ARTIFICIAL INTELLIGENCE
ENGINEERING YOUR AI FUTURE
NAVIGATING AI CHANGE MANAGEMENT LIKE A BOSS
INTRODUCTION

Artificial Intelligence (AI), the ability of machines to perform tasks that typically require human-level intelligence, has the potential to fundamentally change the way organizations operate. While some may hear the term Artificial Intelligence and imagine it is a long way off, it is good to recall the routine AI interactions you have almost daily: Have you asked your smartphone assistant for directions? Did you use the chat bot while you were online shopping? AI has already been by your side for years.

Implementing AI solutions in your organization can mean improved performance, streamlined processes, and enhanced decision-making capabilities. One study claims that AI is capable of increasing workforce productivity by 40 percent or more by 2035. However, AI is not just about using machines to create efficiencies in your organization. Those who take this perspective will miss out on the potential AI can achieve. Rather, AI is about machine and human working together to tackle problems at speed and scale, and gives humans the opportunity to focus more on the complex and interesting problem-solving components of their work.

A HOLISTIC APPROACH

Any organization seeking to successfully strengthen or grow its AI capabilities must do so holistically. The task cannot be to build technological and analytical capabilities and subsequently create your change management plan. Both require a high level of effort and must be carried out in tandem.

A structured assessment of the current state of your organization will provide understanding around how AI might impact the entirety of the organization and therefore inform your organization-wide change management strategy. A comprehensive analysis involves reviewing not only the technology-related capabilities of your organization, but also its other interconnected aspects. These include data, analytical opportunities and techniques, people, and culture. Considering all these perspectives allows you to address the complexities that an AI project brings, and therefore better informs your change management strategy.

In this paper, we focus on several key people and culture considerations for AI change management.
THE ROLE OF CHANGE MANAGEMENT: THE PEOPLE SIDE OF CHANGE

Adopting and integrating AI into your organization is often no small feat and can require a great deal of change. When it comes to AI, many will be excited for a new future, but some may be scared or skeptical.

Why does this matter? Because AI represents a much more fundamental and far less familiar shift from the status quo; by altering the processes and activities of employees, AI is uniquely disruptive to business-as-usual. So, it is natural to anticipate that AI integration initiatives will be met with at least some resistance. Statistics show that only about half of major change initiatives succeed. With such resistance can come productivity loss, attrition, and failure – sometimes even beyond the scope of the change itself.

This is why change management plays such a critical role in addressing large-scale change. It involves strategically crafting a plan to ensure that new solutions aren’t simply rolled out, but that they are fully adopted and integrated into the daily routines of the employees executing them. A successful change management plan requires a thoughtful approach that involves preparing for the change, implementing the change, and sustaining the change. The employee reactions to unmanaged change vs. managed change shown in the chart below helps illustrate how change management affects adoption.

If your organization has determined that AI is the right solution and it is aligned to the organization’s overall strategic direction, you will need a change management plan that specifically addresses the unique reactions that AI elicits.

An organization’s people, who are on the ground implementing and interacting with AI solutions, must be the central focus of a robust AI change management plan. Throughout this paper, we offer five tips that can help you navigate these changes thoughtfully and can be applied iteratively throughout your AI change process.

PREPARE FOR THE CHANGE

- Assess the change and all areas of its potential impact; define your change management strategy

IMPLEMENT THE CHANGE

- Develop your change management plan and implement it

SUSTAIN THE CHANGE

- Continuously gather feedback, manage resistance, and reinforce desired behavior

Key Takeaways

- Minimizes the amount and duration of negative impact from change
- Accelerates the time to realize positive impact from change

An illustrative depiction of the impact of change management when implemented

| Unmanaged Change | Managed Change |
|------------------|----------------|
| I don’t understand how AI is supposed to help me or our organization | My leaders have shared our organization’s vision for AI, and I understand it will take time to get there |
| I don’t know if I will still have a job once we start using AI | I understand how AI will support my role and how I can learn to leverage it |
| I know they are building something, but I don’t know if I will understand the technology or if it will help me in my job | I have been included in the design of our new AI solution(5) and have been able to provide input to make sure it works for me and my coworkers |
| I don’t know where to go to find out information about when things are changing | My coworkers shared with me what they heard at the town hall and showed me the online platform where I can stay up to date on all news and announcements |
There is something to be said for setting ambitious goals when moving toward organization-wide AI adoption. And with high levels of excitement and potential surrounding the many outcomes AI can provide, the impulse may be to implement available technologies first, and then figure out later how AI can drive your organization’s goals forward. However, if you implement AI changes without a clear vision, you cannot clearly show the connection between any AI success and your organization’s goals and so you cannot show its value. Moving forward with AI ideas that do not clearly provide value will undercut future AI efforts by building mistrust. Therefore, to successfully achieve your goals, a key first step is to think big but start small, by setting a vision and specific business objectives for your organization’s AI capability.

By first ensuring your organization clearly defines its vision and business objectives, your organization can recognize what its current capabilities are, identify the outcomes you want to achieve with AI, and place these within the context of your broader strategic plan. Your vision and business objectives then inform your strategic plan that rolls out AI capabilities incrementally, one project at a time, while keeping the mission of the organization clearly in mind. Articulating and reporting on clear goals tied to near-term and long-term outcomes further underscores the connection between AI and the organization’s mission.

“Think big, start small” should be applied to each AI project the organization takes on. With each AI project you pursue, start smaller with pilot projects. Identify employees who have already bought in to an AI future, as they will be invaluable change champions. These individuals can take ownership of early AI pilot projects and showcase the resulting value to their peers. Short-term, technically feasible projects with clear parameters for success can demonstrate value. These quick wins will help build active buy-in, especially when championed by trusted coworkers.

**TIP 1: THINK BIG, START SMALL**

**PREPARE FOR THE CHANGE**
- Hold a visioning session with your stakeholders to set both short-term and long-term goals
- Align pilot projects to strategic objectives to stay on track
- Build a roadmap for your AI journey to help staff visualize the short-term and long-term milestones

**IMPLEMENT THE CHANGE**
- Start with small pilot programs and identify early adopters
- Continue the rollout incrementally using lessons learned from pilots and early adopters as your change champions

**SUSTAIN THE CHANGE**
- Organize a “road show” to highlight successes of pilot projects throughout the organization
- Use organization-wide communications to build awareness and share pilot successes across teams

**TAKE CARE OF YOUR EARLY ADOPTERS**

Do not take your early adopters for granted. Early enthusiasm with AI capabilities may be replaced by frustrations when your staff experience friction when using AI solutions (for example, if the user interface is clunky and not intuitive). To proactively combat this, get them involved early and keep them involved throughout solutioning, development, testing, and deployment. Using an iterative human-centered design approach allows you to gather important input quickly for an AI solution that end users will more readily adopt.
One of the most straightforward ways to show that technology cannot be separated from your change management plan is by applying human-centered design. Human-centered design is the practice of incorporating end users into all phases of the design and development lifecycle, from system concepting to requirements gathering to refining and development to testing. Human-centered design starts with empathy and understanding for the needs of the end user. Insights can be gained through interviews, focus groups, and surveys; these insights should be prioritized in the design strategy and used to set standards of success for measurement. End users should also be brought back in for a cyclical process of testing, analyzing, and evaluation during the development to ensure the final, refined design meets the user’s needs. Each AI project should follow a human-centered design approach, which includes both technical end users (e.g., analysts) and non-technical decision makers who will use the output. End users, domain subject matter experts, and technical AI SMEs will work hand-in-hand throughout the process.

Engaging your end users in the design process increases the likelihood that the end product truly meets user needs and therefore increases likelihood of successful and sustained adoption. Those involved in the full design and development lifecycle will have a sense of ownership and therefore will be primed to act as your advocates and champions for adoption.

As you incrementally roll out AI technology, continuously seek to improve the solution. This requires frequent analysis of results against success metrics identified in the research and planning phase as well as continuous solicitation of feedback from the end users in order to improve upon the solution.

**CASE STUDY: OPTIMIZING FIRE & RESCUE RESPONSE TIMES**

Collaboration between subject matter, data, and AI experts can build AI solutions to empower better human decision-making. In 2019, there were over 34 million activations of Emergency Medical Services in the U.S., which equates to about one emergency response every second. The emergency medical technicians answering those calls know slow response times can have life-threatening outcomes. In Fairfax County, Virginia, medical technicians aimed to respond in under four minutes. But reducing response time can be challenging: how to improve performance with immovable stations, a growing population, and calls coming from anywhere, anytime?

Booz Allen donated their time and expertise to the Fairfax County Fire and Rescue Department in a collaborated effort to tackle this challenge. Emergency medical technicians walked Booz Allen AI practitioners through their dispatch center, explaining how 9-1-1 calls are answered and EMS crews are deployed. Using what they learned, the AI team built a multi-armed bandit algorithm to optimize dynamic allocation of resources. This AI solution provides insights to aid in the redeployment optimization of fire station assets with the goal of improving response times.

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**TIP 2: PUT YOUR PEOPLE FRONT & CENTER**

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**PREPARE FOR THE CHANGE**

- Convene a focus group to understand user needs, using design thinking techniques to drive insights
- Develop user personas to inform development decisions
- Involve end users in refining

**IMPLEMENT THE CHANGE**

- Encourage end users involved early to evangelize the product to their peers
- Include end users in pilot testing

**SUSTAIN THE CHANGE**

- Continuously solicit feedback from users
- Host an open house retrospective to gather lessons learned
Not only are you asking your staff to adopt AI solutions, you are also likely moving them into roles that require new skills, processes, requirements, and tools. This necessitates empathy in the process – meeting staff where they are, understanding their experiences and perceptions, and equipping them with the facts, guidance, and training needed to perform well in an evolving organizational environment.

Knowing more about your staff and the viewpoints within your organization will allow you to tailor your change management plan to properly educate and train in a way that addresses your specific adoption challenges. Conducting a stakeholder analysis will provide valuable insights as to why your staff may be reluctant to change at various points in the process. The following addresses some of the common, emerging themes experienced across multiple organizations.

- **Address Concerns.**
  Without a clear understanding of what AI is, employees may be fearful. Some may worry about being replaced by machines or fear a steep technical learning curve. Others may distrust the results of algorithms they don’t understand or question the ability to build AI without bias. Regardless of the specific concern, worry about an uncertain future will cause employees to resist AI. To avoid this, identify and address the most common concerns across your organization. For example, proactively address concerns in your AI Strategy; circulate to staff and hold a town hall to facilitate two-way dialogue. Be sure to address what AI is, and what it is not.

- **Clarify Roles & Responsibilities.**
  Operationalizing AI requires all staff to shift how they work, even if they’re keeping the same position within the organization. Provide clear guidance on how and why workflows will change for each unit, to prevent staff from defaulting to the old way of working. Leadership can provide tactical instruction on what aspects of employees’ jobs are staying the same, what is changing, and how that benefits them. For example, develop a before and after slick sheet for each unit, highlighting how AI can improve their day-to-day experience.

- **Focus on Workforce Skilling.**
  Learning opportunities that build skills and familiarity with AI tools also help ensure staff have realistic expectations, while also building their ability to actively participate in AI efforts. Executives and senior leaders should have at least a cursory understanding of AI technology and the impact that it has on your organization and industry’s strategy and operations, to help guide the direction of your organization. Mid-level managers may need a deeper understanding of AI technology so they are equipped to set the direction of AI projects within your organization and can track progress against project goals. AI engineers and front-line staff require an even deeper level of understanding of AI technology in order to deliver projects, including gathering and working with data.
Successfully operationalizing AI requires strategic, targeted communications. A good communications strategy is grounded in timebound goals to ensure that individual communications support the same outcomes in tandem with change progress. When building a communications strategy around adopting AI, your organization should consider the following goals:

- **Build Hype but Manage Expectations.**
  Some people don’t have a clear vision of how AI can improve their day-to-day, and therefore might begrudge the effort required to adapt. To others, AI is an exciting, limitless technology. While the future is very bright, right now we’re just scratching the surface of AI’s potential. If your employees expect the AI of the future (one with super robots), they may be dissatisfied with what AI can do now and therefore less likely to integrate AI into their day-to-day. To achieve a balance of excitement and realism, clarify what AI can do today in the context of how and when it will transform your organization. For example, you might build and internally circulate a roadmap showing how your AI capabilities will grow and mature over the next three to five years.

- **Maintain Engagement.**
  Overhauling how your organization works to embrace AI will not happen overnight. While some aspects of the transition may reap quick benefits, others will require months of development and testing before you can truly see its value. The human preference for instant gratification may leave your staff frustrated, feeling like they’ve sacrificed the old way of doing things for nothing. To keep all your staff engaged and excited, use those quick wins to motivate staff across the organization. For example, in a newsletter or internal blog, spotlight testimonials from staff already seeing the benefits of AI.

- **Solicit Feedback.**
  As AI becomes increasingly embedded in your organization, your employees will have thoughts on what works well, what could go smoother, and how AI could be further embedded into the organization. When leadership creates an avenue to receive this feedback, triage it, and incorporate the best insights, everyone wins. Employees feel heard and valued; your organization matures and taps into previously unseen opportunities. For example, create an anonymous mailbox for AI-specific feedback and highlight when feedback is implemented in company-wide townhalls.

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**TIP 4: TELL IT LIKE IT IS**

**PREPARE FOR THE CHANGE**

- Draft a communications plan, including focused messaging
- Identify advocates at management, mid-level, and front line levels

**IMPLEMENT THE CHANGE**

- Launch a newsletter to provide status updates and spotlight success stories
- Host a kick-off All Hands event to build broad awareness of upcoming changes
- Host small group Brown Bags led by change champions to build peer-to-peer awareness of the change

**SUSTAIN THE CHANGE**

- Launch an anonymous electronic feedback box to ensure staff is comfortable providing feedback throughout the process
- Include staff testimonials in a newsletter to highlight how colleagues are benefiting from the change
- Include an overview of staff feedback and responsive action in a newsletter to show how feedback is being addressed
Whereas the communications strategy in Tip 4 focuses on leadership-to-staff dialogue, community building nurtures staff-to-staff dialogue. Community surrounds and binds staff together, creating a sense of shared responsibility and support to ingrain AI into the way the organization functions. A tightly-knit community also amplifies top-down communication. When employees are busy and juggling multiple priorities, it is hard to read every newsletter or attend each town hall. But even so, they will hear about the content second hand from their coworkers who are already bought in. Many governmental organizations are already seeing successes from building such communities of interest.

A healthy AI community will be cross-functional, co-educational, and interactive. AI and associated changes will impact all of your employees, albeit in different ways, so an AI community should be open to all employees across all parts of your organization. Such an inclusive space allows employees with different perspectives on how AI is shaping the organization to interact and learn from each other. A successful community needs more than just an online forum or listserv, however. Interactive opportunities, such as hack-a-thons, hands-on AI training sessions, or AI pilot showcases can increase engagement with and understanding of AI.

Beyond building an internal AI community, organizations can learn from each other. As we move towards the era of AI, more and more organizations are developing AI strategies and working to operationalize AI in their workplace. Other organizations that are farther along the AI path can provide insightful lessons learned. The U.S. government brought over 175 leaders and experts across government, industry, and academia to the White House Summit on Artificial Intelligence in Government to discuss how the U.S. government can better adopt AI. Attendees discussed best practices that can be leveraged, how to foster collaboration through an AI Center of Excellence, and how to develop a Federal AI workforce.

A major federal health agency recognized the importance of connecting its staff to opportunities to support the agency’s data science and AI ecosystem. Why? Because everyone plays a role regardless of background, experience, or job title. Booz Allen partnered with the agency to provide access to role-based learning opportunities with the goal of raising awareness on key data science and AI concepts for all staff. To reinforce the subject matter and provide staff with ways to engage with one another outside of their own divisions, Booz Allen helped the agency host a Data Science Open House that showcased over 75 research posters, 25 staff spotlight articles, 4 expert talks, and an agency leader-led trivia activity session. The impact? In one year, the agency saw a 12.5% skill lift, collected over 100 ideas for data science applications to agency challenges, and improved collaboration across disparate divisions.
CONCLUSION

Operationalizing AI – truly embedding it in the way you work – cannot happen without full engagement and support from employees throughout your organization. Success relies on the support of individuals who come with their own motivations, concerns, and perspectives. This makes change management a uniquely important process for addressing the human side of any new initiative, particularly one as complex as AI, critical in ensuring its successful adoption. The five tips outlined above will provide the building blocks to successfully manage your organization’s transition to the AI future.

If you would like more information on AI and Change Management or to learn more about the services that Booz Allen Hamilton provides, please reach out to:

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SOURCES

1 Forbes, “Artificial Intelligence Will Enable 38% Profit Gain by 2035,” June 22, 2017. Retrieved from https://www.forbes.com/sites/louiscolumbus/2017/06/22/artificial-intelligence-will-enable-38-profit-gains-by-2035/.
2 Gartner, “Successful Organizational Change Management,” 2018. Retrieved from https://www.gartner.com/en/human-resources/insights/organizational-change-management
3 Prosci, “The 3-Phase Process: A Structure For Organizational Change,” Retrieved from https://www.prosci.com/resources/articles/change-management-methodology#phase
4 Booz Allen Hamilton, “AI Primer,” 2018. Retrieved from https://www.boozallen.com/s/insight/thought-leadership/the-artificial-intelligence-primer.html
5 Prosci, “Are You Getting Things Done or Getting Things Adopted?” Retrieved from https://blog.prosci.com/are-you-getting-things-done-or-getting-them-adopted/
6 Landing AI, “AI Transformation Playbook,” Retrieved from https://landing.ai/ai-transformation-playbook/
7 FedScoop, “Rise of AI and ML spurs DHS to create ‘community of interest’ for staff,” October 9, 2018. Retrieved from https://www.fedscoop.com/dhs-artificial-intelligence-community-of-interest/
8 White House, “Summary of the 2019 White House Summit on Artificial Intelligence in Government,” September 9, 2019. Retrieved from https://www.whitehouse.gov/ai/executive-order-ai/

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