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Straightening the Path

How Michigan's Scope Validation gets projects back on track

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EXECUTIVE SUMMARY

Like many other public and private technology organizations, the State of Michigan (SOM) has experienced information technology (IT) projects where business and IT professionals have gaps in understanding throughout the stages of a project.

Misunderstandings occur around timelines, project requirements, budgets, stakeholder communications, and more. To remedy this, the Department of Technology, Management & Budget (DTMB) developed a Human Centered Design (HCD) Scope Validation methodology.

This methodology provides a facilitated experience for business, DTMB Agency Services providing IT support, and vendors, to jointly review current scopes of work and agree on project milestones. Specifically, facilitation ensures project status is agreed upon, as well as areas for project revisions and shifts in scope. It helps ensure requirements, deliverables, budgets, and timelines are jointly agreed upon, driving project success.

The DTMB Office of Continuous Improvement (OCI) acts as the objective facilitator for the Scope Validation experience. This team works to ensure both DTMB and agency partner opportunities and concerns are voiced, and partnerships are strengthened. In three pilot projects the state found double digit additions to requirements, identified unnecessary requirements, increased development velocity and improved communications by keeping leaders informed on decisions.

IDEA

What problems or opportunities does the project address?

Even the best intended IT project teams can be misaligned on what has been completed and what needs to yet be accomplished. Many project teams experience the challenge of projects that have newly discovered or underdeveloped requirements and shifting priorities. This heightens tension as the business senses a disconnect while they start to test, ask for changes, begin to approve completed items, and realize what is “done” may not be their perception of “done.” This can lead to business leaders experiencing an erosion of trust in the technology partner as they manage the impact of extended timelines and staff voicing dissatisfaction in initial results.

Frustration can be felt by IT staff who see changes midway through development requiring rework, creating a heads down development focus and the road to completion moving further away. Business and DTMB Agency Services leadership may see a need for a change to ensure a IT solution is delivered, but conversations can be guarded as expectations for both cost and time have already been established and in some cases exceeded.

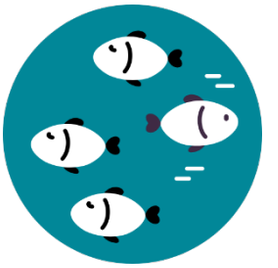
Why does it matter?

Industry studies focusing on why IT projects fail highlight failure rates at 50-70%. [1] Studies focus on why failure happens but often overlook how teams can set up future projects to reduce likelihood of failure. They don’t examine how teams can regroup from the fog of a failing project and get back on track. In the SOM’s Scope Validation method, regrouping is instrumental and relationships are key. Getting business areas and tech teams together to align on how they want to structure work, carry out that work and complete the work has been a game changer for our project success.

[1] Pratt, Mary K., et al. “Why It Projects Still Fail.” *CIO*, 20 May 2025, www.cio.com/article/230427/why-it-projects-still-fail.html
Wu, Te, and Ram B. Misra. “Why Big Projects Fail - and How to Give Yours a Better Chance of Success.” *Harvard Business Review*, Harvard Business Review, 3 Nov. 2023, hbr.org/2023/11/why-big-projects-fail-and-how-to-give-yours-a-better-chance-of-success.
Andriole, Steve. “3 Main Reasons Why Big Technology Projects Fail – & Why Many Companies Should Just Never Do Them.” *Forbes*, Forbes Magazine, 9 Nov. 2022, www.forbes.com/sites/steveandriole/2021/03/25/3-main-reasons-why-big-technology-projects-fail---why-many-companies-should-just-never-do-them/.
3 Main Reasons Why Big Technology Projects Fail – & Why Many Companies Should Just Never Do Them
Big technology projects fail most of the time. Is there any way to reduce the likelihood of failure? Yes: look at definition, scope and management problems, but don’t look too closely at problem...

The use of outside facilitators helps project team members hear each other, create shared definitions, see what needs to be documented, identify rework needing to be completed, and leads to project innovation. Facilitators manage the cadence of project reviews and the outputs and have candid conversations with leaders at all levels about the unique barriers and dynamics to the project at hand. Scope Validation can quickly change the perception of a failed project to a project with a path forward.

What makes it different?



In recent years the SOM has deployed innovations such as Lean Process Improvement (LPI) and HCD activities to help build joint understanding among project stakeholders. LPI and HCD activities are pre-project interventions that help ensure business readiness. The SOM has been supplementing these activities with traditional project tools like; backlog grooming, and scheduled sign off gates to keep projects on track. Scope Validation has been a welcomed solution for mid-flight projects in jeopardy of falling off track. Integration of Scope Validation creates an alignment on what is done, what's essential, identifies "high value" features that were under identified, and provides new options for business leaders to consider.

What makes it universal?

Keeping project stakeholders on the same page is vital to a project's long-term success. Michigan's LPI, HCD and Scope Validation models can be readily shared with NASCIO members. OCI has captured this method into a blueprint, with guides that can be used no matter the size of the project or organization. This method can be easily adopted by trained facilitators. The method has defined expectations and responsibilities that can be adopted by project teams. The Scope Validation approach is part of a wholistic strategy that goes beyond individual projects and can change how businesses strengthen relationships.

IMPLEMENTATION

What was the roadmap?

Scope Validation starts with DTMB Agency Services identifying a troubled project, having a direct conversation with business area, and bringing in a facilitator to identify disconnects and engaging the facilitator to scope the project. Once the project state is determined and scope is agreed to, options are crafted, a new agreement is made, and the project moves forward.

DTMB's Agency Services, which provides IT services to all SOM state agencies, began Scope Validation as a pilot to address a project in risk of failure. DTMB Agency Services brings in OCI to help re-baseline the project plans. Based on these engagements strategic decisions for projects are made to endure likelihood of success.

How does this project fit into an enterprise view?
The Scope Validation method involves a multidisciplinary team of IT professionals and business experts with leveraged objective facilitators. Since the first pilot project using Scope Validation, OCI has worked alongside DTMB Agency Services to establish and strengthen the new methodology into a replicable process. The DTMB Agency Services director is intimately involved in refining the method to ensure the quality of engagement continues across various SOM state agencies. OCI has added Scope Validation as a standard service offering and has two staff that are committed to providing facilitation for identified projects.

Who was involved?
The work of Scope Validation is intentional towards building a stronger joint team by the end of the project. Before working jointly with the business experts, the project IT Professionals are pulled together for a lunch, affectionately called "family dinner". This is a time to review how the project has gone thus far, what is understood about the customer needs and customer frustrations and includes a direct conversation on the support needed. The business sponsors and IT sponsors agree for a pause and proposed time box of work. Work begins in concentrated sprints that often includes:

- IT project leads
- Business analysts
- Lead developers
- Project managers
- Product owners
- Business process owners
- Product users
- OCI objective facilitators

The facilitator team includes a primary and secondary facilitator and also the director of their office who helps identify road blocks and elevates concerns to the project sponsors. The chart below maps the level of engagement across roles.

Roles & Responsibilities:

Primary Secondary Facilitation

	Facilitator's	AS & PM Team	Business Team	Executive Sponsor's	AS & OCI Director's
Kickoff with GM and team	✓	✓		✓	✓
Family Dinner	✓	✓			✓
Workshop Prep	✓	✓			
Workshop Sessions	✓	✓	✓		
Executive Weekly Updates	✓	✓	✓	✓	✓
Update Estimates	✓	✓			
Cross-area Reviews	✓	✓	✓		
Final Presentation Development	✓	✓	✓		
Final Presentation Review w/AS Director	✓	✓	✓		✓
Executive Sponsor Presentation	✓	✓	✓	✓	✓

How did you do it?
DTMB identified pilot projects to explore new ways to re-baseline project status. The first three projects were diverse and included:

- A "Enhancement to a Lift and Shift" project that had doubled in time and cost.
- A "Two Agency Integration" project that struggled in the current structure to see they would get equal value.
- A "New Funds to Finish" project that had received extensions and special funding but not sure how far the funding would go.

As appropriate, development work is halted until the scope was validated. The Scope Validation sprint cycle refocuses the team on what is at stake so decisions on the project moving can be done judiciously.

Below is a high-level description of the work being completed during a sprint cycle:

The methodology utilizes six sprints managed in 12 weeks. A Scope Validation engagement is explained to the business executives noting the constraints of what will be accomplished by the engagement. As a service the facilitation cost is not one absorbed by the Agency or project budget.

1. Alignment with the IT team on the state of the project and their understanding of the customer at a meeting called "Family Dinner".
2. Review of all project epics to ensure there is consensus on the detail up to the feature level.
3. Agreement on terms in regard to consensus on the status of all epics.
4. Identification of gaps in requirements, agreement on completeness and path to resolution.
5. Project sponsors are engaged via weekly 15-minute executive updates on the team's movement, accomplishments and challenges.
6. Options crafted in terms of structure of order of epics, concurrent work, functionality not to attain, contracting and impact realized by various options concerning project schedule, cost and business logistics.
7. Final Scope Validation report on the accomplishments and findings of the team as well as an updated project schedule, options and estimates for project delivery.
8. Facilitated agreement on path forward is obtained.

IMPACT

What did the project make better?

Scope Validation gives clarity and structure to the tough conversations concerning the true health of a project. Business and IT leaders quickly agree on what is complete and what is needed to move forward. Decisions are made concerning allocation or resources, what to stabilize, what to prioritize for faster delivery and what actions are needed for delivery. A project with a validated scope can help:

- ✓ Compress project plans and timelines
- ✓ Empower staff to make more informed decisions
- ✓ Reallocate staff and resources for efficiency
- ✓ Improve business relationships with increased customer satisfaction

How do you know?

As each Scope Validation project is unique. Four metrics are tracked to evaluate the Scope Validation process.

1. Validate completed work – the number of features that agreement was obtained that functionality was completed**.** All projects needed agreement on the definition of done for the work that was already labeled complete.
    a. In one project 66% of completed work needed some rework to enable agreement on completion.

2. Added epics/features – the number of epics and features identified and agreed upon.
    a. All projects in the pilot had at least a 20% change in requirements validation. In one project, 24 epics did not have features, 13 new epics were added to provide more clarity, and 122 new features were added. These changes resulted in all epics having features, as well as notes and supporting documentation.
    In all three projects it was not just the number of additions but the identification of multiple "high value" features that benefitted the project. Examples of "high value" requirements and feature include:
        I. Appeals processing
        II. Rate comparison transactions
        III. Handoffs of licensing information from one agency to another
        IV. Municipality compliance
        V. Prior approval gates
        VI. Exemption mechanisms
        VII. Audit functions
        VIII. Analytic connectivity to Power BI

3. Velocity (speed of development) – the rate of items in the backlog per week that were accomplished.
    a. We tracked one project pre-Scope Validation and development completion on the backlog was in the low 20's. After Scope Validation velocity moved into the mid 40's. Efficiencies found in

the reorientated structure and sprint process the team implemented resulted in an improved user story quality and deeper understanding for what was to be built.

4. Business sponsor informed - the rating to which the executive sponsor felt more informed from the engagement outcomes.
    a. When asked by the facilitators all three project business sponsors provided top ratings (5 on a 1-5 scale) for “feeling more informed for decision making” i.e. what has been completed and what the gaps in project completion are.
    b. All three projects had a consensus on a path forward within weeks of the report out, which provided prudent refocusing of efforts and preservation of existing funding.
    c. Participants provided positive feedback on the experience.

What now?

Michigan will continue to expand the use of Scope Validation in its projects. The SOM has established a structured process to identify projects earlier. An intake process has been launched for better alignment and communication before starting new projects.

OCI has established an ongoing facilitation service line to ensure the methodology is refined, documented and repeatable.

The success of Scope Validation as an innovation has been beneficial to the projects included in the initial pilot and those in flight now. The SOM looks forward to the continued evolution of our LPI, HCD and Scope Validation methodologies to benefit our business partners and the users of our services.