Seeing the Whole System: A Practical Method for Workflow Analysis

How Pango Technology Helped Bristol Bay Area Health Corporation Prepare for Change

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1. Executive Summary

Most organizations are in some stage of transformation—new systems, new regulations, new service models, or just trying to do more with the same number of people. But there is a common pattern: major changes are launched on top of processes that no one has fully documented, that vary from team to team, and that live mostly in people's heads.

That is a risky way to run a business.

Pango Technology uses a structured, repeatable workflow analysis method to address exactly that risk. The method is designed to answer a deceptively simple question:

> ***How does work actually happen here, and what does that mean for the changes we are about to make?***

Independent research suggests that a large share of digital and business transformation initiatives fail to fully meet their objectives, often because organizations underestimate the importance of clear processes, alignment, and execution—not because the technology itself does not work.[1] At the same time, experts warn that relying on informal, undocumented institutional knowledge makes organizations fragile, especially when turnover is high or key staff are suddenly unavailable.

This white paper introduces Pango's workflow analysis method and shows how it was applied at Bristol Bay Area Health Corporation (BBAHC), a tribally owned health organization in Western Alaska. BBAHC engaged Pango to help them understand, document, and standardize critical workflows across a complex, multi-site environment, at a time when they were also preparing for significant changes to their electronic health record (EHR) and other systems.

The method described here is not specific to healthcare. It is a general, industry-agnostic approach for:

- Building a prioritized inventory of workflows across an organization.
- Systematically documenting those workflows using a standard artifact set.
- Engaging subject matter experts (SMEs) in a structured way.
- Creating documentation that supports system decisions, training, compliance, and continuous improvement.

BBAHC is one example of this method in action—a complex use case that demonstrates how it holds up in a demanding environment with many stakeholders, high risk, and a lot of variation.

The sections that follow explain why workflow analysis matters, describe Pango's method in more detail, and then show how it played out at BBAHC—and what other organizations can learn from that experience.

2. Why Workflow Analysis Matters

Most organizations are under pressure to change. New platforms are deployed, teams are reorganized, services are expanded or consolidated. Yet the odds of success are not in anyone's favor.

The Failure Problem

Studies from major consultancies and research firms consistently report that around 70% of digital transformation and business transformation efforts fail to achieve their intended objectives, and that fewer than half fully meet or exceed their business outcome targets[2].

When analysts dig into why, the pattern is remarkably familiar:

- Unclear goals and success criteria.
- Misaligned stakeholders and conflicting priorities.
- Poor understanding of current processes and constraints.
- Change fatigue and resistance from people closest to the work.[3]

Technology rarely fails in a vacuum. It fails when it collides with messy, invisible workflows.

Undocumented Institutional Knowledge and Shadow Processes

In many organizations, the "real" process lives in conversations, ad hoc workarounds, and the habits of a few experienced people. That kind of informal, undocumented institutional knowledge can be valuable—but it is also a liability. When processes depend on undocumented knowledge, organizations are one retirement, resignation, or extended leave away from serious disruption[4].

A few common symptoms:

- Different teams perform the "same" process in different ways.
- Policies and SOPs exist, but no one fully follows them.
- Critical steps are known only to one or two people.
- Rarely used but high-stakes workflows (like certain approvals or emergency procedures) are hard to execute when needed.

These informal "shadow processes" make it difficult to enforce policy, manage risk, or even answer basic questions like, "How long does this actually take from start to finish?"

Why "Just Ask the Managers" Is Not Enough

Leadership insight is essential, and many managers carry an impressive amount of process detail in their heads. At the same time, relying only on that mental model has limits when you are trying to change systems or standardize across sites. A conceptual picture often does not show:

- The full number of steps and handoffs across roles and locations.
- Where practice legitimately varies between departments, sites, or shifts.
- The workarounds that have evolved to deal with system limitations or local constraints.
- The manual effort and rework that no one intended but everyone has learned to live with.

Even in an environment with a high level of process discipline like BBAHC, mapping workflows end-to-end gave leaders and SMEs a shared, visual way to compare what they already knew, reconcile differences across sites, and talk concretely about improvement opportunities. That pattern is not unique to healthcare; even in organizations with highly knowledgeable leaders, putting the process on paper often reveals connections and implications that are hard for any one person to hold in their head.

Benefits of Systematic Workflow Analysis and Documentation

Experience and external research agree on the benefits of documenting workflows in a structured way[5]:

- **Operational efficiency and consistency.**
  Process mapping helps organizations identify bottlenecks and redundancies, standardize procedures, and streamline operations.
- **Better training and onboarding.**
  Clear maps and detailed activity descriptions allow new staff to understand how work flows, not just what buttons to press.
- **Resilience against turnover.**
  Documented processes reduce dependency on individual employees and protect against the loss of institutional knowledge.
- **Support for compliance and risk management.**
  In regulated environments, process documentation is key to demonstrating due diligence and linking controls to actual activities.
- **Better inputs to system and organizational change.**
  When it is time to select or configure a new system, restructure departments, or centralize services, a clear view of how work happens today is an invaluable starting point.

The challenge is less about whether to document workflows and more about how to do it in a way that is thorough, scalable, and does not grind day-to-day operations to a halt. That is where method matters.

3. The Pango Workflow Analysis Method

Pango's workflow analysis method is designed for organizations or process environments that are complex enough that no single person can describe "how things work" with confidence. It is industry-agnostic and has three major phases, each of which exists to answer specific questions:

Phase 0 – Establish Project Resources.
Who owns this effort, how will we keep it on track, and where will the work live?
Phase I – Scoping & Prioritization.
Which processes should we focus on first, and how big is the overall universe of workflows?
Phase II – Documentation & Analysis.
How do these priority workflows operate in practice, and how do we capture that in a way people can trust and reuse?

The method balances structure and pragmatism: enough rigor to handle complex processes, but flexible enough to adapt to different organizations and scopes.

3.1 Phase 0 – Establish Project Resources

Phase 0 is about making sure the work is set up to succeed before anyone draws a box or arrow. It answers the question:

> *Who is responsible for this, and how will we make decisions as we go?*

Governance and Roles

The first step is to establish clear ownership:

- Identify executive sponsors and a steering or sponsorship group who can unblock issues and make tradeoffs.
- Define a process lead and core project team who are accountable for day-to-day progress.
- Clarify the role of SMEs and extended stakeholders so people know when and how they will be involved.

This clarity avoids the all-too-common pattern where process work becomes "side-of-desk" for everyone and stalls as soon as a tough call needs to be made.

Cadence and Communication

Next, the team agrees on how they will work together:

- Set up regular internal standups for the analysis team to coordinate interviews, documentation, and reviews.
- Define a schedule for status meetings with sponsors and stakeholders so they see progress and can steer priorities.
- Decide how issues, risks, and decisions will be logged and communicated, so nothing important stays buried in email threads.

Tools and Repositories

Finally, the project needs a home:

- Establish a single source of truth for project artifacts (for example, a shared folder, Teams site, or similar).
- Agree on naming conventions and versioning practices so people can reliably find the "right" version of a document.
- Create basic templates for status reports, interview notes, and diagrams so the work feels consistent from the start.

Investing in Phase 0 avoids one of the classic failure modes of process work: beautiful diagrams in six different folders and no one quite sure which version is the latest.

3.2 Phase I – Scoping & Prioritization

In most organizations, the first hard question is not "How do we document this process?" It is:

> *Which processes do we document first, and how many are we actually talking about?*

Phase I turns that fuzzy concern into a concrete, shared plan.

Inventory and Clustering

The work starts by surfacing what already exists:

- Build an inventory of processes, workflows, and encounters across departments or service lines. This can draw on org charts, existing SOPs, ticketing systems, and interviews.
- Cluster related workflows into logical groups ("constellations") to see where processes interconnect and to avoid treating every minor variation as a separate project. For example, customer onboarding, billing, and collections might form a single constellation in a services company, while

permit intake, inspection scheduling, and final approval might form one in a public-sector organization.

The goal is not a perfect list on day one. Instead, the inventory becomes a living map of the organization's work, refined over time as more is discovered.

Define Scoring Dimensions

Once the inventory is in place, Phase I asks a more strategic question:

> *What makes one workflow more important to analyze than another?*

To answer that, the team defines a set of scoring dimensions, such as:

- Impact on customers/clients/cases (for example, how a change would affect citizens applying for a permit, patients scheduling a visit, or customers placing an order).
- Cross-functional complexity and number of handoffs.
- Regulatory or compliance importance.
- Financial or revenue implications.
- Degree of pain or friction reported by staff.

These dimensions are customized to the organization, but they always aim at the same outcome: align analysis work with what matters most to the business.

Apply Quantitative Scoring

With dimensions defined, Phase I introduces a simple, transparent scoring model:

- Constellations and individual workflows are rated using high/medium/low or numeric scales on each dimension.
- Scores can be weighted so that, for example, regulatory risk or revenue impact carry more influence than other factors.
- The scoring model is parameterized so leadership can adjust weights as priorities change without rebuilding the tool from scratch.

The point is not to create a mathematically perfect model, but to replace gut feel with a structured, defensible way of deciding where to start.

Create a Prioritized Roadmap

The outputs of Phase I typically include:

- A prioritized inventory of workflows, grouped by constellations or domains.
- Visualizations that show how workflows relate to each other and where complexity clusters.
- A draft plan for Phase II, including a recommended first set of workflows to document, rough sequencing, and a sense of overall effort.

Critically, the inventory and model are built so that they can be reused. As new processes are identified or as priorities shift, organizations can update the model rather than starting over. Phase I turns "we have a lot of undocumented workflows" into "we know what they are, how they relate, and which ones we will address first."

3.3 Phase II – Documentation & Analysis

Once high-priority workflows are selected, Phase II moves into structured documentation and analysis.

This phase answers two key questions:

> *How does this workflow actually operate today?*
>
> *How can we capture that in a way people will trust and use?*

Standardized Artifact Stack

To avoid every analyst inventing their own style, Pango uses a consistent artifact stack, with each layer serving a distinct purpose. You can think of these as different lenses on the same workflow, whether that workflow is processing a loan application, handling an internal access request, or fulfilling a customer order:

- **Macro Flowchart (MAF).**
  A high-level view of where the process sits in the overall organizational context. This helps leaders see boundaries: where the workflow starts and ends, and which other processes it touches. For example, a MAF might show how a service request moves from intake through review to fulfillment and follow-up.
- **Functional-Activity Flowchart (FAF).**
  A cross-functional flowchart showing roles, departments, and handoffs. This is usually the workhorse diagram that most stakeholders react to and refine—for example, an order-to-cash flow that crosses sales, operations, finance, and customer support.
- **Task-Procedure Flowchart.**
  A linear, step-by-step view for activities that need detailed, task-level documentation—for example, closing the monthly books in a finance team, or running a safety inspection checklist on a vehicle or facility.
- **Activity Detail Sheet (ADS).**
  A rich, structured description of each activity: inputs, outputs, owners, controls, related policies, systems, and key risks. The ADS ties together what the diagram shows visually with the information people need to execute and govern the process.

Because every workflow uses the same artifact types, documentation is coherent and comparable. A reader who understands one FAF and ADS can quickly understand another.

Interview-driven Refinement

Phase II does not assume the first draft is right. Instead, it uses a structured, interview-driven cycle to refine the documentation:

1. Confirm the initial scope of the workflow with the core project team so everyone agrees on the “edges” of the process.
2. Review any existing documentation, policies, or job aids to avoid asking SMEs to repeat information that is already written down.
3. Draft initial MAF and FAF diagrams based on this research, treating them as hypotheses rather than finished products.
4. Identify and confirm SMEs for each “swim lane” or role so the right people are in the conversation.
5. Conduct SME interviews (typically about an hour), tailored to each role’s part of the process. The focus is on what actually happens, not what the policy says should happen.

6. Create interview summary documents and send them to SMEs and supervisors for validation with clear deadlines, so they can correct or clarify what was captured.
7. Incorporate validated feedback into the diagrams and ADS drafts, refining the flow and adding missing details.
8. Conduct a second round of interviews or review sessions focused on the FAF and proposed documentation, asking, “Does this represent reality, and would you be comfortable training someone with this?”
9. Capture and validate action items, update artifacts, and repeat as needed until the team is confident in the accuracy of the workflow.

Throughout, the project team maintains a secure repository for drafts, intermediate versions, and final documents, and clearly marks which artifacts are “in progress” versus “approved.” This protects SMEs from version-confusion and makes it clear when their feedback has been incorporated.

Validation and Acceptance

The final steps in Phase II ensure that the work is not just accurate, but owned:

- Confirm that SMEs agree the FAF, ADS, and related artifacts accurately represent the process as it is actually performed.
- Conduct a final “readiness check” on each deliverable to make sure it is complete, consistent with standards, and stored in the right place.
- Submit final documents to the project’s core team or governance group for formal acceptance, so there is a clear handoff from project work to ongoing ownership.

The result is not just “a diagram,” but a tightly linked set of artifacts that capture both how the process works and how it should be governed. Because the method is standardized and repeatable, organizations can apply it to a small set of high-risk workflows or scale it up to support multi-year, enterprise-wide transformation.

4. How the Method Worked at BBAHC

To see how this method works in practice, consider Bristol Bay Area Health Corporation (BBAHC), which provides health services to dozens of communities and operates many clinics across the Bristol Bay region of Western Alaska. It delivers a wide range of services—from primary care and emergency care to specialty services—across a geographically dispersed environment.

4.1 Organizational and Engagement Context

BBAHC identified a significant risk:

- Many mission-critical workflows were not consistently documented.
- Knowledge was distributed across long-tenured staff and varied by site.
- For many reasons, the organization needed a solid understanding of current workflows.

BBAHC engaged Pango to:

- Build a comprehensive, prioritized inventory of workflows.
- Document and analyze high-priority workflows in detail.
- Create a standard toolkit and artifact set they could reuse over time.

The engagement was structured with:

- Phase I – Scoping and Planning (Workflow Analysis Phase I).
- Phase II – Documentation and Analysis (Workflow Analysis Phase II).
- A subsequent Phase II extension (Phase II.2) to cover more complex workflows such as referral management and medication order management.

4.2 Phase I at BBAHC – Building the Roadmap

In Phase I, Pango's analysts:

- Reviewed extensive SME interview notes and documentation from prior efforts.
- Consolidated this information into departmental process lists.
- Created categories and scopes for processes and grouped them into cross-departmental constellations.

From there, they:

- Designed and refined constellation tables and weighting models to prioritize workflows based on impact, complexity, and risk.
- Flagged duplicates, identified missing owners and SMEs, and strengthened the dataset.
- Documented the workflow analysis method and standards, including the BBAHC Workflow Analysis Tool (BWAT) guidance, Activity Detail Sheet templates, validation tracking, and a style guide for diagrams.

This phase produced:

- A prioritized inventory of workflows.
- A set of tools and standards that would govern Phase II.
- A clearer picture of just how much workflow complexity BBAHC was managing.

In practical terms, Phase I answered BBAHC's big questions: "How many processes are we actually talking about?" and "Which ones should we tackle first?"

4.3 Phase II at BBAHC – Executing the Method

In Phase II, Pango applied its workflow analysis method to the highest-priority workflows, focusing initially on areas such as registration, scheduling, and key clinical support processes.

The team:

- Developed and refined workflow diagrams for outpatient, emergency department, and specialty registrations.
- Created and updated multiple Activity Detail Sheets and Functional-Activity Flowcharts.
- Conducted interviews with SMEs across departments including Radiology, Audiology, Optometry, Physical Therapy, and other service areas.

Along the way, they:

- Designed, tested, and applied flowchart style guidelines and navigation patterns so that staff could easily move between documents and understand what they were seeing.
- Maintained and updated the BWAT tool with owner feedback and prioritization decisions.

- Delivered regular status reports, executive presentations, and structured updates to keep leadership aligned and informed.

By the close of Phase II, BBAHC had a validated, reusable set of workflow artifacts for some of its most visible and high-traffic processes, plus a method and toolkit that could be extended to additional workflows.

4.4 Phase II.2 – Tackling Complex Workflows

After seeing the value of the initial documentation, BBAHC extended Phase II to cover more complex and risk-intensive workflows, including referral management and medication order management workflows.

For referral management, the team:

- Conducted interviews with a broad range of stakeholders, including case management, providers, and departments/clinics who have high volumes of referral traffic.
- Consolidated interview notes into master sets, validated them with SMEs, and refined FAFs and ADSs.
- Developed scenario mappings and flowcharts to handle different referral pathways and exceptions.

For the medication order management workflows, they:

- Researched relevant system modules and existing job aids.
- Developed a FAF primarily for outpatient contexts.
- Validated findings via provider interviews, carefully logging assumptions, pain points, and differences between departments.

These workflows were among the most complex and high stakes in BBAHC's environment. Applying the same structured method demonstrated that the approach scales—not just in volume, but in complexity.

5. Results and Value: What BBAHC Gained

The workflow analysis effort at BBAHC produced value in several dimensions: operational, strategic, and cultural.

5.1 Operational Stability and Standardization

By the end of the initial phases, BBAHC had:

- A set of standardized diagrams and ADSs for key workflows, validated by the people who actually execute them.
- A style guide and navigation structure that made documentation more than a static artifact; staff could move between related diagrams and ADSs without getting lost.
- A single, organized repository for process documentation, replacing scattered versions of "how we do things" across files and inboxes.

This foundation improved day-to-day consistency and made it easier to have fact-based conversations about how work should be done.

5.2 A Reusable Prioritization and Planning Toolkit

BBAHC's leadership now has:

- A prioritized inventory of workflows and constellations that can be revisited and updated as needs change.
- Parameterized scoring tools that let them adjust dimensions and weights as new risks, regulations, or strategic priorities emerge.

That means future decisions about "what to analyze next" do not start from scratch or rely solely on intuition—they start from a structured, data-informed model.

5.3 Documentation That Supports Future Initiatives

The workflow analysis outputs are already positioned to support:

- **Future System Implementation and Configuration.**
  Clear workflow documentation is a natural input to system build decisions, testing scenarios, and training design—for example, when evaluating or implementing an electronic health record (EHR) or other enterprise platforms.
- **Training and Onboarding.**
  New staff can see how their role fits within the broader process, not just learn isolated tasks.
- **Quality, Compliance, and Improvement Efforts.**
  When audit or improvement work begins, BBAHC now has a set of artifacts that show where controls sit in the process and where changes might introduce risk.

In short, the deliverables are designed to be reused, not just archived.

From Pango's perspective, one of the most important outcomes is less visible: BBAHC now has a method and toolkit for understanding its own workflows, which can be applied well beyond the initial set of processes.

6. Lessons for Other Organizations

The BBAHC engagement illustrates some broader lessons for organizations considering workflow analysis.

6.1 Processes Are Almost Always More Complex Than They Look

At the start of any engagement, there is a temptation to say, "We already know how this works." Once the MAFs, FAFs, and ADSs are drafted, that confidence tends to be replaced by a more productive reaction:

> *I had no idea it was this long, or this varied.*

Recognize that this complexity is not a sign of dysfunction, it is a normal feature of mature organizations with many moving parts.

6.2 You Do Not Need Perfect Clarity to Begin

Phase I exists precisely because most organizations cannot list all their processes on day one. The inventory and scoring work create that clarity, then turn it into a roadmap.

If you wait for a perfect understanding of your workflows before starting an analysis, you will never start. The method is built to help you discover and refine that understanding as you go.

6.3 Standardization Pays Off Twice

Standardized documentation:

- Reduces friction and confusion today (people have a shared reference).
- Makes future change easier (you do not have to rediscover how things work every time you introduce a new system or policy).

The same artifact stack and style guide that made BBAHC's initial workflows coherent can be applied to any new workflow the organization chooses to document.

6.4 Workflow Analysis Is Not Just for "Big Projects"

It is natural to associate workflow analysis with major system implementations or reorganizations, but the method scales down as well as up:

- A smaller organization might use it to document a handful of high-risk processes.
- A department might use it to untangle a single, multi-team workflow that keeps causing issues.
- A large enterprise might treat it as the backbone of a multi-year transformation.

In each case, the same principles apply: inventory, prioritize, document, validate.

6.5 What Pango Brings

Pangos bring three things to this kind of work:

1. **A Structured, Repeatable Method.**
   The phases, scoring models, and artifacts have been tested in real-world engagements and tuned for complex environments.
2. **Experience Navigating Messy Reality.**
   We expect incomplete information, conflicting narratives, SME scheduling challenges, and the occasional "this is how we have always done it" standoff. The method is built with those realities in mind.
3. **A Collaborative, SME-Respecting Approach.**
   The people closest to the work are not "resources to be mined"; they are co-authors of the final documentation. The interview/validation cycle makes that explicit and gives them a clear voice in the outcome.

Your processes will not document themselves. But with a methodical approach, a consistent artifact stack, and a team that knows how to listen, you can turn invisible workflows into tangible assets—assets that make every future change a little less risky and a lot more effective.

End Notes

[1] McKinsey & Company, *Why do most transformations fail? A conversation with Harry Robinson*, (https://www.mckinsey.com/capabilities/transformation/our-insights/why-do-most-transformations-fail-a-conversation-with-harry-robinson) July 10, 2019 ; and Boston Consulting Group, *Companies Can Flip the Odds of Success in Digital Transformations from 30% to 80%*,(https://www.bcg.com/press/29october2020-companies-can-flip-the-odds-of-success-in-digital-transformations-from-30-to-80) October 29, 2020. Both report that only around 30 percent of large-scale transformations fully succeed, with the remainder failing to meet their objectives.

[2] Gartner, *Gartner Survey Reveals That Only 48% of Digital Initiatives Meet or Exceed Their Business Outcome Targets* (https://www.gartner.com/en/newsroom/press-releases/2024-10-22-gartner-survey-reveals-that-only-48-percent-of-digital-initiatives-meet-or-exceed-their-business-outcome-targets), press release, October 22, 2024. This global survey finds that fewer than half of digital initiatives enterprise-wide achieve their intended business outcomes.

[3] Prosci, *Overcome and Prevent Change Fatigue* (https://www.prosci.com/change-fatigue) and *6 Strategies for Reducing Change Saturation* (https://www.prosci.com/blog/6-strategies-for-reducing-change-saturation) Drawing on global change management research, Prosci describes how continuous change can lead to exhaustion and cynicism ("change fatigue"), which in turn reduces employee engagement, lowers adoption rates, and undermines the success of transformation initiatives.

[4] Gartner, *Institutional Knowledge: How to Safeguard It When Employees Leave* (https://www.gartner.com/en/articles/how-to-safeguard-institutional-knowledge-in-the-face-of-the-great-resignation); and Strivr, *Why Institutional Knowledge Puts Your Business at Risk.* (https://www.workwise.strivr.com/blog/solving-the-institutional-knowledge-gap) These sources describe how relying on undocumented institutional knowledge concentrated in a few employees creates operational risk, especially when turnover or disruption occurs.

[5] ProcedureFlow, *Top 10 Benefits of Process Mapping* (https://blog.procedureflow.com/knowledge-management/benefits-of-process-mapping), December 6, 2023; Creately, *Top 10 Benefits of Business Process Mapping for Operational Efficiency* (https://creately.com/guides/benefits-of-business-process-mapping/), 2023; and KataCon Solutions, *The Benefits of Process Mapping: A Key to Efficiency and Improvement.* (https://www.katacons.com/resources/the-benefits-of-process-mapping-a-key-to-efficiency-and-improvement) These sources describe how process mapping supports efficiency, training and onboarding, compliance, and continuous improvement.