

# Leadership Toolbox for Technology Implementation

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*Simplar Institute*



# Simplar Institute

- Group of **researchers and educators**
- Integrated with **all parties** (owners & vendors)
- Developed **tools & hands-on support:**
  - Organizational Transformation
  - Procurement & Sourcing
  - Risk-based Partnering & Contracting
  - Project & Risk Management
  - Performance Measurements

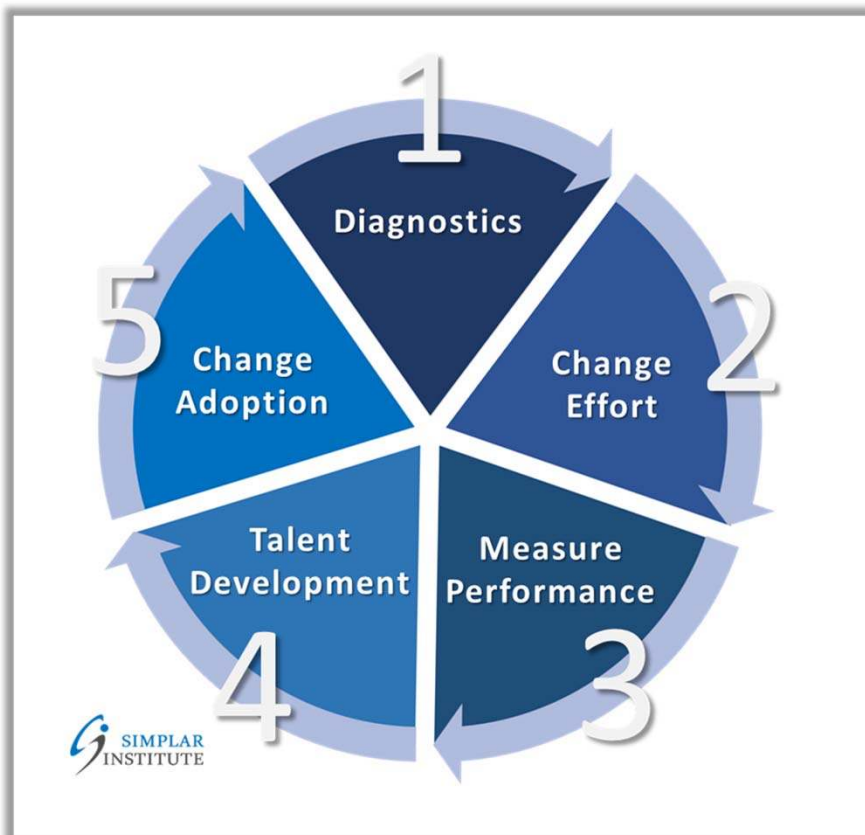


# Simplar Institute

- Becoming a **Client of Choice**
- Becoming a **Performance-Based Contractor**
- **Other things:**
  - Industry Benchmarking
  - Human Dimensions
  - Talent Development
  - Workforce Studies
  - Exploratory research
  - Policy & Regulations
  - Standards & Templates



# How We Help You Become Better



1. **Diagnostics:** Organizational assessment; RFP assessments; comparison to peers; benchmarking; change readiness;
2. **Change:** XPD procurement education, training, support, and administration; IT implementation (communication plan, change plan, resistance planning, training plan, etc.)
3. **Measurements:** Individual project performance, department reports, organization performance (including Suppliers)
4. **Talent:** Professional Development & Training, Human Dimensions mapping and talent management/development
5. **Adoption:** Reporting how a change has been implemented and adopted.

20+ Years | 150+ Owners

3,000+ Projects | \$15+ Billion Procured

## Information Technology

Networking  
Data centers  
Hardware  
COTS software  
ERP systems

Help desk services  
eProcurement

## Facility Management

maintenance  
landscaping  
security service  
building systems  
industrial moving  
waste management  
energy management

custodial  
conveyance  
pest control

## Health Insurance/ Medical Services

## Manufacturing

## Business / Municipal / University Services

dining  
multi-media rights  
fitness equipment  
online education  
document management  
property management  
audiovisual  
communications systems  
emergency response systems  
laundry

retirement fund  
material recycling  
bookstores  
furniture

## Construction / Design / Engineering

Infrastructure  
Municipal  
Laboratory  
Education  
Hospital  
Corrections  
Financial

Renovation  
Repair  
Maintenance  
Roofing  
Specialty  
Demolition  
Development

DBB  
CMAR  
DB  
IDIQ  
JOC  
Low Bid  
IPD



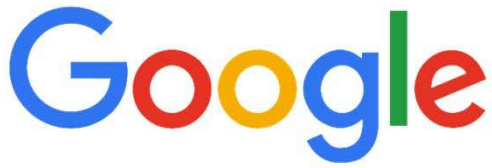
**Google**



**PROJECT PARTNERS AND PARTICIPANTS:**

- U.S. General Services Administration (GSA)
- US Army Medical Command
- Arizona State University
- Canon
- State of Oklahoma
- City of Phoenix, AZ
- University of Minnesota
- State of Alaska
- Rijkswaterstaat (Dutch public works & water management)
- Aramark
- State of Oregon
- State of Idaho
- University of Alberta
- Boise State University
- United Airlines
- Neogard / Jones-Blair
- Tremco
- Bank of Botswana
- General Dynamics C4 Systems
- Salt River Project (SRP)
- US Air Force Logistics Command
- US Coast Guard
- US Embassy (Botswana)
- US Army Corps of Engineers
- Federal Aviation Administration
- IBM
- Brunsfeld
- Qwest
- Honeywell
- City of Peoria, AZ
- University of Idaho
- University of Hawaii
- University of New Mexico
- Entergy
- Sodexo
- Chartwells
- Dallas Independent School Dist.
- Olmstead County, MN
- City of Roseville, MN
- Hennepin County, MN
- Scenter
- Abengoa Solar
- City of Sitka, Alaska
- US Solar
- Rochester Public Utilities
- Harvard University
- Denver Health & Hospital Authority
- State of Missouri
- State of Washington
- Idaho Transportation Department
- State of Georgia
- Arizona State Parks
- United Excel
- East Valley Institute of Technology
- Arizona Public Service (APS)
- Rochester School District
- Fann Environmental
- Idaho State University
- On Semiconductor
- Pearson
- State of Wyoming
- Idaho Department of Corrections
- City of Miami Beach, FL
- Lewis & Clark State College
- Hawaii Department of Transportation
- Baptist Health
- City of Columbia, SC
- PECO Energy
- Intermediate District 287

PARTNERS



Environment Protection Authority Victoria



uOttawa



# Current/Recent Public Projects

- \$250M Hazardous Waste Removal
- \$100M Office Building
- \$1.5B Mainline / Trunkline (100+ projects, 6-10 yrs)
- \$400M+ Groundwater Treatment
- \$50M Hotel
- \$30M Smart Grid Consultants & OCM
- \$30M Smart Grid Change Management
- \$900M Smart Grid/Meter Replacement (1.5M Electric/700 Water)
- \$3.1M Design for \$60M Turbine Replacement
- \$400K Design + \$2.5M Solar Microgrid
- \$3M Automated Metering OCM
- \$500k On-Call Distribution Engineering Design
- \$1.5M Hydro-Generating Station Re-Licensing
- \$XXB+ Tech Site
- \$3M Electrical Substations (x2)
- Construction Mgmt List / VOR Program
- \$1.2M COR Program/Audit
- \$16M Police Facility (Design & CMAR RFPs)
- \$7M Public Works Field Operations Facility
- \$5M Environmental Site Rehabilitation
- \$1.2M Capital Project
- \$250k Engineering Analysis of Utility Distribution Network
- \$1.2M Annual Audit Consultant
- \$10M+ City-wide Parks Program
- \$1.5M Construction Project Mgmt Software
- \$600k Remedial Investigation (Marina)
- \$20M Residence Hall (Design-Build)
- \$5M+ Wireless Telecom (City-wide upgrade to 5G)



# Current/Recent Services Projects

- Dining (Multiple) (\$150k - \$1.2B)
- Cold Beverages (\$2-\$5M)
- Document Mgt/Printing (\$2.5M-\$4M)
- Bookstore (\$650M)
- Travel Management (\$15M-\$50M)
- Campus Network (\$52M)
- Identity Access Management System (\$2M)
- Retirement Fund Management (\$248M)
- Athletics Financial IT System (\$3M)
- Recycling & Waste Management (\$900k)
- Janitorial (\$25M)
- Security Services (\$25M)
- Peoplesoft HR, Financial, etc. (approx. \$850k per system)
- Security System IT (\$5M)
- Library System Master Plan (\$400k)
- Gym Equipment (\$250k)
- Sports Marketing (\$80M)
- Furniture (\$50K-\$20M)
- Construction Services Program (\$50K - \$30M)
- Parking Management System (Tech & IT) (\$2M)
- Elevator Maintenance (\$1.5M)
- Snow Removal (\$400K)
- Transportation Services (Athletics) (\$300k)
- Linen, Moving, IT Consultants, Finance Controls, Master Planning, Renovations, Pcard System, etc.

# Recent IT (software/hardware) Projects

- Telecom System - Wire Telephony, Data Network, Video Conferencing & End User Support (\$35M)
- System Integrator for Generation Enterprise Asset Management (\$25M+)
- Telecom Management Solution (\$1.5M)
- Peoplesoft HR, Financial, etc. (\$850k per system)
- ERP public sector org (\$34M to \$85M)
- ERP private sector org (\$4M+)
- Human Resources Management System (HCMS) (\$4M+)
- GIS-Based Asset and Work Management Software and Implementation Services (\$600k)
- DMV Legacy System Replacement (\$25M)
- Campus Network (\$52M)
- Identity & Access Management Solution (\$1M)
- Radio System Upgrade (\$1.5M)
- Capital Project Management System (\$700k)
- Electronic Call Monitoring System & Call Center Replacement
- PCB Tracking & Condition Assessment System (\$1M+)
- System Integrator for ERP (\$75M+)
- Snow Plow Mobile Data Collection (\$2M)
- Housing Management System (\$200k)
- IT Monitoring Solution (\$100k)
- Wireless Network – Residences (\$400k)
- CRM Solution (\$1M)
- eCourse Evaluation Solution (\$400k)
- EDRM Solution (\$500k), ePAR People Soft (\$600k)
- Asset Management System (\$300k)
- ITS Central Control System (\$700k)
- Recreation Management System (\$600k)
- Mobility Management and Administration System (\$700k)
- Enterprise Document Records & Mgmt System
- Demand-Side Management Software (\$1.5M+)
- Building Analytics Software (\$1.5M+)
- Anti-Money Laundering (AML) System (\$2M+)
- Organizational Change Management for Software Adoption (*multiple*)

# Observations of Adopting “New”

- **Simple on a Single Project:**

Applying new methods, tools, processes to a single project is not that hard

- **Implementing across the Organization**

Apply the proven new method, tools, or processes across an organization to realize the full benefit is very difficult

# Reference Points

- **100+ Hands-On with Owner Organizations:**

hyper-detailed measuring of adoption of new technology, processes, tools – tracked behaviors, reactions, speed, learning, etc.

- **600+ Detailed Change Case Studies:**

detailed data collection and interview process, statistical analysis

- **+++ Complementary studies, hundreds of papers, books, pilot studies, etc.**

**Changing is Not Easy**

# Iron Curtain of Knowledge

- Greatest barrier to learning something new is what you think you already know



# Dunning–Kruger Effect



## ■ Lemon disguise was no help

PITTSBURGH — A middle-aged bank robber who rubbed lemon juice on his face because he thought it would prevent surveillance cameras from taking a clear picture of him was sentenced to 24½ years in prison.

Surveillance photos at the bank clearly showed MacArthur Wheeler and Clifton Earl Johnson taking \$5,200 from a Mellon Bank in Swissvale on Jan. 5, 1995.

U.S. District Judge Gary Lancaster sentenced Wheeler, 46, on Friday to the prison term and ordered that he serve three years on probation after that.

Johnson, 43, received a five-year sentence in April, in part because he testified against Wheeler. Johnson told him about the juice, Wheeler said.

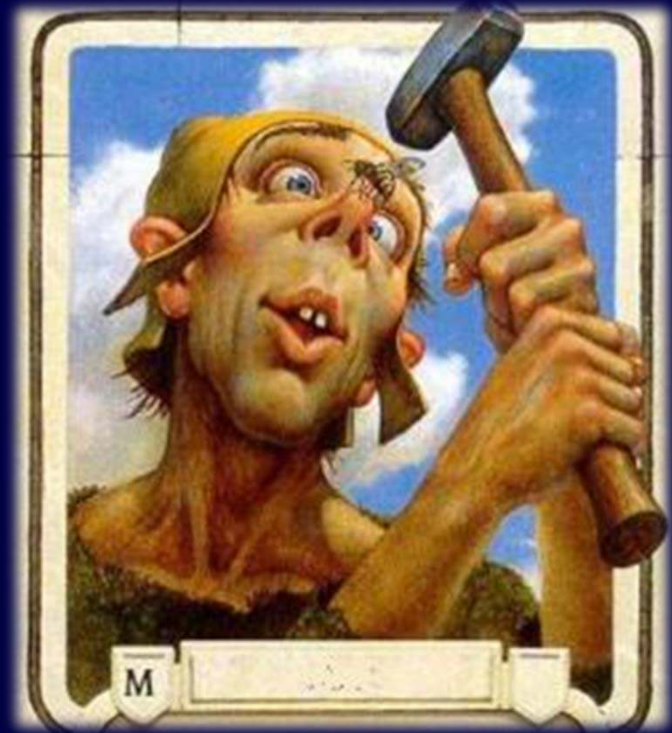
The men didn't wear masks because they were sure the lemon juice would obscure their faces, according to Shaun Sweeney, who prosecuted Wheeler.

**THE FIRST RULE OF  
DUNNING-KRUGER CLUB IS**

**YOU DO NOT KNOW YOU'RE IN  
DUNNING-KRUGER CLUB**



The **Greatest Risk**  
to any  
Change Effort is...

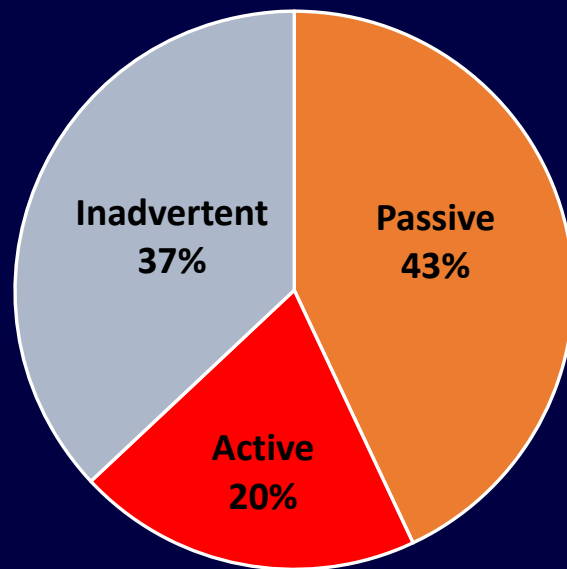


# Common Misperception: Value of ROI

ROI alone does not  
drive change readiness & acceptance.

It is simply part of the puzzle.

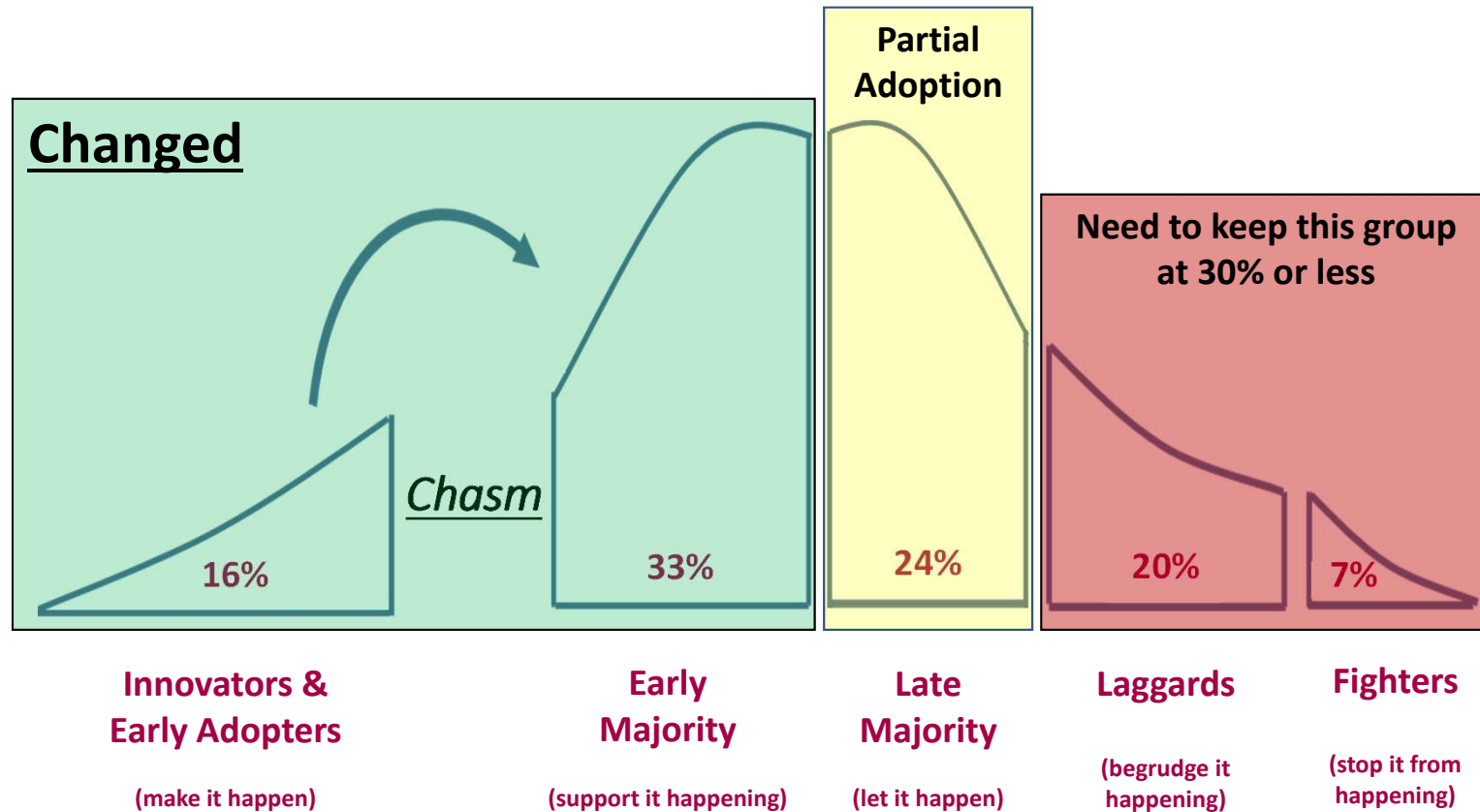
# Resistance to Change



## Top 5 Resistance Behaviors

1. Reversion
2. Reluctant Compliance
3. Arguing
4. Lack of Transparency
5. Delaying

# Average Owner Org: *Change Adoption Profile*



N=104

# Change Initiative Benchmarking Database

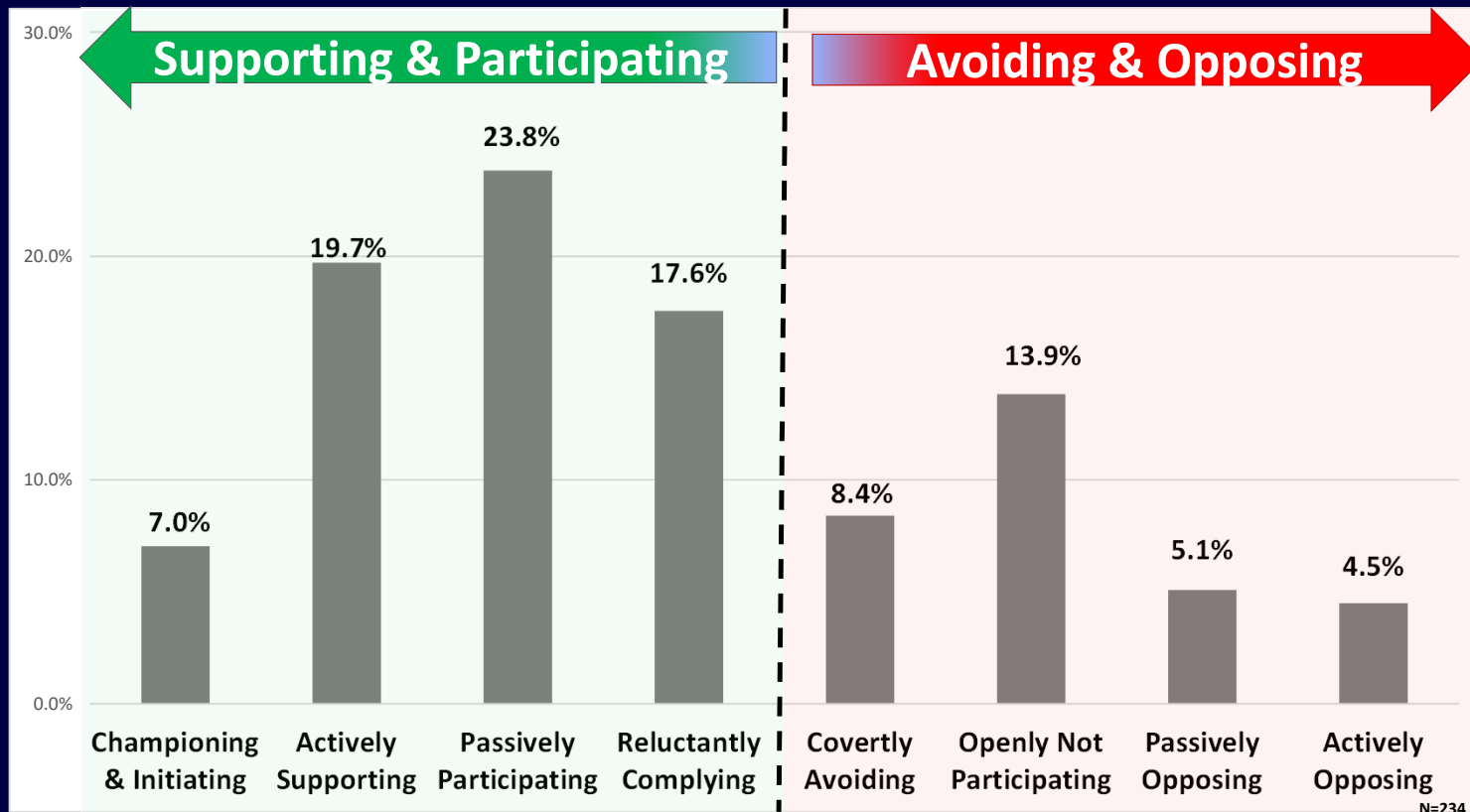
600+ Change Events from 500+ Organizations

- Implement global SAP update
- Document management system
- Project controls technology
- Reorganize customer-facing operating procedures
- Integrate a major acquisition
- Roll out of formal project management execution process
- Customer Relation Management (CRM) Implementation
- Change in sales & marketing strategy
- Smart plant implementation
- Introducing BIM on projects
- Implement Lean
- Enterprise Resource Planning
- Reorganize customer-facing operating procedures
- Productivity management system
- Project delivery strategy
- Introduce Material Tracking Upgrade
- Industrialized Construction
- Developing a data foundation program
- Upgraded production software

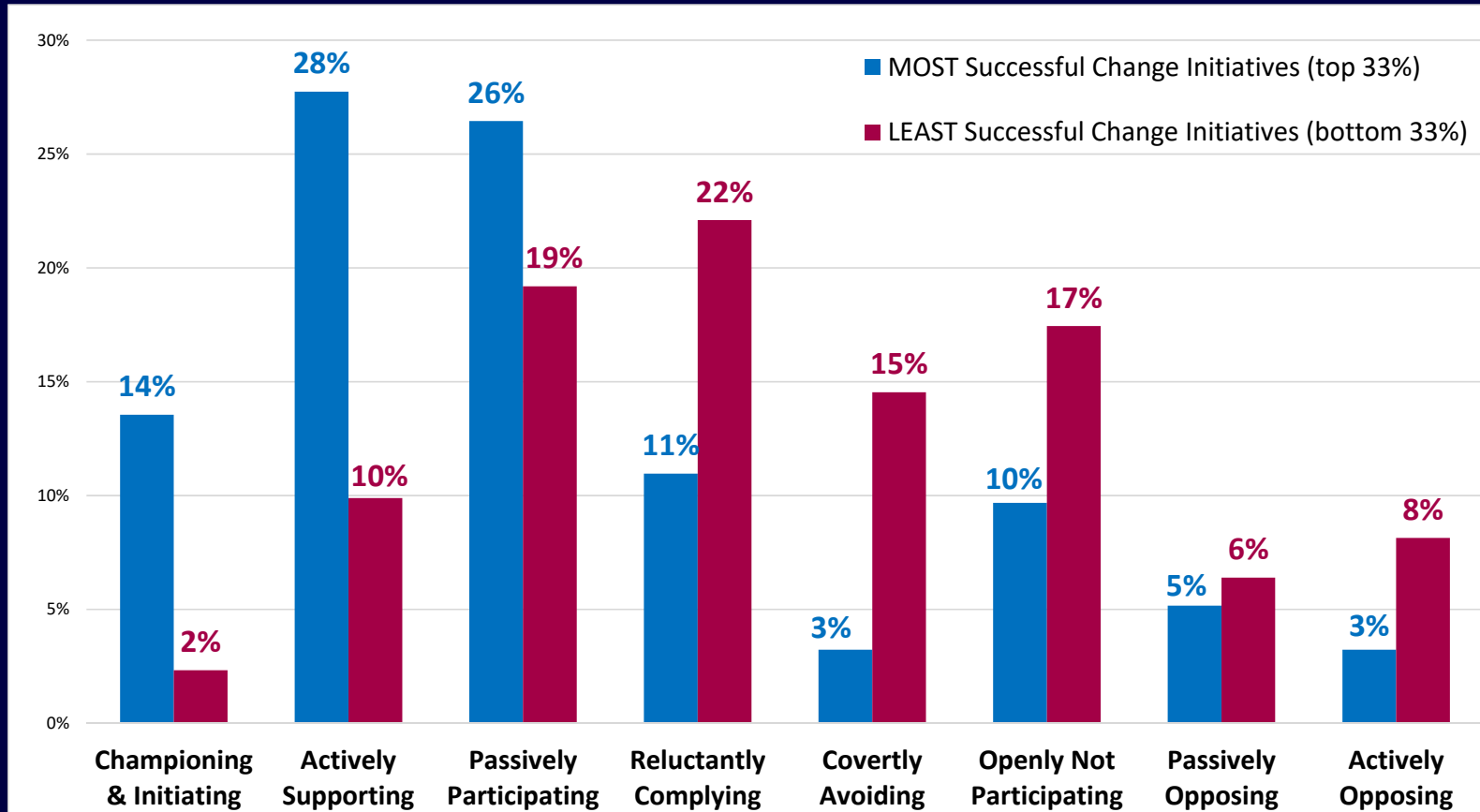
# What Drives Successful Implementation of a Change Initiative?

1. **Effective Change Agents acting as implementation doers & champions**
  2. **Realistic Speed & Timescale**
  3. **Organizational Measurement & Benchmarks**
  4. **Proper training**
  5. **The Org & the People can see clear personal benefit**
  6. **Senior leadership committed to the change initiative**
- + The Importance of Proving Hope**

# Personnel Reactions to Change

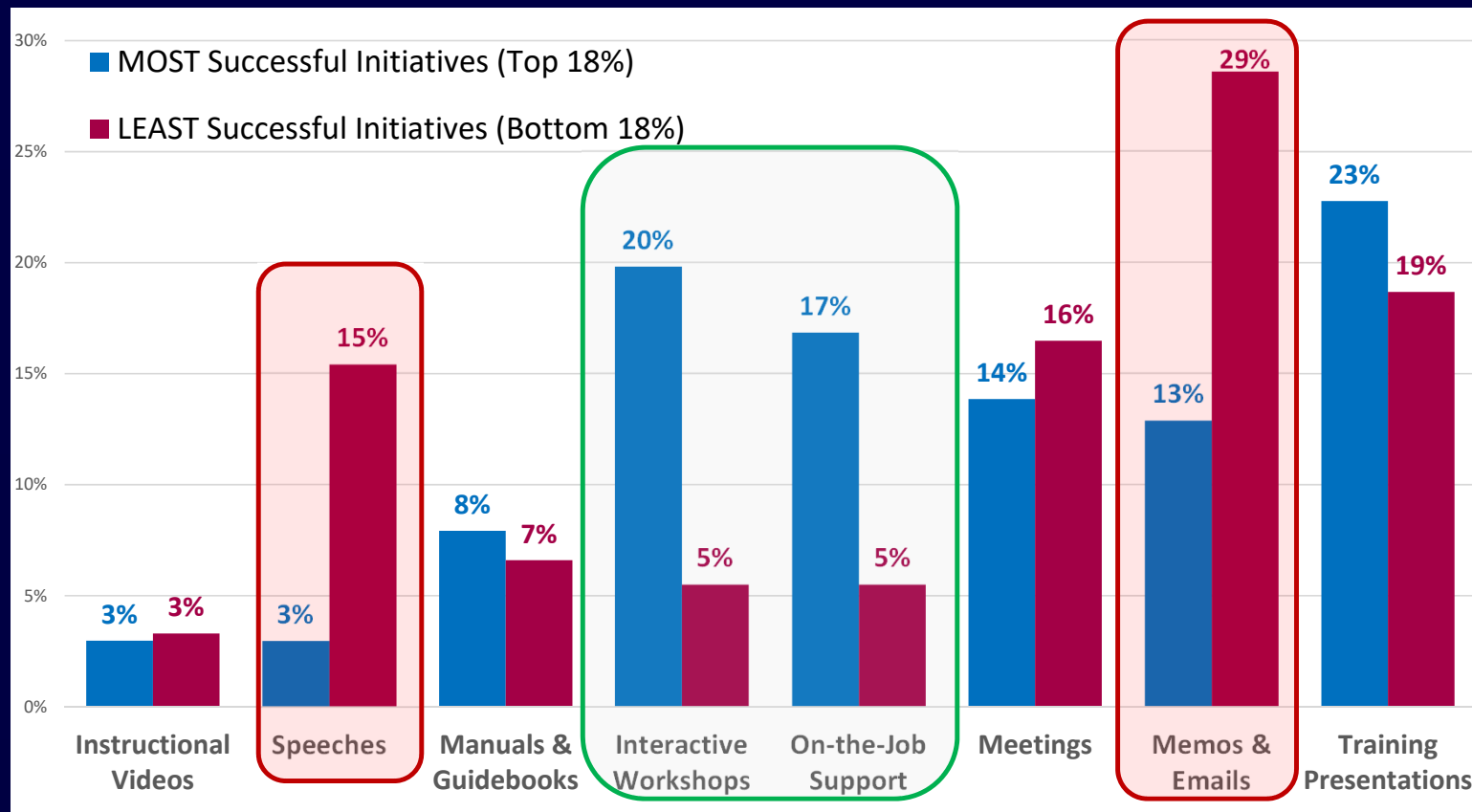


# Personnel Reactions to Change





# Communicating the Change Message



# Other Foundational Truths



- Change is not a **“light switch!!”** – It’s a progression over time.
- Speed of adoption and learning is directly related to the magnitude of the change and the frequency of individual usage of the new tools/processes by the average end-user.
- Change adoption can vary greatly across individual units, which often form locally accepted practices and have different usage rates.
- Users typically require **5-7 iterations/uses** of the new process/tool before they have truly “learned” and can consistently incorporate the changes into their daily work function and stop doing what they were doing before.
  - Varies based on how “new” and “different” the process, tool, system is compared to the previous.
  - Uses must be on-the-job, real actions, real outcomes.
  - If there is significant time in between uses, users may need to re-learn or be coached further and require more iterations.

# Adoption Keys

- A progression from:
  - The “start” state
  - To the end, the new “steady” state
- Adoption is more than “did someone take the training.”
- Major initiatives/process changes are not as simple as informing someone of the change – they need to be able to practice/use the new process/change.
- Training must be informed by a more holistic understanding of adoption.
- Adoption is a combination of the following:
  - Opportunities for learning
  - Opportunities for practicing
  - Overcoming potential barriers to learning and practicing/using
  - Acceptance/Use of the change with minimal adaptations/changes to the new process/system



# Change Adoption Factors

- 1 Change Agent Performance
- 2 Leadership Satisfaction
- 3 Knowledge Transfer
- 4 Leadership Support
- 5 User Satisfaction
- 6 Adaption & Resistance
- 7 Culture
- 8 Implementation Team

# The 8 Change Adoption Factors and Sub-factors

## 1 Change Agent Performance

- C.A.'s responsiveness to share feedback
- C.A.'s level of activity
- User satisfaction with C.A. – provided support
- Leadership satisfaction with C.A. – provided support

## 2 Leadership Satisfaction

- Leadership's responsiveness to share feedback
- Leadership's satisfaction with the changes

## 3 Knowledge Transfer

- Abilities to execute independently
- Abilities to incorporate the changes into their daily work function
- Impressions and satisfaction with the initial in-person training
- Results/performance results

## 4 Leadership Support

- Perception of Leadership's support by users
- Leadership's level of activity done in support of the change

## 5 User Satisfaction

- Satisfaction with the new tools/processes
- Level of perceived personal benefit (key research indicator)

## 6 Adaption & Resistance

- User behaviors
- Comparison to industry norms
- Potential adaptations

## 7 Culture

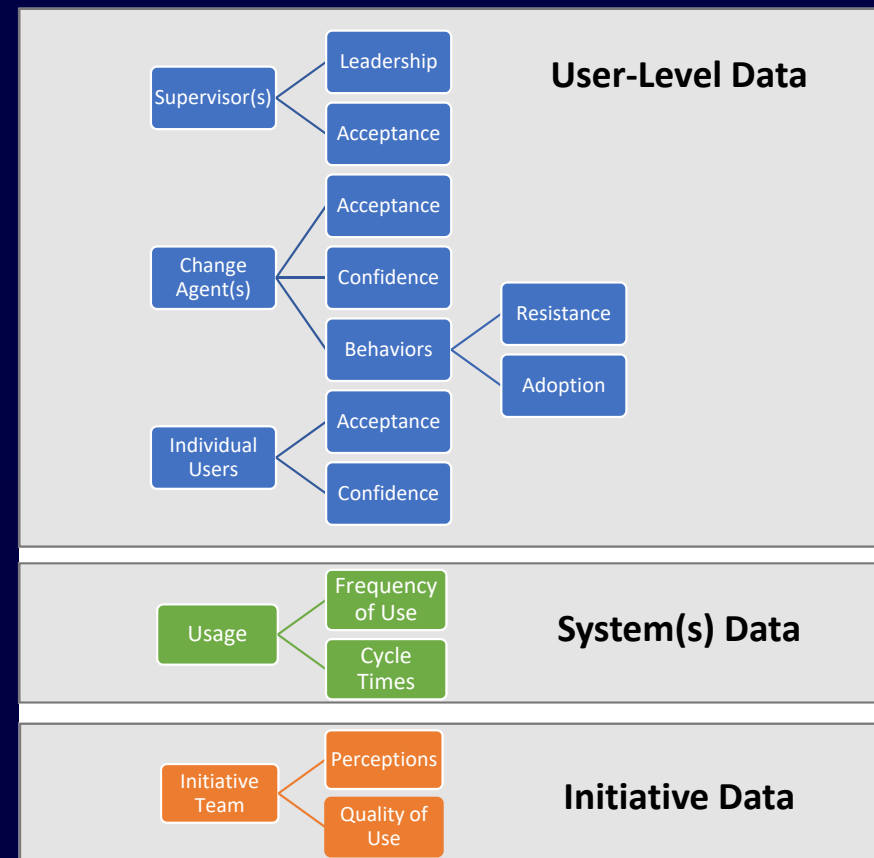
- Perceived scale/newness of the changes
- Willingness to participate/engage
- Gap in current practices vs. future/desired practices

## 8 Implementation Team

- Reach established (key research indicator)
- Quality and clarity of the communications
- Change Agent preparedness
- Service
- Feedback and Issue Resolution

# Measuring Change: *Adoption Data via Triangulation*

- Data that informs adoption will come from multiple sources for a single site to ensure representation.
- Includes individuals, system data, and data interpretation
  - Qualitative and quantitative

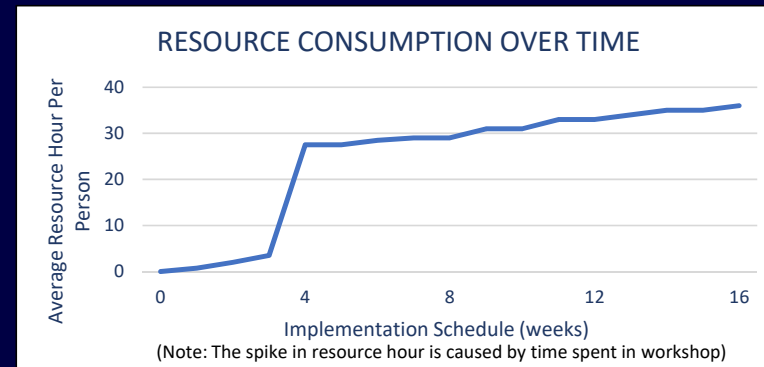


# Set Up Best Practices

- **Change team established + logistics + resources (in place)**
- **Simplar led three days of general change management training for different audiences (exec, various site level leaders, rising performers) + top exec closed discussion**
- **Execs top concern most often time/effort to learn (equals time not doing their current job)**

# Understanding Hours to Learn

- Precise resource-hours will depend on the content to be learned and will be aligned with the overall implementation plan (following is an approximation only).



| TRAINING FORMAT                   | RESOURCE-HOUR CONSUMPTION  |
|-----------------------------------|--|
| Online                            | <ul style="list-style-type: none"> <li>• 45% of the skills/tools will likely utilize this format</li> <li>• 3-7 hours of training across 3-4 months</li> <li>• 0.5 hours per week per person on average</li> </ul> |
| Workshops                         | <ul style="list-style-type: none"> <li>• 50% of the skills/tools will likely utilize this format</li> <li>• 1 day + potential travel per person</li> </ul>   |
| On-the-job support and follow-ups | <ul style="list-style-type: none"> <li>• 5% of the skills/tools will likely utilize this format</li> <li>• 3-5 hours of support per person across 3 project iterations</li> </ul>                                  |
| <b>TOTAL</b>                      | <b>30 – 36 hours/person across 4 months</b>  |



# Map the Current State: Important Data to Gather

- **Need to develop a baseline, based upon historical data, such as:**
  - **Historical volume**
  - **Size or magnitude of work**
  - **Number of transactions/tasks performed within the system**
  - **Number of users**
  - **Number of stakeholders**
  - **Key reports**
  - **Number of business process/practices this new process/system may impact**
- **Identify what other initiatives/projects are occurring at the same time that may impact this project/initiative**

# Map the Current State: Important Questions to Ask

- How is this process/task currently performed?
- Are there any 'high performers' that are doing this process/task successfully?
  - What are they doing differently from everyone else (or the current process)?
  - How do they feel the current process can be improved?
- How often do users currently perform this task/use this system?
- Are users required to use this process/system or is it optional?
- What is 'wrong' or 'inefficient' etc. about the current process/task?
  - Quantify the impact of inefficiencies to the organization

# Current State: Important Questions to Ask

KEY:

**GATHER DATA FROM THOSE THAT  
ACTUALLY USE THE CURRENT SYSTEM/PROCESS  
(NOT JUST CORPORATE STAKEHOLDERS)**

# Determine the Learning Opportunity Cycle

- Learning will depend on the # of iterations/chances a single user has to complete all steps in the new system/process
- Our research has shown it takes 3-7 iterations (with the average being 5) for a user to feel comfortable with the new system/process
- For some new systems/processes, a user might only perform these once in a while/infrequently

# Change Agents & Champions

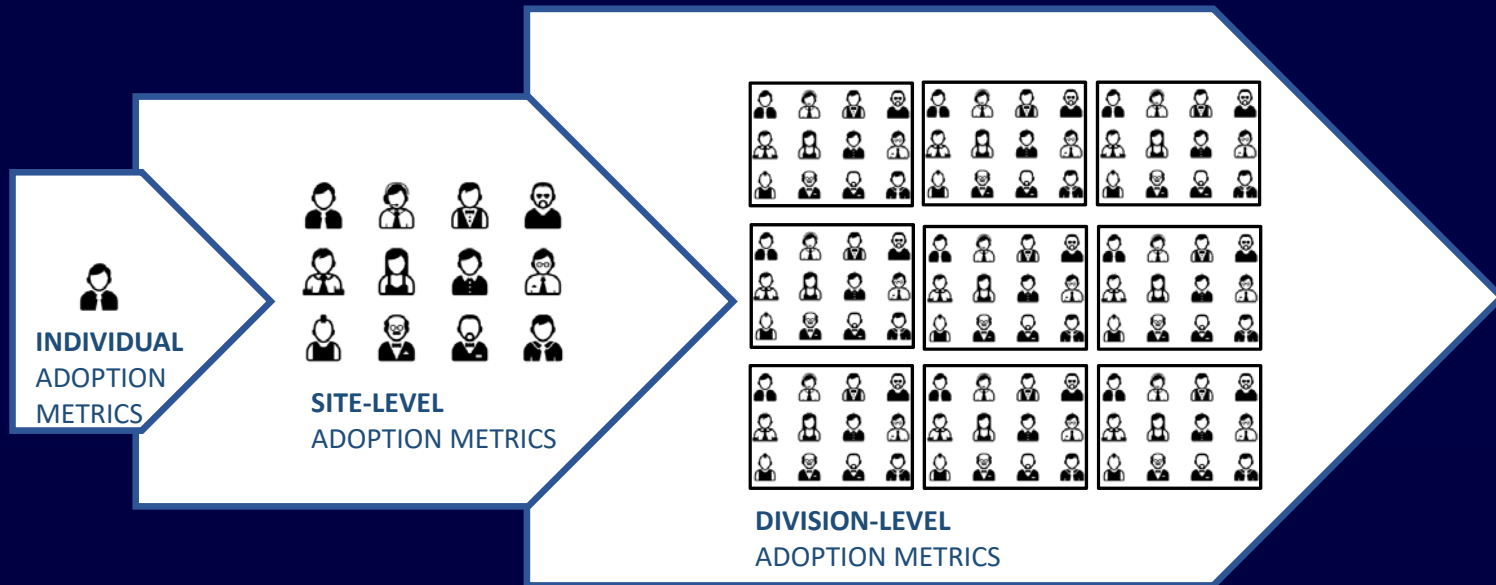
## CHANGE AGENT =

- Role: provides hands-on support to help their peers learn and change, “eyes on” adoption and resistance
- Who are they: a peer to those changing, a doer, they care, a driver, a connector, a refiner, Simplar partner & day-to-day contact
  - Personally affected by the change, a peer or peer-supervisor of those personally affected by the change

## CHAMPION =

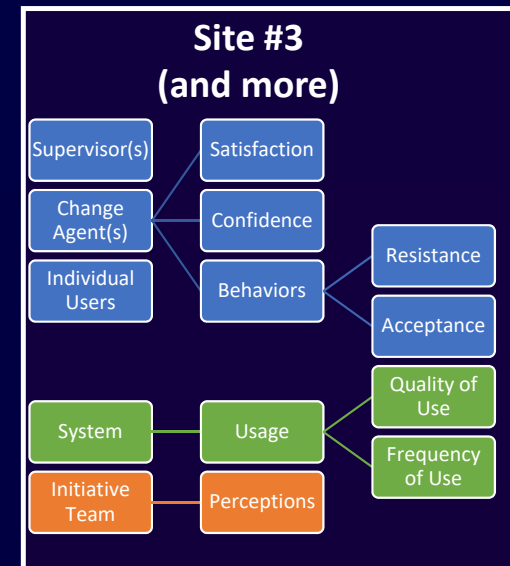
- Role: supports the change in sustaining actions that may include verbal & actionable support, allocating resources (time, people), providing structured and non-structure communication, rewarding high achievement in change
  - can be obvious support as well as subtle support
- Who are they: management and/or leadership, an active supporter, they believe in the change, they are respected, knowledgeable, optimist, good communicators, have influence over resources oversight
  - They may not be personally greatly affected by the change, and may not be highly involved in the details

# Tracking Change Across the Organization

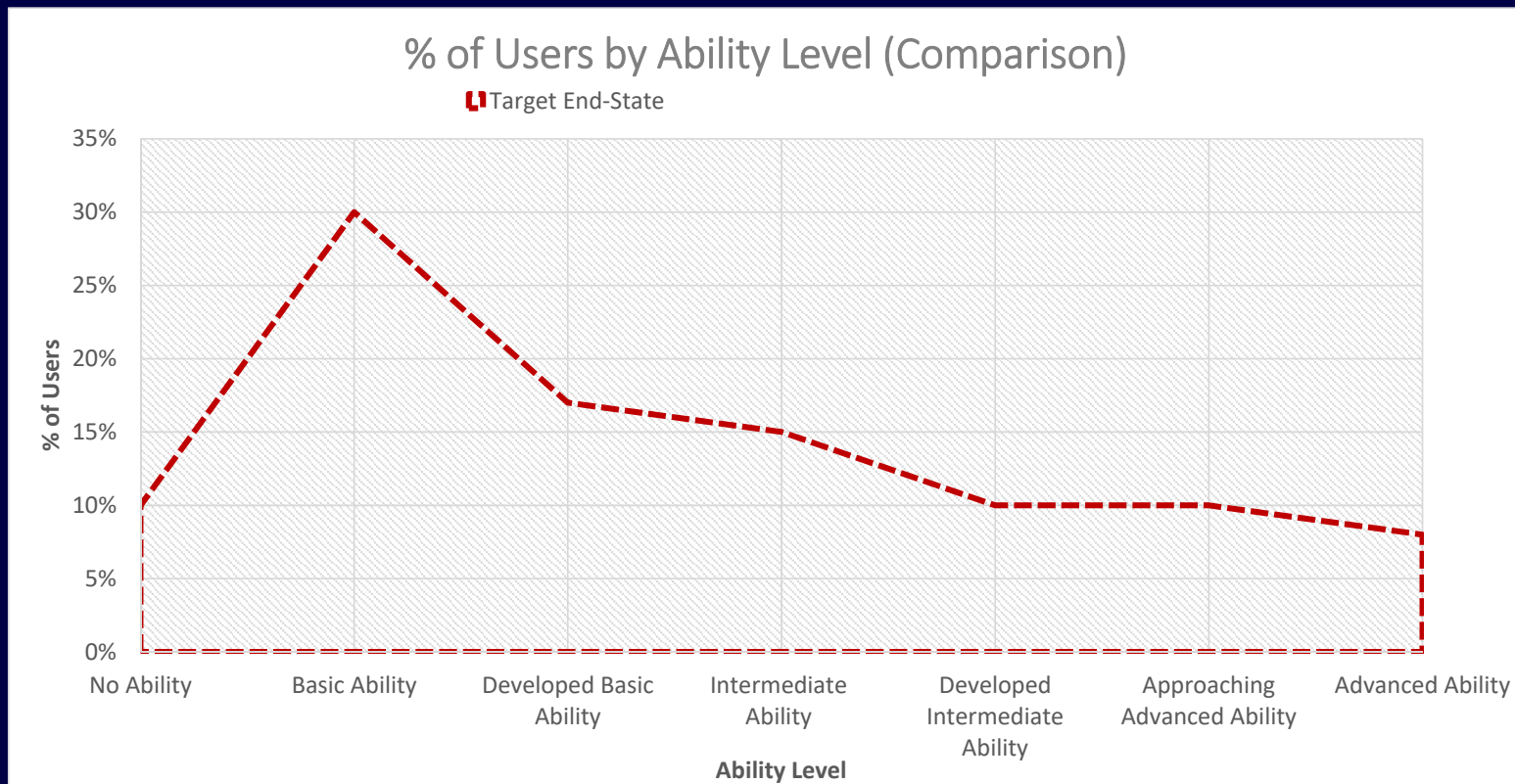


- Identify leaders to assist with increased adoption
- There should be executive visibility into real-time metrics of all sites and divisions
- Can be broken down by the specific change/tool/process

# Reporting Structure

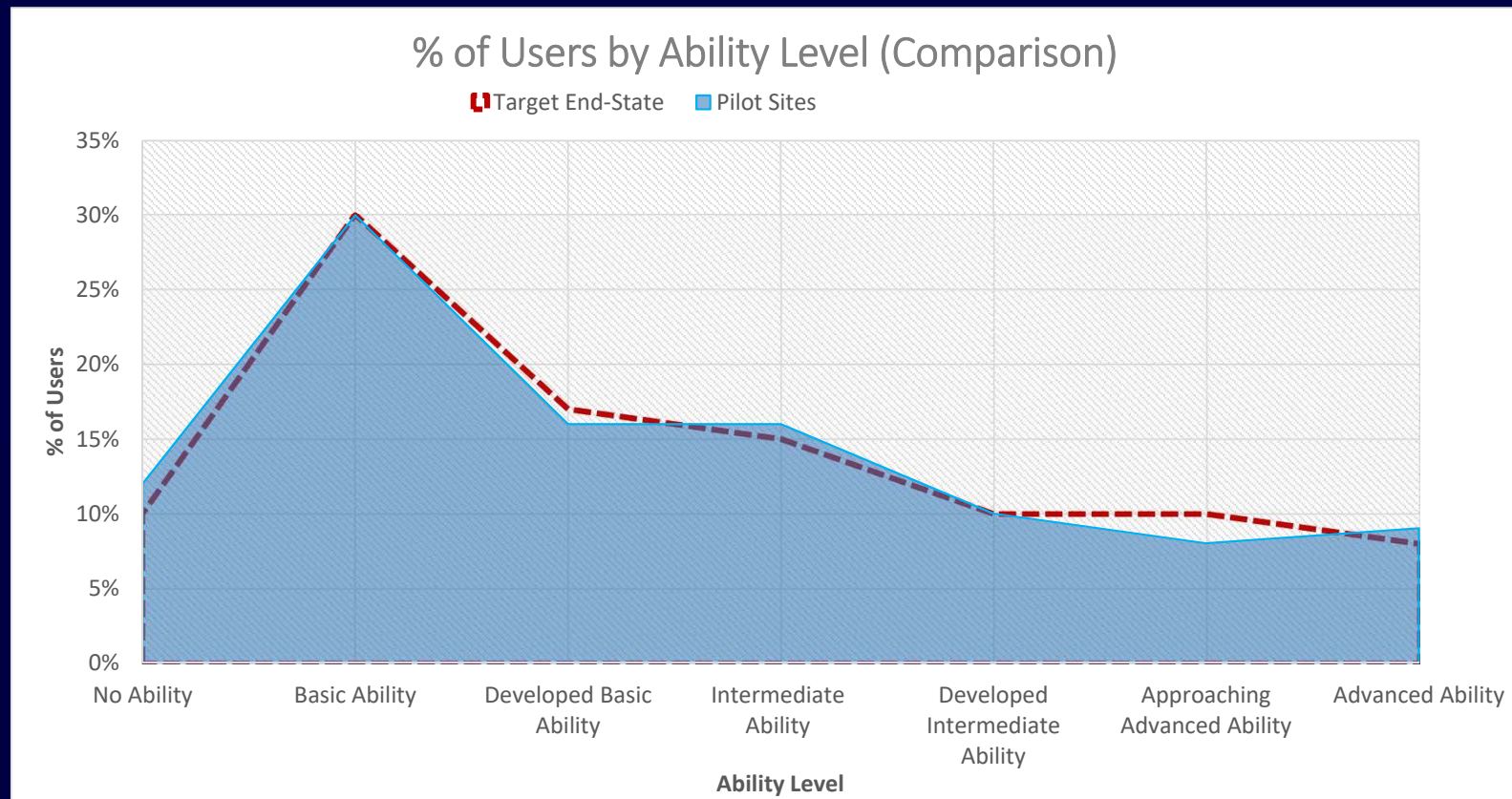


# Set the Steady-State Target

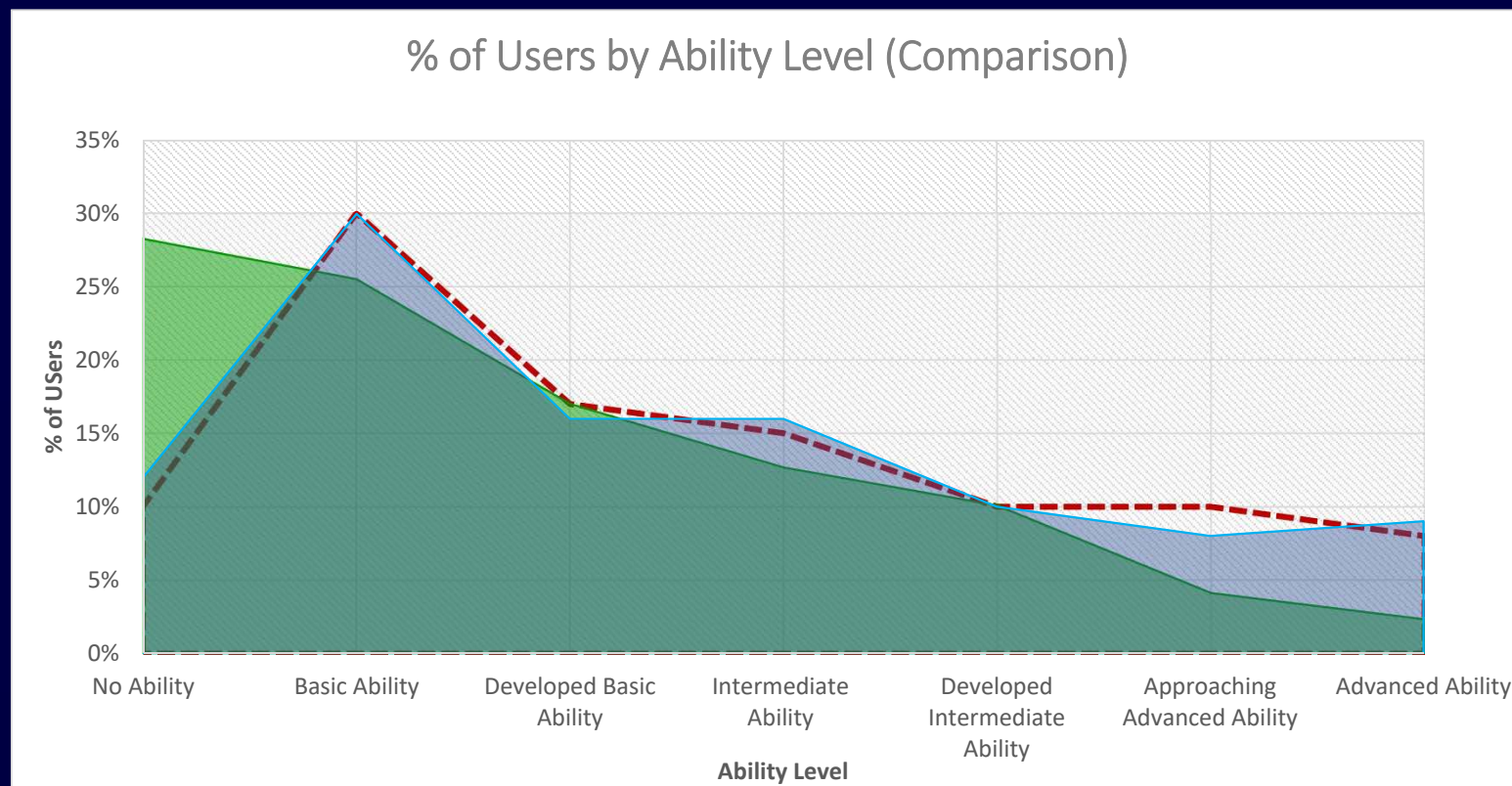




# Pilot Group vs Target (8 months after rollout)



# Wave 1 (4 months) vs Pilot (8 months) vs Target



# Site-By-Site Roll Up

**DIVISION:**  
**SITES:**

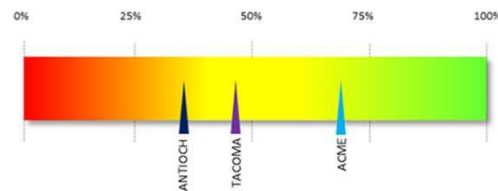
**DATE:**  
**POINTS OF CONTACT**  
Practitioner contact:  
Comm. Ambassadors:

**# OF SITES: 3**  
**# OF PARTICIPANTS: 72**

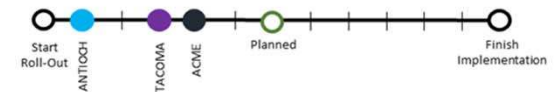
**RESOURCE HOUR CONSUMPTION**

Online training : 216 hrs.  
In-person workshop : 1728 hrs.  
Change Agent support : 144 hrs.  
Average resource hour consumption per person : 29 hrs.

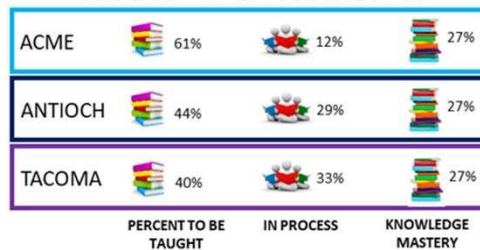
## PERCENT ADOPTION



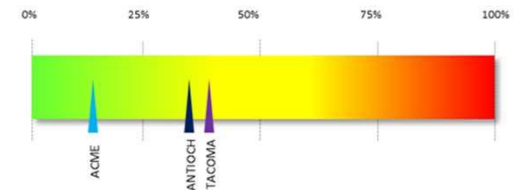
## SPEED OF ADOPTION



## KNOWLEDGE TRANSFER



## PERCENT ADAPTION



# Business Unit Report Snapshot

**BUSINESS UNIT:** Building

**DATE:**

**POINTS OF CONTACT**

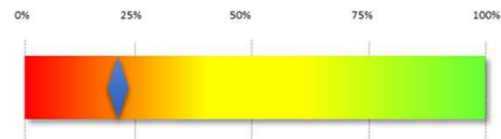
Practitioner Contact:

Supervisor:

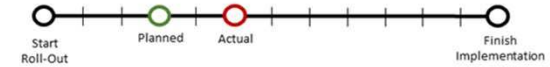
Change Agents:

**# OF SITES:** 74

## PERCENT ADOPTION



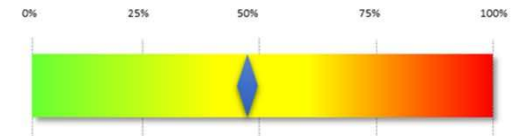
## SPEED OF ADOPTION



## KNOWLEDGE TRANSFER



## PERCENT ADAPTION



# Learning and Doing is Change:

## *Correct Training/Adult Learning*

- Training is critical to the success of a process/system change.
- The typical 'train-the-trainer' session provided by software vendors is only effective after the new system is active/working and with historical data used as an example.
- Training is not a one-time event
  - Training ≠ Adoption
  - "Tested and Passed" Training ≠ Adoption
  - Correct Consistent Use = Adoption
- New to Org. don't need to change, but do need to be trained
  - High reliance on Tribal/Village & Tacit Knowledge Transfer perpetuates adaption & resistance
- Traditional training pulls from scholastic methods (that we all experienced as kids)
  - Adult learning andragogy vs Youth learning pedagogy

*includes*  
Human Dimensions Mapping

# The "ACT" Approach

## Learner & Content Considerations

### Questions to Consider for Adult Learners

- What is the average participant's need for this skill?
- Has the need for the instruction been empirically validated?
- What have been the learners' previous experiences with this topic?
- How relevant is the topic of the instruction to the learners' current work?
- How important is the topic/skill to the learners?
- What is the benefit to the individual learner of a workshop?

### Construction Industry Considerations

- To better understand the participants' background, a survey was conducted that contains questions pertaining to their education, field of education, credentials/certification, company working for, at a minimum.
- The instructor considers the potentially conflicting experiences across construction industry stakeholders (e.g., owner, contractor, designer, etc.) and seeks to unify these sentiments to produce a cohesive learning experience.
- Relevance, importance, and benefits are measured through a general industry advisory panel or targeted practice groups and used to measure these aspects as well.

### Application to this Research Test

- The seminar was offered to members of a professional association, based upon the advertisements and registration cost.
- The professional association identified the topic relevant, important, and beneficial to their members.
- The attendance was not limited to a particular geographic area; the association has a mix of owner, contractor, and designer.
- Via a pre-training event survey, demographics were collected to inform the presenters and facilitate content.
- The group of facilitators served as the informal peer reviewers of the initial concepts and topics to be instructed.

## Design

### Questions to Consider for Adult Learners

- What skills/knowledge are intended to be taught?
- How complex will these skills be to the average participant?
- How new will these skills be to the average participant?
- How does the topic relate to learners' daily tasks/common situations?
- How will real-world or job-specific problems versus general topics be addressed?
- How will the learner be able to share with others their point of view and experiences?
- How will the learner be held accountable and responsible for their learning?
- How will the learner be able to place what they learn within the context of their work and understanding?
- When presented with different scenarios, how will the learner be prompted to reflect and use their previous experiences?
- How will the learner be prompted to reflect and use their previous experiences?
- How will the instructor ensure the learner is confident to change and adapt to new information?
- How will the learner understand the variety of choices they can make in a given situation?
- What instructional media/technology is appropriate?

### Construction Industry Considerations

- Frame content to be learned in reference to common challenges encountered by participants who relate to the topic.
- Consider the use of team exercises within groups that closely resemble the project (i.e., owner/field user, authorities, sub-disciplines, and designer).
- Select examples and team exercises that learners can relate to. Ask participants for their perspectives of construction project stakeholders, and determine if they are different under this perspective.
- Integrate challenges faced by construction projects, without identifying specific project names, to help them reflect on their own experiences.
- As construction projects involve the balancing of stakeholder expectations, typical project stakeholders when describing alternatives.
- Consider how learning the topic is beneficial to multiple construction project goals, success, and meeting the customer's needs.

### Application to this Research Test

- The term "participant" is intentionally used in any documentation and communication to avoid bias.
- The initial seminar begins with placing the topic within the challenges of the construction industry to contribute to low performance.
- A team exercise/workshop is created using a scenario that represents a construction project team could understand, while not having understood the purpose.
- The group of facilitators served as the informal practitioner committee during design.
- The workshop was conducted in teams that represented a similar diversity of multiple perspectives. Facilitators monitored discussions to ensure cordiality.
- Through the workshop scenario scope of services and the team environment, part of the task the teams have to complete the workshop.
- In the seminar, practical examples are presented and participant feedback is collected. The scenario scope of service is another useful example and point of view of the project.

## Execution

### Questions to Consider for Adult Learners

- How will the instructor refer to the learners and avoid using the term "student"?
- Is the environment welcoming and not dominated by the appearance of the instructor is the subject matter expert?
- Is the environment welcoming of feedback to improve the course/practice?
- What will be done if the approach to getting learners to share with others is not working as intended?
- Is the instructor able to engage learners to choose and take on multiple roles? If not, can something be adapted without minimizing the exercise?
- Is the instructional media selected being effective in enhancing the learning? Can something be adapted without minimizing the instruction?

### Construction Industry Considerations

- In lieu of the term "student," the instructor can use the construction stakeholder terms (i.e., owner, contractor, designer, etc.), when needed, to use terms such as: participants, team members, etc.
- The delivery of the instruction creates an environment that construction professionals can connect and relate, such as a construction project.
- The instructor should moderate the overall tone of sharing and giving feedback to ensure it is not heavily weighted for or against any one key construction stakeholder to minimize adversity.
- The physical layout of the room or location should be open and allow participants to walk around to be able to share. If the instruction is held at a construction site, some room modifications may be needed.

### Application to this Research Test

- Initially, there was a single instructor, then participants worked within groups, with multiple facilitators guiding them through their team exercise.
- Due to the size of the seminar, it would not be possible to maintain the workshop in such a large group setting. The learners worked with the smaller rooms.
- Continuous improvement suggestions were solicited during the debriefing session, and facilitators shared their thoughts after the seminar.

## Evaluation

### Questions to Consider for Adult Learners

- How will it be determined/measured that the participants have obtained the skills/knowledge intended to be taught?
- How will it be determined/measured that the participants have obtained the skills/knowledge intended to be taught? How will learners' satisfaction with the training be measured?
- How will it be determined/measured that the participants are using the skills/knowledge in their jobs?
- How will any benefits that the company experiences from the learner and their learning be measured?

### Construction Industry Considerations

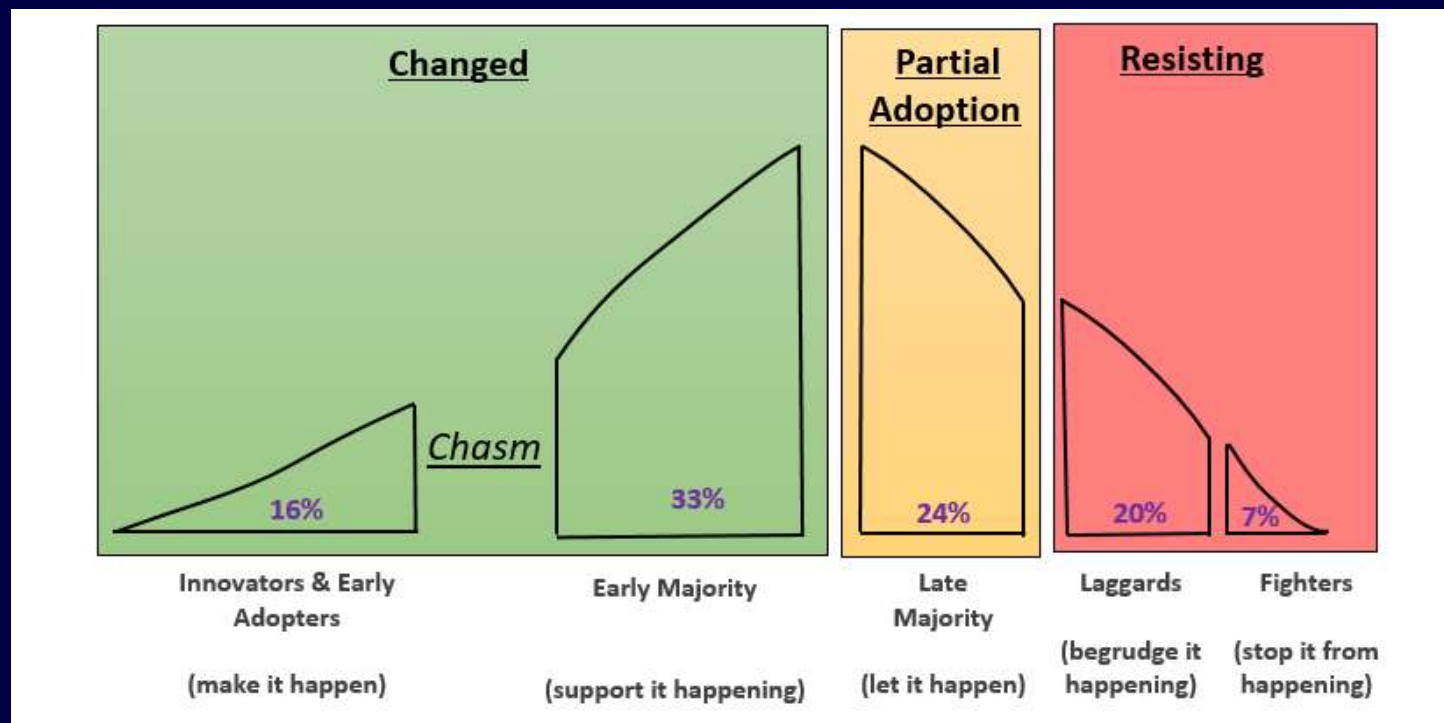
- Incorporate feedback from multiple project stakeholders for a balanced perspective.
- Consider measuring the applications of the skills/knowledge on a construction project versus at work, generally.
- As projects are executed in a dynamic team environment, consider the impact of the project team on the learner's ability to apply their learning.
- Use the company's performance appraisal process as a potential means to identify company benefits.

### Application to this Research Test

- Application of the skills was measured via the team submissions from the workshop.
- A learner satisfaction questionnaire was used as part of the pilot testing process for the workshop.
- A facilitator/observer role was created, which required two to three people to observe each team and assess the team's effectiveness and overall performance as a team.

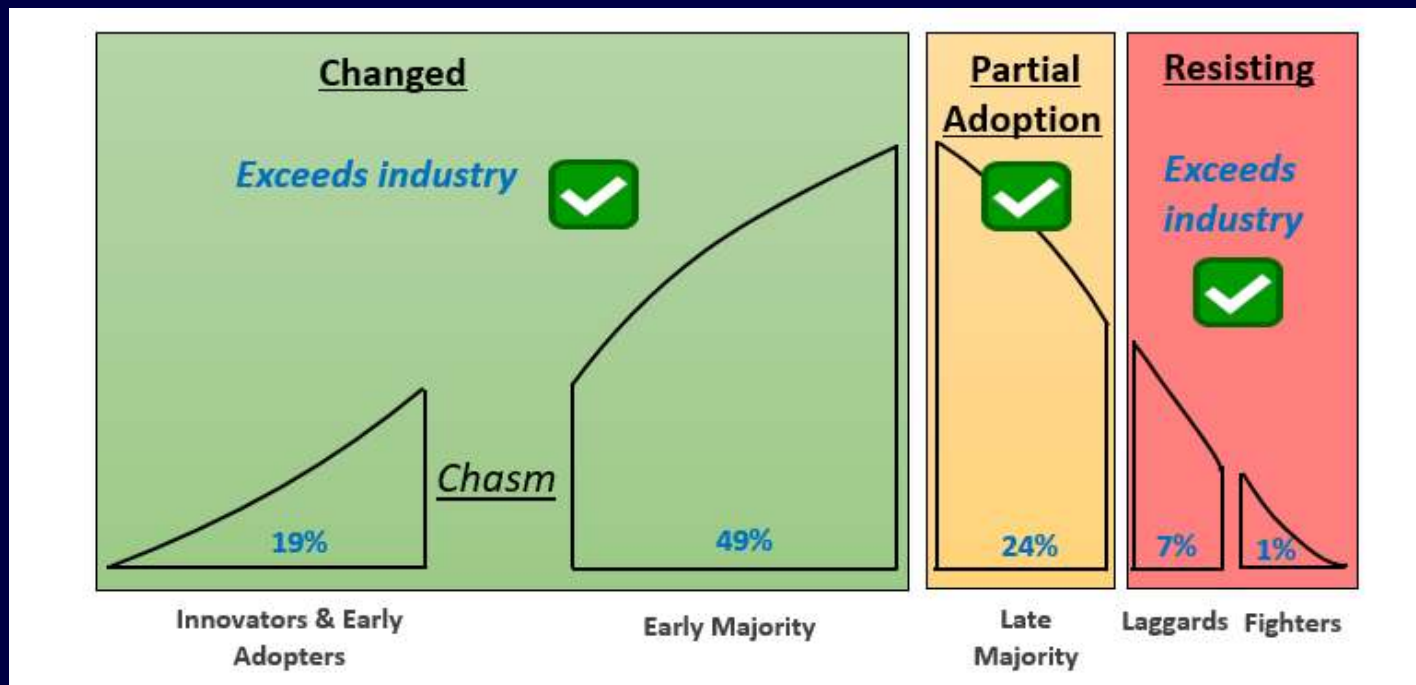
# Be Mindful of the Nocebo Effect

# Average Technology Adoption





# Impact of Good Leadership on Technology Adoption

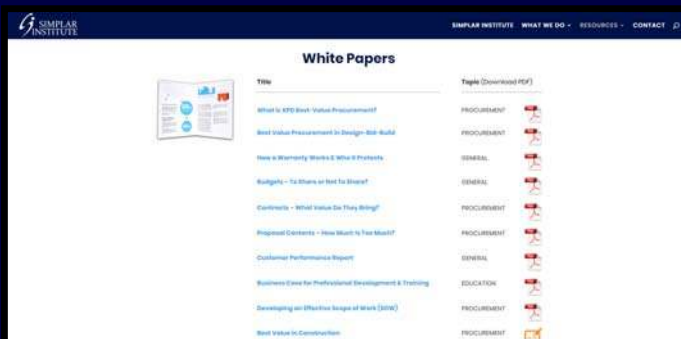


# Conclusion

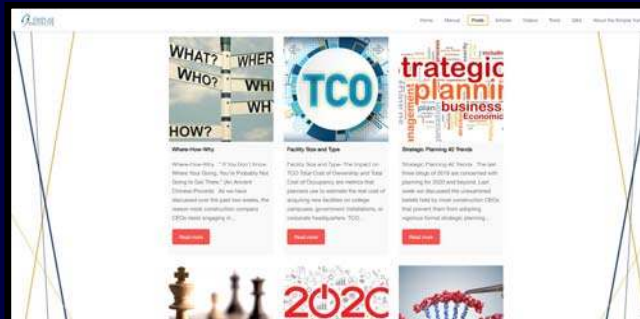
- **Change management is hard – but it is a skill that can be learned**
- **Traditional approaches yield inconsistent results**
- **Keys to success**
  - **Transparency through measurement (adoption, adaption, etc.)**
  - **Change agents & champions are key**
  - **All training is not equal – Andragogy: Workshops & hands on are best + training platform**
  - **Leadership throughout the organization w/ consistent messaging**
- **Success means: Goal Met, Less Pain/Effort/Cost, Faster, Less Adaption, Less Resistance**

# Just the beginning

- On-site / Hands-On Training
- Project / Organizational Support of RFP & Project Delivery



Website / Papers



Blog



Webinar Series

Contact us to set a time to chat

# Questions?

Copy of Slides?

**Leave a business card**

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