

A Buyer's Guide to Hyperautomation

Maximizing customer experience and profits through finely-tuned processes

How organizations are blending technology and people to achieve optimal operational performance.

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The next stage of DIGITAL TRANSFORMATION for most businesses in 2022/23 is HYPERAUTOMATION

Hyperautomation is about business process automation of an unprecedented scale. The term is used to describe the step change in productivity and output achieved by applying modern digital technologies to supercharge business processes.

Even in 2022, most organizations continue to process data by depending on regular human manual interventions and the use of documents as a transport between dysfunctional process steps and as a human-data interface.

In this guide we explain the different types of digital automation possibilities that exist to buyers in the digital era.



Knowing Your Capability Model

The start-point to HYPERAUTOMATION is to describe on a single page what your business needs to do to maximize its customer value and profits.

APPRECIATING THE DIFFERENCE BETWEEN CAPABILITIES, PROCESSES AND ACTIONS

- All organizations have a set of Capabilities that define what they do.
- Processes go a level deeper to detail how a processing task is achieved.
- Actions are the interventions of machines and robots to act on data to process it; the **events** that drive your productivity and output.
- The sum of all of the parts is your **Capability Model**. It's used by Enterprise Architects to tune how organizations of a certain type work. For example, every hospital will operate different processes but must fulfil a common set of capabilities.

A Capability Model helps organizational designers to identify those processes that exist, those that matter most, and what proportion of those processes are automated.

The gap between the total number of key processes and processes that are today automated represents the **hyperautomation opportunity**.





Know Your Digital Self

Like humans, organizations have a DNA to describe their design and what gives them their unique characteristics.

We use the term 'Bases' to describe the core constructs of DNA.

While humans have four DNA bases, organizations have ten.

DIGITAL DNA

Your Digital DNA consists of:

- 1. Legal Entities
- 2. Locations
- 3. Organizational Design Structure (Org. Units)
- 4. People
- 5. Roles
- 6. Processes
- 7. Actions
- 8. Systems & Data
- 9. Stakeholders (Shareholders, Customers, and Suppliers)
- 10. Assets





Identify Improvement Priorities

There's only so much time in the day. Sometimes, it's necessary to settle for 'good enough' and concentrate resources on the most impactful improvements.

Before you can achieve step-change improvements in the way your processes work you will need to determine **why** processes exist, **which** are underperforming, and **identify** those that promise the biggest return from investment.

INTERNAL WORKFLOW DESIGN AUDIT

A business workflow design

This is an internal audit of your business process workflows. A consultant will step through your business interviewing managers and workers to ascertain how processes work on the ground.

The aim is to establish what jobs could be done better through automation. Having concluded the audit, a management discussion will determine priority areas for automation based on cost reduction or value gain.





Power Continuous Improvement

Change in organizations today is continuous. Gone are the days when leadership teams envisioned a RE-ORG with the anticipation of transitioning from one state to another with any level of confidence that the new normal would stay the same for years.

For an agile enterprise, **Improvement Management** is a business-critical process like any other. Therefore, it needs to follow a typical life-cycle model of: design > implement > operate > review.

YOUR TECHNOLOGY ECOSYSTEM

A business workflow design

This is an internal audit of your business. Underpinning your improvement process, will be a technology ecosystem that brings your team access to the orchestration tools and technology capabilities needed to automate processes.

Business Process Modelling (BPM)

Business Process Modelling (BPM) describes technology used to articulate processes and install simple technology instruments to augment data processing at various stages.

BPM tools use point and click tools to design process flow automations. These either run left-to-right or down a screen, articulating the if/then events that determine how a packet of work is processed through a series of actions and events. In the last decade, rich data analytical tools and dashboards have massively improved the ease of use of BPM software tools, allowing non-technical business analysts to shape processes in hours, not days or weeks.

IT AND THE PROCESS AUTOMATION JOURNEY

A business workflow design

For many years, the IT industry has understood BPM to mean Business Process **Management**.

In truth, almost no traditional BPM solution did actually manage processes. To do that requires a higher level of automation than was possible in previous generations of IT.

Only now, with advances in Artificial Intelligence and Software Robots, is the opportunity of digital governance of processes being realized.

Robotic Process Automation (RPA)

Robotic Process Automation (RPA) describes a collection of data processing technologies that offer simple automation of process steps by mimicking the behaviors of humans.

These information processing services are helpful as an approach because they obviate the need of IT systems to be adapted.

Data integrations between IT systems remain a complex and costly problem to overcome. RPA therefore allows organizations to automate without the high costs of IT change or integration.

WHAT SOFTWARE BOTS CAN DO

Use Cases of RPA

Examples of bots include automating a **key-fill data entry** routine (so a human doesn't need to do it); a **reporting routine** that gathers reports, aggregate them and publishes them; and **swivel chair use cases** such as taking data from one system and upload it to another (i.e. without needing to perform an application integration).

Sometimes, RPA is inappropriately used, as it is better and more efficient in the mid to long-term to install robust machine-to-machine processes rather than 'glue' systems together using bots.

Artificial Intelligence

Artificial intelligence describes the simulation of human intelligence processes by machines, especially computer systems. Examples include expert systems, natural language processing, speech recognition and machine vision.

Artificial Intelligence SHOULD describe the use of computers that can learn by themselves to rationalize inputs and mimic human decision making behaviors. As the technology has become an IT buzz-word, the term now gets used to describe a wide range of algorithmic decision engines.

AI AND HYPERAUTOMATION

Using machine intelligence

Al has a role to play in process automation today. It (1) increases the volume of data processing performed by of learning engines, (2) reduces the time taken to 'learn from data' and, (3) has the potential to increase the consistency and reliability of decisions.

Often, AI can be used *as a service* to allow humans to reduce the number of escalations they need to manage.

Obstacles to the adoption of AI have less to do with its maturity and cost, more to do with data quality and the ability of organizations to embed it into incumbent systems and processes.

Data Integration, Mashups and ETL

One of the greatest inhibitors to process improvements is the existence of data silos, largely the consequence of operational silos.

This happens because, as departments grow over time, they establish systems and processes that operate in isolation; often acting against the overarching objectivity of the enterprise.

Modern no-code data mashup tools and digital documents allow data to be harvested from siloed business systems for re-use.

DATA QUALITY AND INTEGRITY

Why data quality is a problem

When data is used to serve a specific purpose, its completeness and quality can suffer. Re-using data for new purposes (such as data analytics, software robotics and artificial intelligence) cruelly exposes these shortcomings in data quality. Unsurprisingly, the most common reason for business intelligence and AI project failures is data quality.

Advances in codeless data harvesting, cleansing, transforming and data integration tooling mean that it's now much easier to overcome both the challenges of connecting to data systems and the act of preparing data for use by new systems.

Chain Links and Micro-Automation

Chain links are cause-and-effect micro-automations that can exist during any data transfer, plug-in configuration, data integration, key-fill form event, or button press.

Chain links perform an important service in hyperautomation (often understated) by streamlining processes with machine-to-machine automations used to pre-prepare data to make it consumable.

MICRO AUTOMATIONS AND DATA RE-USE

When data is put to new uses, it's quite common for process designers to need to make changes to it. For example, acquiring information from one system might enable a process to learn enough in order to set a workflow rule.

Here's a simple example—'If you see the word 'SVP' in the Job Role field, then check field 'Is a Member of the Exec. Team.' Then, assign tasks to 'Member of the Exec. Team.')

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