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CASE STUDY: VISUAL DATAFLOW MAPPING TO UNCOVER CRITICAL PATHS DURING ORGANIZATIONAL CHANGE

SITUATION

A growing organization preparing for an acquisition needed a clear understanding of how sensitive business data was moving through its environment. While leadership understood the location of **Controlled Unclassified Information (CUI)** contained within key systems, there were a number of processes that had developed over time that were not as well documented. There was no comprehensive picture of the data flowing between the different tools used to manage bids, collaborate with subcontractors, and store files, including the use of email. In addition to preparing for an acquisition, a key individual in the organization was preparing to retire; holding significant amounts of institutional knowledge that was not documented.

To properly integrate the acquisition, a clear picture of both organizations processes and systems were needed to understand their CUI scope fully. The newly acquired organization did not have the documentation required to prepare for integration; in many cases, **critical data was being copied, shared, and stored in multiple locations.** Secure systems were in place, but no one had a complete view of how work was actually getting done to the degree needed to smoothly integrate the operations of both organizations. The organization had made progress on compliance, but without mapping dataflows across departments, they could not accurately define their CUI scope.

They needed more than a static inventory. They needed to understand which teams were using which systems, what kind of data was involved, and how it moved across business functions. Without that level of visibility, they risked missing key gaps during the acquisition, introducing avoidable risk, and **undermining future integration efforts** across both business and IT teams. You cannot protect what you cannot see. You also cannot integrate, restructure, or scale it.

SOLUTION

We started by meeting with project leads and technical staff to understand how work actually moved through the organization. Instead of beginning with a checklist, we asked direct questions. What does your day look like? What systems do you use? Where does the data go?

This gave us a real picture of the environment. We were not just tracking where CUI might be. We were identifying how business processes functioned in practice. Using **Visio Professional**, we built custom data flow diagrams containing the information that allowed systems, roles, data and workflows to be connected in a way that could be reviewed, reported upon and updated over time.

The method is *repeatable and built to scale.*

DATAFLOW MAPPING AS A CORE STRATEGIC CAPABILITY.

Dataflow mapping has evolved beyond compliance. It now supports organizations during **high-impact transitions**, including mergers, offboarding, and operational restructuring. By visualizing how data moves across systems, users, and functions, this method enables **accurate scope definition**, clearer ownership, and stronger decision-making.

The output is not a static diagram. Built using tools like Visio Professional, it becomes a **living reference point** that surfaces risk, guides alignment, and reinforces confidence in the integrity of operations. What began as an internal tool is now a repeatable capability used to bring clarity to complex environments.

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SOLUTION | CONTINUED

Each team was brought into the process to walk through what their day-to-day looked like. The goal was not to chase documents or system lists. It was to understand what work was being done, what data was moving, and how each system was actually being used in practice. Most environments hold surprises, and this one was no different. **Critical workflows were happening over email, through shared drives, and inside third-party platforms.** Even more challenging, the two companies used vastly different systems to accomplish the same business function.

The outcome was a set of **visual, data-enabled diagrams and reports** that reflected how the business really operated. Built in Visio Professional, enhanced to provide system and data flow metadata, these diagrams tied specific workflows to systems, users, and data types. These were not merely reports, rather they were decision tools. Leadership used them to evaluate scope, identify risks, and make informed choices about system integration, team alignment, and security posture.

This approach has become essential during mergers and acquisitions, where alignment must happen quickly and accurately across people, platforms, and policies. Without this process, critical gaps are almost always missed. For organizations navigating change, the diagrams offer more than documentation. **The diagrams surface blind spots and build consensus.** They define what the future state needs to be, and then show you how to get there.

If you're making decisions without this level of visibility, you're not working with the full picture, and that only increases organizational risk. **Taking the time to get the full picture puts you in control of what comes next.**

RESULTS & BENEFITS

CROSS-FUNCTIONAL DATAFLOW CLARITY

Visual diagrams mapped how sensitive and operational data moved across systems, users, and departments, creating a shared understanding of real workflows.

ENHANCED SCOPE DEFINITION AND COMPLIANCE READINESS

Mapped environments enabled clear, confident identification of **CUI** and **FCI** scope, supporting internal audits, regulatory reviews, and security assessments.

MERGER AND INTEGRATION INSIGHT

Side-by-side environments were analyzed to identify overlaps, risks, and key differences, helping leadership plan system alignment, organizational restructuring, and future-state readiness.

REAL-TIME DECISION SUPPORT TOOLS

Diagrams became a living resource for leadership to evaluate risk, reassign roles, offboard staff, and support organizational change without losing critical business functions or continuity.

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