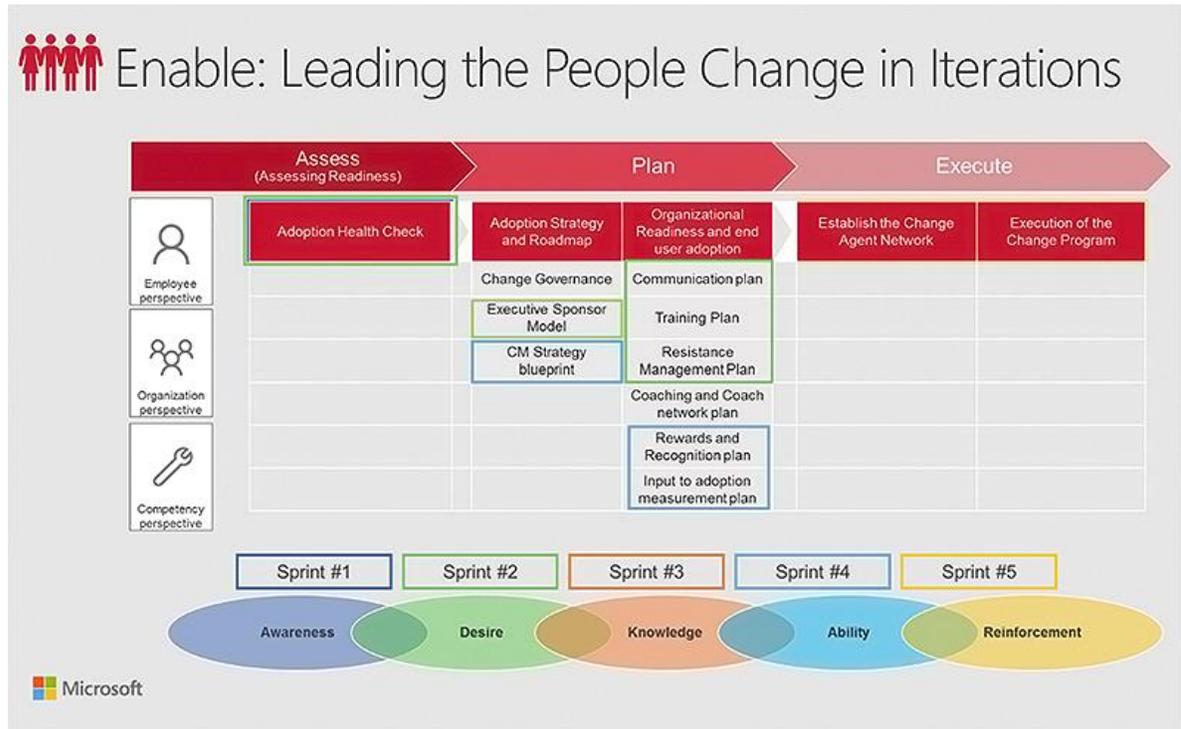


Figure 2.3 Agile and OCM Adoption Integration

Agile / Scrum OCM Alignment Plan

Figure 2.4 below provides an example OCM / Scrum Alignment Plan based on primary Scrum stages including Discovery, Sprint Planning, Backlog / Prioritization, Sprint Review / Demo, Release and Post-Release activities. OCM workstreams corresponding to each stage addresses core activities including Stakeholder Management, Leadership Alignment (Sponsorship), Capability Development (Training), Adoption & Sustainment, and Communications.

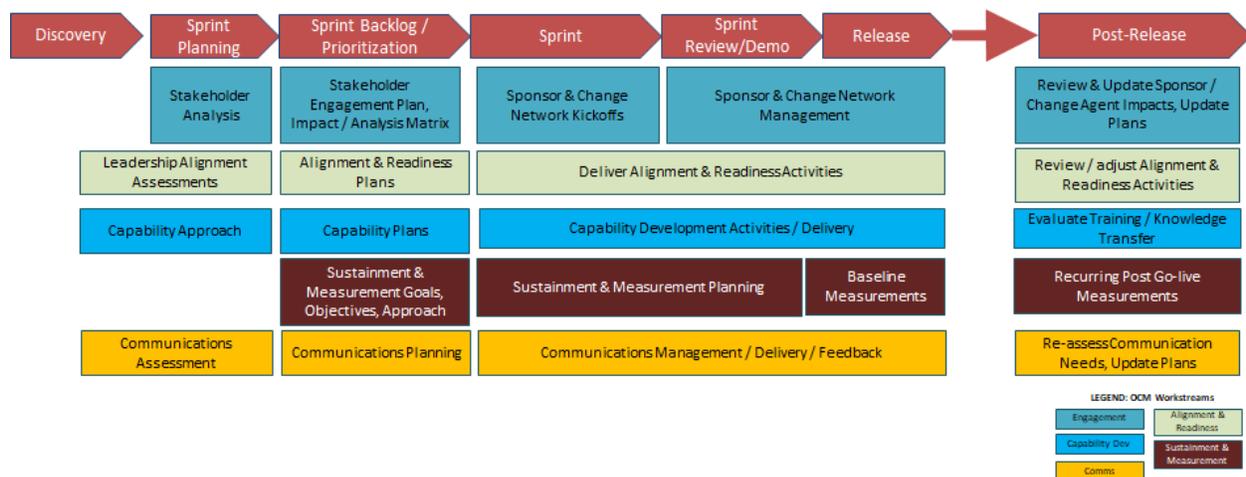


Figure 2.4 Agile Scrum / OCM Alignment Plan

Final Thoughts

The combination of an aligned Agile / OCM approach ensures advantages of both are achieved. Agile’s emphasis on quick product development and user feedback will continue to ensure greater customer involvement, while OCM’s emphasis on internal customer impacts beyond the Agile project team ensures greater understanding and adoption with the customer, as well as confirming the Agile team develops the “right” solutions based on customer requirements. This Agile / OCM alignment can form a productive, symbiotic relationship leading to greater team productivity and enhanced customer satisfaction.

References

- Baer, M., and Frese, M. 2003. Innovation is not enough: Climates for initiative and psychological safety, process innovations, and firm performance. *Journal of Organizational Behavior* 24(1): 45–68.
- Beck, K., Beedle, M., van Bennekum, A., Cockburn, A., Cunningham, W., Fowler, M., Grenning, J., et al. 2001. Manifesto for Agile software development. <http://agilemanifesto.org/>
- Boehm, B., and Turner, R. 2005. Management challenges to implementing Agile processes in traditional development organizations. *IEEE Software* 22(5): 30–39.
- Carmeli, A., and Gittell, J. H. 2009. High-quality relationships, psychological safety, and learning from failures in work organizations. *Journal of Organizational Behavior* 30(6): 709–729.
- Cockburn, A. and Highsmith, J., 2001. Agile software development, the people factor. *Computer*, 34(11), pp.131-133.

Collins, C. J., and Smith, K. G. 2006. Knowledge exchange and combination: The role of human resource practices in the performance of high-technology firms. *Academy of Management Journal* 49(3): 544–560.

Crawford L., Aitken A., Hassner-Nahmias A. 2014. *Project Management and Organizational Change*. Newtown Square: Project Management Institute, Inc.

Detert, J. R., and Burris, E. R. 2007. Leadership behavior and employee voice: Is the door really open? *Academy of Management Journal* 50(4): 869–884.

Edmondson, A. 1999. Psychological safety and learning behavior in work teams. *Administrative Science Quarterly* 44 (2): 350 – 383.

Groysberg, B., Lee, J., Price, J. , and Cheng , J. Y. 2018. The leader’s guide to corporate culture. *Harvard Business Review* 96 (1): 44 – 52.

Hiatt, Jeffrey M., 2006. *ADKAR: A Model for Change in Business, Government and our Community*. Prosci, Inc.

Hoda, R., Salleh, N. and Grundy, J., 2018. The rise and evolution of agile software development. *IEEE software*, 35(5), pp.58-63.

Huck-Fries, V., Nothaft, F. and Wiesche, M., 2021, January. Investigating the Role of Stakeholders in Agile Information Systems Development Projects: A Mixed Methods Approach. In *Proceedings of the 54th Hawaii International Conference on System Sciences* (p. 6806).

Jehn , K. A., and Bendersky, C . 2003. Intragroup conflicts in organizations: A contingency perspective on the conflict-outcome relationship. *Research in Organizational Behavior* 25: 187 – 242.

Jehn, K. A., and Mannix, E. A. 2001. The dynamic nature of conflict: A longitudinal study of intragroup conflict and group performance. *Academy of Management Journal* 44 (2): 238 – 251.

Kotter, John (2012). *Leading Change*, Boston: Harvard Business Review Press.

Kumar, G., and Bhatia, P. K. 2012. Impact of Agile methodology on software development process. *International Journal of Computer Technology and Electronics Engineering* 2 (4): 46 – 50.

Li , J. , Moe, N. B., and Dybå, T. 2010. Transition from a plan-driven process to Scrum: A longitudinal case study on software quality. Paper presented at the *Proceedings of the 2010 ACM-IEEE International Symposium on Empirical Software Engineering and Measurement*, Bolzano-Bozen, Italy, September 16–17.

Martin, Jane, 2017. Agile organizational change: Leveraging learning from software development. *OD Practitioner* 49 (3).

McDonald, Kent J., 2016. *Beyond Requirements: Analysis with an Agile Mindset*. New York: Pearson Education.

Moe, N. B., Aurum, A., and Dybå, T. 2012. Challenges of shared decision-making: A multiple case study of Agile software development. *Information and Software Technology* 54 (8): 853 – 865.

Nembhard, I. M., and Edmondson, A. C. 2006. Making it safe: The effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. *Journal of Organizational Behavior* 27 (7): 941 – 966.

Nguyen, T.S. and Mohamed, S., 2021. Mediation Effect of Stakeholder Management between Stakeholder Characteristics and Project Performance. *Journal of Engineering, Project & Production Management*, 11(2).

O’Neill, O. A. 2009. Workplace expression of emotions and escalation of commitment. *Journal of Applied Social Psychology* 39 (10): 2396 – 2424.

Pikkarainen, M., Haikara, J., Salo, O., Abrahamsson, P., and Still, J. 2008. The impact of Agile practices on communication in software development. *Empirical Software Engineering* 13 (3): 303 – 337.

Satir, Virginia, et. al., *The Satir Model: Family Therapy and Beyond*, 1991. Science and Behavior Books.

Schwaber, K., and Sutherland, J. 2017. *The Definitive Guide to Scrum: The Rules of the Game*. <https://www.scrumguides.org/docs/scrumguide/v2017/2017-Scrum-Guide-US.pdf>.

Springer, Cham. Matook, S. and Maruping, L.M., 2014. A competency model for customer representatives in agile software development projects. *MIS Quarterly Executive*, 13(2).

Springer, Cham. Sudevan, S., Bhasi, M. and Pramod, K.V., 2014. Existing Software Stakeholder Practices an Overview. *International Journal of Computer Applications*, 102(3).

Strode, D. E., Huff, S. L., Hope, B., and Link, S. 2012. Coordination in co-located Agile software development projects. *Journal of Systems and Software* 85 (6): 1222 – 1238.

Thorgren, Sara, Caiman, Elin, 2019. The role of psychological safety in implementing Agile methods across cultures. *Research-Technology Management*, March-April 2019.

Valentine, M. A., and Edmondson, A. C. 2015. Team scaffolds: How meso-level structures enable role-based coordination in temporary groups. *Organization Science* 26 (2): 405 – 422.

About the Author



Paul Burton, PhD

North Texas, USA



Dr. Paul Burton currently serves as a faculty member and M.B.A. Project Management Coordinator at Amberton University in Garland, TX. Courses include Project Management Fundamentals, Risk, Cost & Schedule Management, Project Execution & Closure, Stakeholder & Communications Management, Agile Project Management and Agile Methods. He also serves as a leader in major Information Technology (IT) transformations with many businesses and industries, focusing on Organizational Change and Project Management. Currently working at Salesforce, he also has a consulting background with Deloitte and Computer Sciences Corporation (DXC Technologies). Dr. Burton served 7 years in corporate services with Raytheon Company as an IT Project Manager and Six Sigma Black Belt. Additional qualifications include Prosci Change Management Practitioner, Project Management Professional (PMP), and PMI Agile Certified Practitioner (PMI-ACP). His current interest is blending Project Management and Organizational Change for today's dynamic, company-wide initiatives.

Dr. Burton can be contacted at pburton@amberton.edu