accenture consulting

ENTERPRISE DATA
MANAGEMENT
**MANAGING COMPLEX
WORKFLOWS WITH EDM
FROM IHS MARKIT**

INTRODUCTION

Enterprise data management (EDM) can be defined as the need to collect data from multiple sources, master and validate the data to present a "gold copy," and distribute the information in a timely fashion to support business activities.

EDM activities are often repetitive and can involve multiple steps. These workflows may be simple or automated, but sometimes they are very complex. In deploying workflows to meet business needs, firms should follow a structured approach to avoid the pitfalls and diversions that can derail these types of initiatives.

WHAT IS WORKFLOW?

A workflow is a series of connected process steps that encompass operations and decisions carried out by a person, a group of people or multiple teams.

In today's automated world, machines across an organization work together to achieve some desired outcome. In a factory setting, the result might be a completed assembly. In EDM, the outcome is usually a validated unit of data that's fit for public consumption. For the purposes of this discussion, we will exclude workflows that are candidates for robotics process automation (RPA) and focus on those involving teams of people.

Different kinds of workflows

Workflows can vary considerably in terms of their scope and complexity. Simple EDM workflows may be used to:

- Manage data exceptions

- Create overrides for given values

- Organize single approval for overridden values

At the other end of the spectrum, complex workflows may be required to:

- Create new data entities, such as securities or portfolios

- Organize multi-level approvals, such as "four-eyes" approval or cross-departmental/ cross-team approval, for overridden values

As workflows grow in complexity, tracking, monitoring and effective communication become increasingly important for confirming that key information is passed from one stakeholder to the next.

IMPLEMENTING WORKFLOWS

Regardless of a workflow's scope or complexity, several basic but important design principles and development considerations should be followed.

Design principles

Enhancing the return on investment of an EDM system requires a careful look at workflows within the system and those that span the organization, consuming data from and/or supplying data to the system. All of these workflows will play important roles in data governance and stewardship. Wherever possible, they should facilitate repeatable business processes, process monitoring and automation.

Begin the design process by asking: What is the required outcome? During the discovery phase of an EDM project, it can be tempting to ask people what they would like to do, but it's more productive to ask what business issues need to be addressed.

Once specific issues have been identified, review each one in turn:

• How are things currently done?

• Why are things done that way?

• Do the factors or constraints that led to this process still apply?

Take this opportunity to streamline procedures and introduce operational improvements, but avoid change for the sake of change.

Involving end users early is key to the successful design and adoption of new or modified workflows. Each workflow needs to be designed and written for the task at hand—how it is actually performed, not how the IT team perceives it to be. A cross-functional team should be charged with compiling requirements for meeting the workflow goals. Once the business need and its requirements have been defined, design and delivery of a new or modified workflow can begin.

> Involving end users early is key to the successful design and adoption of new or modified workflows. Each workflow needs to be designed and written for the task at hand—how it is actually performed, not how the IT team perceives it to be.

Development considerations

Storyboarding can be an effective way to involve end users in workflow development. Instead of focusing on the precise layout of screens in the user interface (UI), this technique uses simple, cartoon-like panels to map out and describe the workflow. A single panel may represent an end user's view of a page in the UI or a step in the process.

Storyboarding can help identify:

• What users need to see

• What types of actions can be performed

• What types of validations might be needed

• What types of actions can be triggered at this point in the workflow

Actions identified may include passing the baton to the next team, initiating background processing, triggering requests to other users or simply moving on to the next screen.

Throughout the process, three questions should be revisited often:

• What needs to be accomplished in this step?

• What conditions need to be met to move on?

• What is happening in the background?

From an end-user perspective, you might phrase these as: "What can I see on the screen?" and "What can I do?"

Requirements change over time, so take that into account in the design phase by adopting a modular approach. Breaking large, complex workflows into small units makes it possible to define inputs and outcomes for discrete units of work. That, in turn, enables smaller unit testing, supports issue resolution and facilitates future modifications.

It may be tempting to replicate the current user experience to make adoption easier, but that can lead to an unfortunate mix of front-end custom development and behind-the-scenes technical adaptations to meet the agreed-upon business, governance and stewardship requirements. The resulting workflow is often difficult and costly to maintain.

While UI aesthetics and usability are important, data accuracy is paramount. Use of a workflow development tool that is tightly coupled with the EDM environment will help to confirm data integrity.

Workflows should be designed with monitoring, correction activities and performance metrics in mind. Audit monitoring supports the analysis of problems that may arise during workflow execution. Providing access for correction activities allows problems to be remediated once their cause is understood. Performance metrics provide a basis for workflow improvement over time.

A testing plan should be formulated during the design and development process. Separation of duties should be strongly enforced, with the creation of a testing team that is completely independent of the development team. Tests should reflect agreed-upon business requirements rather than technical specifications, which may or may not reflect the business requirements as well as intended.

MANAGING WORKFLOWS WITH EDM FROM IHS MARKIT

EDM from IHS Markit is a well-established and highly respected toolkit that's capable of meeting many enterprise data management needs—from ingesting data in multiple formats and from multiple sources, to integrating, normalizing, validating and distributing information. Strong lineage and audit capabilities, combined with a flexible platform, make it a strong choice for numerous use cases.

The EDM from IHS Markit UI development tools include a workflow management component that delivers the workflow interface through a standard browser. The workflow component is a container that supports multiple workflow steps, maintenance of status information, data integrity and continuity, the ability to call other workflows or processes, and the ability to navigate forward or backward as indicated by various status values.

EDM from IHS Markit has the distinct advantage of closely integrating workflow management with underlying data management as it interacts directly with the IHS Markit database and all other Markit components.

EDM from IHS Markit has the distinct advantage of closely integrating workflow management with underlying data management as it interacts directly with the IHS Markit database and all other IHS Markit components.

The nature of the UI structure, which is comprised of elements placed on pages linked together using the workflow component, facilitates using a modular approach as described. The data management pipeline components eliminate the temptation to deliver solutions that hide steps within code, instead delivering transparent solutions that expose data and information management at every stage.

Although there are limited opportunities to vary the look and feel of the workflow UI (e.g., color palette, page layout), the integration of workflows and data management components in a common toolkit confirms consistency and results in lower ownership and maintenance costs in the long term.

CONCLUSION

Our experience delivering many workflows across a wide variety of use cases has reinforced the value of the core principles discussed in this paper: start with the business need, use storyboarding to clarify the functional design, develop with the "edge cases" in mind, and test, test, test. Most important, never forget your end users—they're the true judges of a workflow's usability and value.

Through multiple implementations, our team has learned how to identify and avoid the pitfalls of EDM from IHS Markit. No system is perfect, but appropriate experience during the design phase can facilitate the platform's benefits and reduce its constraints.

An appropriately designed solution could meet the business needs of both simple and complex workflows, while simultaneously addressing the wider needs of monitoring and traceability that data governance and stewardship principles demand. Our teams have the requisite experience that could be leveraged by your business to yield results which meet your enterprise data management goals. Already today, Accenture's experienced Markit EDM team currently supports our global clients 24/7.

An appropriately designed EDM from IHS Markit solution will meet the business needs of both simple and complex workflows, while simultaneously addressing the wider needs for monitoring and traceability that data governance and stewardship principles demand.

CONTACTS

Jeremy Hurwitz
Managing Director
jeremy.m.hurwitz@accenture.com

Mick Cartwright
Associate Director
mick.cartwright@accenture.com

Bill Leete
Manager
bill.leete@accenture.com

Follow us on **Twitter**

Follow us on **LinkedIn**

Read our **Blog**

Explore more **Asset Management Latest Thinking**

DISCLAIMER

ABOUT ACCENTURE

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions – underpinned by the world's largest delivery network – Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With approximately 435,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. Visit us at www.accenture.com.

180330