BOUNDARYLESS

Controls Automation for Risk, Finance and Operations

Are manual adjustments the problem, or lack of data controls?

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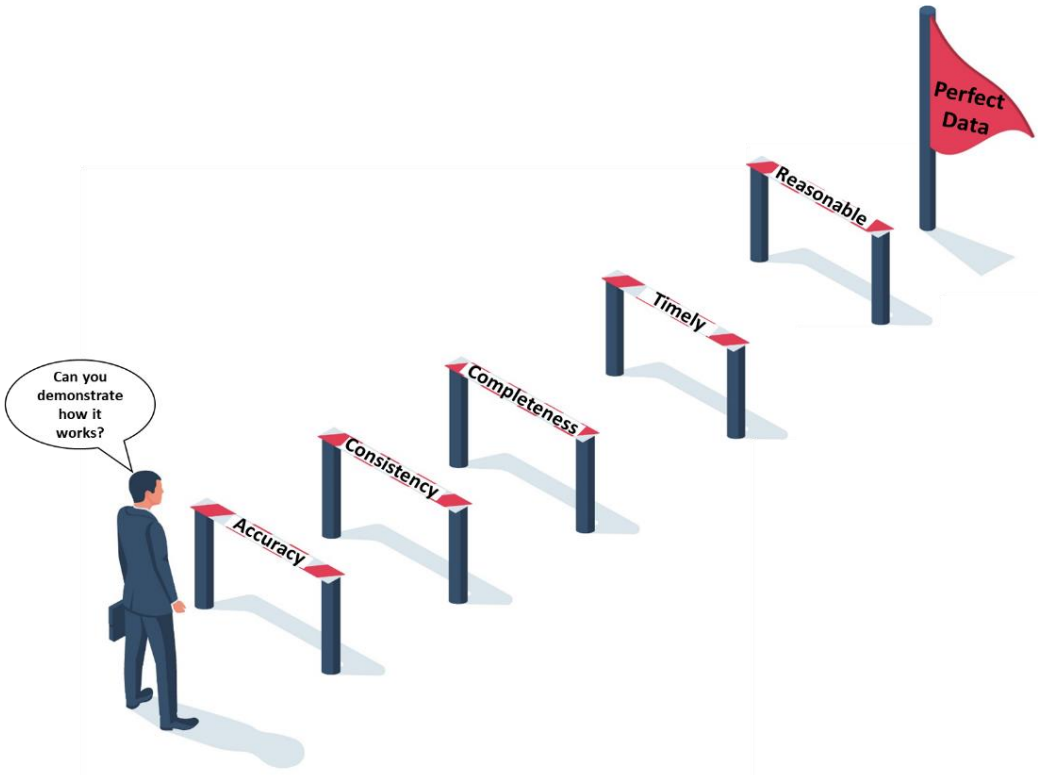
With recent technology advances many companies are exploring controls automation to better manage risks in business and IT operations. They strive to deliver automation, keeping data integrity in check, while combining technologies and augmenting business processes.

Typically, organizations face a range of data issues: multiple disparate systems, fragmented data ownership, and the need for manual interventions before data can be used. Business leaders and technology architects often recite manual adjustments as one of the biggest work drivers.

For instance, manual adjustments have become a core part of Finance' activities to manage the books, and also in performance reporting. Underlying reasons for these adjustments are typically process failures or lack of data controls upstream. The main challenge is in deploying various layers of controls including accuracy, consistency, and evidence that controls work.



Every time data changes form, function, moves between systems, or encounters a manual touchpoint there is an opportunity for error. Hence, a need for data to be controlled.

Typical controls performed on data to deliver the outcomes

Attestation
- sign-off on a piece of data by business owner

Validation
- confirm the data is in line with what was expected

Variation
- data comparison to previous cycle(s) or reports

Reconciliation
- data comparison between different populations

Data controls are required to provide confidence on data which is reported. High quality data is an imperative for modern business. This raises the question “what constitutes bad data”?

Badly organised
- Multiple layers of data, within too many databases, a complex or disjointed architecture

Unusable data
- Illegible, unclean or otherwise unusable data, which is also referred to as "dark data"

Inconsistent / Duplicate data
- Multiple data sources and inconsistencies making it difficult to know what data can be trusted

Unsafe data
- Departments are using data from unauthorised sources

Poorly defined
- No governance or operational definition around data (attributes), hampering reliability

Data decays overtime
- Given a certain error rate your data can become outdated, if not controlled

Lack of robust retention strategy
- Many regulatory penalties happened where organizations are unable to prove data retention and retrieval controls

Movement
- No tracking on transformations as data moves from source to destination through the organization

In response to data concerns, organizations look to automate controls and manual interventions to improve effectiveness and efficiencies. Typical solutions include data lineage solutions, automated controls and RPA. While many software solutions are available and new ones are emerging regularly, firms often struggle to find the right solution.

Responding to a well-publicized Covid-19 catastrophic data error in MS Excel, CTO of leading global fintech firm, Gresham Technologies (Gresham), noted:

> *"The simple fact is that where humans are involved, manual errors will occur. Particularly when those humans are managing an unprecedented, fast moving global event under immense pressure. This is why automation is not just a question of mere day to day cost saving – it is also about the cost, financial or otherwise, of correcting potentially catastrophic errors caused by the simplest of mistakes."* – ***Neil Vernon*** *(CTO, Gresham)*

Simple errors can have catastrophic consequences. To pursue an automation solution, business leaders need to solve two problems: To solve data risk issues, they do not want the organization to be exposed to new risks. They worry about risks that come with automation:

- **Technology** – Poor solutions design may impact existing IT infrastructure. Conversely, routine IT changes may impact existing automation solutions.
- **Regulatory compliance** – Automation errors can reduce accuracy of regulatory reports, risking legal violations, fines and sanctions.
- **Operations** – Processing errors caused by poorly designed automation solutions can result in inaccurate or incomplete financial reporting, the need for restatements and reputational damage. Lack of effective oversight procedures increases operational risks.
- **People** – Automation can negatively impact morale if communications to employees do not focus on the positive impacts to them. More added value, less repetitive work. Also, access to and oversight must be carefully managed to prevent and detect abuse.

> *"Most of us are aware of business' unending frustration with IT's roadblocks to data but, contrary to a current myth, the answer is not free for all, self-service access by users to every piece of data through some sexy visualization tool. That comes after the data is consolidated, blended, cleansed and certified for use. The creation of a high-quality data resource has always been what data warehousing has been about. And that's what automation is about too—but faster, better and more flexible than traditional tools. With automation, we can move from IT's old need—or necessity—to control everything to empowering both business and IT people to each do what they do best. Business defines what data is needed and how it should be analysed iteratively, with IT capturing the business needs and applying quality and production values in flight."* – ***Dr. Barry Devlin*** *(Visionary, founder of data warehousing)*

Solutions

Data is called the fuel of the fourth industrial revolution. Yet there is a lot of "bad data" out there: data that is not ready for immediate use. Missing data, inconsistent data, logic conflicts, and duplicates data all result in data quality challenges.

Badly organized data and unusable data ("dark data") are the two most common issues we see. While capabilities to work with unstructured data are on the rise, the issue is typically more fundamental: poor legacy infrastructure and lack of data ownership are common causes. This results in many processes that still require human intervention to improve the data and get work done.

Is response, many business professionals have built spreadsheets or databases on their PC to get the work done. The use of so-called End-User Computing applications ("EUCs") is widespread in business. It could be argued that in many organizations Microsoft Excel is the actual operating platform in many organizations, instead of the organization's ERP system.

The downside of EUCs is that they are very hard to control. How to ensure that calculations are correctly done? How to know there are no hard-coded "plugs" in an Excel macro? Is the data coming from the right sources and did we use the latest data? In addition, are exceptions raised through ad hoc channels (email or chats) to report and be resolved?

It is not surprising that a recent Deloitte study found that most organisations plan to improve their digital controls and improve Finance processes with automation, analytics and other technologies. 53% of over 1,700 Finance, Accounting and other professionals say their companies plan digital controllership improvements. Two solutions are typically applied to improve data controls: Intelligent Automation and Workflow-based controls engines.

Benefits of Intelligent Automation

Since the financial crisis in 2008, a lot of new regulations have demanded new and stringent financial controls to be put on institutions, e.g. CCAR, SACCR, S166, dear CFO letters, etc. The Finance department must deal with all the required new controls in addition to their existing activities. While the work has gone up, the number of workers has not. There is a need to improve automation in Finance to avoid new EUCs and high-risk control failures.

Intelligent (Process) Automation is a new generation of software-based automation. It combines methods and technologies to execute business processes automatically, on behalf of knowledge workers. A key approach to intelligent automation in Finance & Accounting is the use of Robotic Process Automation ("RPA") to increase efficiency and internal controls; considered a top priority by 35% of the financial executives surveyed.

We have been using Alteryx to collect and prepare data for analysis, RPA (UiPath) to select the sample data and perform checks/reconciliations, a workflow tool if a human-in-the-loop is needed to investigate exceptions, and a reporting tool (Tableau, Power BI) for reporting.

We observe time savings of 70%-90% versus the manual performance of these tasks. In addition, these automation tools are much easier to control and audit compared to EUCs.

Further benefits of implementing Intelligent Automation include:

- better strategic use of employee time;
- reduction of repetitive, manual work;
- reduction of human error;
- improved visibility on potential risks from testing wider data sets.

Benefits of a workflow-based controls engine

One step further than intelligent automation of the existing process, is to use workflow-based controls engine. This type of automation makes it possible to process and analyze data real-time. The Treasury function of a large corporation could use this to have a real-time view of a company's cash situation, across legal entities and bank accounts. Similarly, a bank could automate trade reconciliations.

For a large investment bank, we built such a trade reconciliation. The bank needed to compare (reconcile) the data from 5 million daily trades between two of its system. Traditionally this was done the next day, a process involving several spreadsheets to investigate differences. We built an automated data reconciliation tool using Gresham Tech's Clareti platform.

While this brought financial savings from efficiency and reduced need for reserve buffers, arguably the biggest benefit is the "population" advantage. This is the ability to move beyond sample testing as we can now control, investigate and audit every transaction in detail. Needless to say, this provides additional assurance for both management and regulators.

Other benefits of implementing a workflow-based control engine include:

- Documentation of controls;
- Ability to manage exceptions in a controlled environment;
- Ability to see all business and tech controls on a single dashboard;
- Audit trail for controls and exceptions.

About Boundaryless

Boundaryless is a niche consulting organization in advanced analytics and intelligent automation. We distinguish ourselves with deep expertise, which has resulted in partnerships with leading software solution companies: Gresham Tech, Alteryx and UiPath.

Our certified Alteryx experts and UiPath MVPs help build organizational capabilities and deliver solutions. These can either be automations delivered stand-alone, or as part of a strategic program with your technology team to build and implement strategic solutions.