We are Frontier

Scaling beyond Pilot Purgatory

A MiCRONOS whitepaper
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MiCRONOS

Welcome to the Frontier

Over the past few years, artificial intelligence has moved from buzzword to boardroom priority. Organizations everywhere are experimenting, piloting, and testing AI solutions at an unprecedented pace. And yet, many of these efforts never make it beyond the experimental phase. This phenomenon has a name: **Pilot Purgatory.**

The term was popularized by McKinsey and the World Economic Forum to describe a state of corporate limbo. Companies launch dozens of proofs of concept, but struggle to turn them into production-ready solutions that truly change how work gets done. The result is frustration: enthusiasm without impact.

Belgium is no exception, yet it is also uniquely positioned. Over the past years, Belgian enterprises have significantly increased their adoption of AI, moving from roughly 14% in 2023 to about 25% in 2024, ahead of the European average (source DESI index). Around 76% of Belgian firms report running AI pilots or experiments. But only a fraction -roughly 21% - have successfully embedded AI into their daily operations at scale (source PWC's 2024 Tech Survey).

This gap tells an important story. Belgian companies are curious, ambitious, and willing to experiment. What holds them back from scaling is not intent, but execution.

Yet, scaling AI into daily operations matter. Belgium cannot compete on low labour costs. Its economic strength has always come from productivity, knowledge, and innovation. From early industrial breakthroughs to advanced chemical and manufacturing industries. To stay competitive, organizations must move beyond pilots and make intelligence available everywhere, all the time.

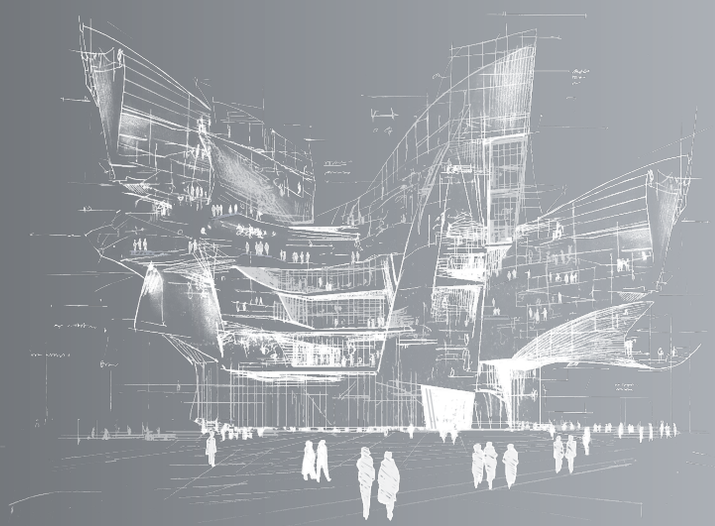
This is where the idea of the **Frontier** comes in.

A Frontier organization is not defined by how fast it ran its first AI pilot. It is defined by how effectively it scaled intelligence across employees, customers, processes, and innovation. It operates with **Intelligence on Tap**: AI that is embedded, proactive, and deeply integrated into how work happens and how business processes are shaped.

1) McKinsey's "The state of AI in 2025" notes a slight uptake globally showing ~30% of companies beginning to scale AI into their daily operations.

What is a **Frontier** firm

Microsoft's Frontier transformation framework identifies four pillars of an AI-first "Frontier Firm". In plain terms, these pillars involve:



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Enriching Employee Experience

Elevating every employee with AI so they can focus on creative, high-value work instead of drudgery (from "humans as workers" to "humans as orchestrators.").

Reinventing Customer Engagement

Using intelligent agents and analytics to anticipate needs and personalize at scale, turning support into proactive partnership (from "reactive support" to "agentic, autonomous service.").

Reshaping Business Processes

Redesigning workflows end-to-end around AI capabilities rather than simply adding AI on top of old steps (from "paving the cowpath" to "building new AI-native roads.").

Bending the Curve on Innovation

Leveraging AI to dramatically accelerate R&D and continuous innovation, so growth becomes exponential rather than linear (from incremental improvements to "exponential breakthroughs.").

Each pillar represents a shift from a pilot/trial mindset (the "as-is" state many firms are in) to a scaled, AI-driven "to-be" state of a Frontier enterprise. In this whitepaper, we will examine each pillar: the current vs. future picture, important challenges companies face, and practical initiatives to overcome those obstacles and start to realize the to-be scenario.

The future does not belong to those who experimented the fastest.
It belongs to those who scaled the smartest.
Welcome to the Frontier.

2) For more information about the Microsoft Frontier transformation framework : 2025: The year the Frontier Firm is born

Prologue - before you begin
Intent comes before intelligence

00

In a world where AI and emerging technologies change everything at lightning speed, companies need to make sure that, before they start building, they know exactly what they are building toward. Because one thing is certain: doing AI just for the sake of doing AI is not a strategy. It is a recipe for disappointment, wasted effort, and, as many organizations experience today, yet another pilot that gets stuck in Pilot Purgatory.

AI is not an end in itself. Without clear strategic choices, AI becomes a collection of isolated proofs of concept: a chatbot here, a smart Excel report there, a predictive model that never becomes part of an actual process. The result? Enthusiasm without impact.

Therefore, the real question every organization should ask is not: “What can we do with AI?” but: “Where can AI meaningfully remove today’s biggest blockers in how we create value?”

The Frontier approach that anchors this whitepaper, and developed further in the four upcoming pillars, rests on one foundational insight: **AI only generates value when it is tied to a clear business objective.**

Before you build, know what you are building toward. That is why direction must always precede technology. A clear strategic frame that determines where AI can deliver real impact; which problems must be solved first; which data, skills, and processes are needed and how to move from pilot to enterprise-wide adoption. Without such a frame, AI becomes fragmented. With such a frame, AI becomes a lever for structural growth.

For anyone embarking on the journey toward a **Frontier Firm:**
You don’t begin with technology, you begin with vision.

Call for **Action**

Run a strategic discovery with your senior leadership team to identify future scenarios, customer and behaviour insights and assess where value can be created using AI and which opportunities matter most. Norden is one of the Competence Centers within the Cronos ecosystem that has the expertise and skills to assist.

Enrich
Employee Experience

Chapter 01

01

From workers
To orchestrators

For decades, digital tools promised to make work easier. In practice, many knowledge workers feel busier than ever. Endless emails, meetings, status updates, manual data entry, and tool switching dominate the workday. This is what we call digital debt: the accumulated friction created by fragmented systems and manual processes.

In most organizations today, AI exists only in pockets. A chatbot here. A smart Excel feature there. Employees must actively prompt, copy-paste, and switch tools to get value. The gains are real, but modest. People still spend too much time on “work about work.”

A Frontier organization makes a different choice.

Here, the role of the employee shifts from human as the worker to human as the orchestrator. AI is no longer something you summon, it is something that works in the background. Routine tasks such as scheduling, note-taking, first drafts, data transfers, approvals, and internal questions are handled by AI agents that operate continuously.

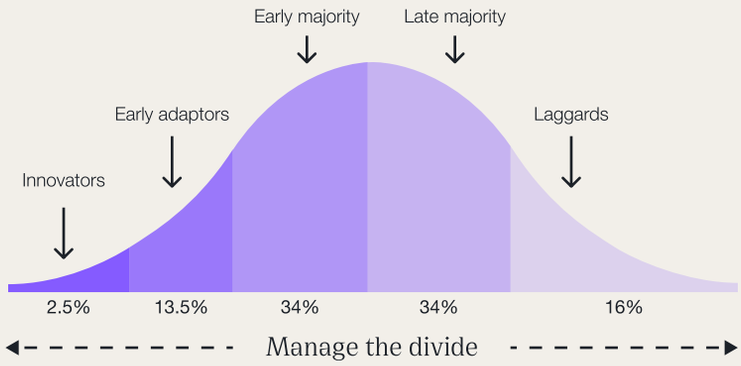
Humans stay in control, but they focus on what humans do best: creativity, judgment, collaboration, and problem-solving. AI handles the execution; people provide the intent.

Skills:
The foundation you cannot skip

Belgium has a solid foundation of basic digital literacy. Around 59% of the population has basic digital skills. Yet advanced digital and AI skills tell a different story. Only about 43% of companies actively invest in digital skills training. This skills gap means that while tools like Office 365 are broadly available, not all employees use them to their full potential. There is still a need for continuous upskilling so that the workforce can make better use of modern platforms and not just adopt them in name.

As for AI literacy, it is emerging as a clear priority for organizations. AI awareness is spreading fast, with nearly a quarter of Belgian workers now using AI regularly at work. That’s 16% more than the year before. Still, around 40% of employees use no AI tools at all, which creates a growing divide not just between companies, but also within them. Despite this rapid adoption, only 30-40% of companies are actively investing in upskilling employees for AI tools. Without structured training and support, staff may resist or under-utilize AI systems, limiting the potential benefits and innovation that these technologies can offer.

The consequences of this internal divide are significant. Teams that embrace AI can streamline operations, make faster decisions, and focus on higher-value work, while those left behind risk becoming less efficient and more isolated. This gap can lead to uneven productivity, lowered morale, and a culture of resistance to change. Ultimately, organizations that fail to address the disparity may struggle with collaboration, face increased turnover, and lose their competitive edge as the digital transformation accelerates.



"The hardest part of AI isn't the tech.
It's getting people to change how they work."

Satya Nadella - Chairman and CEO, Microsoft.
Interview with Business Insider, June '25

Call for Action

Assess your current digital and AI maturity. If needed, start focused upskilling programs. Building confidence and literacy is the fastest way to turn anxiety into adoption. Partners such as The Flow and Learnia have a vast experience in assisting companies with digital upskilling journeys

Breaking through the real obstacles:
Start where it hurts most

Moving toward an enriched employee experience is not just a technical challenge.
It is an organizational one.

Change anxiety and trust: Employees often experience anxiety about how new AI tools might affect their roles, leading to concerns about their future relevance and job security. When organizations fail to communicate a clear vision for how AI will support, rather than replace, staff, mistrust and resistance can quickly set in. This uncertainty may result in reluctance to engage with new technologies or fully participate in transformation initiatives.

Siloed tools: When AI solutions are not seamlessly integrated into the core business systems and workflows employees already use, staff are forced to switch between multiple, disconnected applications. This context switching disrupts work, reduces efficiency, and makes it harder for AI to deliver meaningful improvements. As a result, the perceived value of AI remains low and adoption stalls.

Culture and KPIs: Many organizations continue to measure performance based on visible activity, such as time spent on manual tasks, rather than on real outcomes or value created. This ingrained culture means that automation and AI, which can reduce routine effort and free up time for more impactful work, may be seen as undermining productivity rather then boosting it.

Frontier organizations accept that this shift must happen step by step. They start small, focus on real pain points, and let results build trust.

The fastest way to create momentum is simple: remove friction. Identify repetitive, mundane tasks that consume employee time and automate them. Expense approvals. Timesheet reminders. Password resets. Internal FAQs. Basic data transfers between systems.

Successful organizations begin by automating internal service desk questions or simple administrative flows using tools like Power Automate combined with Copilot agents. Even partial automation can save hours every week. The effect is immediate and visible. Employees feel relief, not threat. AI stops being abstract and starts being helpful.

Call for Action

Pick one or two high-friction tasks and automate them. Demonstrate value quickly. For example, HR digital assistants- such as the one implemented within the xPlore Group - show how AI can reduce workload without reducing people.

The secondary-order effect:
What comes next

Second-order effects refers to the downstream consequences of the efficiency gains mentioned in the previous chapters of the document. Does that time get reinvested in productive work that drives business outcomes, or does it dissolve into low-value activities (or even idle time)? The answer determines whether GenAI's promise translates into real employer ROI or not.

Simply said: Freeing up time is only the first step. What matters is what you do with it.

Just speeding up tasks isn't enough. Frontier firms understand they must **re-engineer workflows and roles** to harness that freed capacity. If they don't, the risk is a "**productivity paradox**": people work faster, but the organization sees little improvement in output or outcomes because the saved time isn't redirected to value-generating work. This challenge isn't new; past waves of automation and IT saw similar issues, where productivity gains only materialized when businesses reorganized work to exploit the efficiency.

In a Frontier organization, the "AI efficiency dividend" is not used to cut staff. It is reinvested. Freed capacity flows into better customer engagement, smarter processes, and faster innovation. This is the bridge to the next pillars of the Frontier model.

> The aim of a Frontier Firm is not to remove the human from the loop, but to raise their altitude. Humans set direction. Intelligence on Tap handles execution. That is how employee experience becomes a true competitive advantage.

Reinvent
Customer Engagement

Chapter 02

From reactive support
To agentic partnership

02

Customer-facing AI solutions often create a strong first impression, though they may not always deliver the seamless experience businesses and customers hope for. In a significant number of Belgian organizations, “AI in customer service” typically refers to a basic chatbot that answers frequently asked questions before transferring the conversation to a human agent. While this can help reduce wait times to some extent, it does not always resolve customer issues from start to finish. Customers may find themselves repeating information, and agents are still required to step in, resulting in a process that is somewhat faster, but not fundamentally improved.

This reflects a reactive approach to engagement, where companies respond to customers reaching out with a question or concern. Although digital channels, such as web, chat, email, and social, are available, they often operate in isolation. As a result, important context may be lost between interactions, and personalization remains limited. In many cases, AI serves primarily to manage call volumes and reduce operational costs, rather than to enhance the overall customer experience.

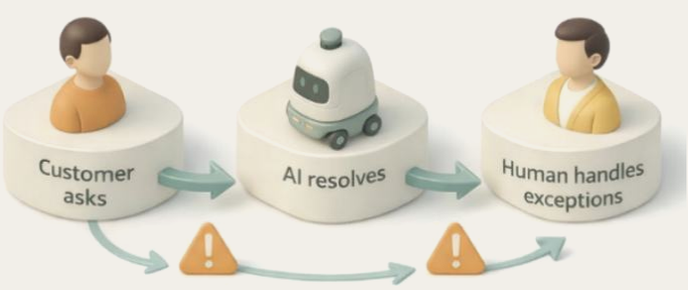
The outcome is generally incremental gains in efficiency, while customer satisfaction remains unchanged. In some situations, AI can even introduce new points of friction, creating a process that is simply a faster version of an experience that still feels cumbersome.

A Frontier organization, however, adopts a distinctly different perspective. Customer engagement becomes agentic: proactive, personalized, and empowered to act.

Instead of waiting for customers to complain, AI systems anticipate issues and step in early. If a shipment is delayed, the customer is notified before they ask. If a service issue is detected, a solution is already in motion. **AI doesn’t just explain what is happening; it fixes it.**

Every interaction is connected. Calls, chats, emails, in-store visits all draw from a single, shared view of the customer. Preferences, history, and context carry over seamlessly. Engagement feels continuous, not fragmented.

Most importantly, **AI is given authority.** It can reroute a delivery, schedule an appointment, issue compensation, or block a fraudulent transaction, without waiting for human approval in routine cases.



The KPI shifts accordingly. **Instead of measuring average handle time, Frontier firms focus on lifetime value, loyalty, and trust.** Each interaction becomes a moment to strengthen the relationship.

From the customer’s perspective, it feels like having a personal assistant.
From the company’s perspective, it is scalable, efficient growth.

Why this is harder
than it sounds

Moving from reactive support to agentic engagement is not trivial.
Companies face several recurring obstacles.

- **Data silos** are the biggest one. Customer information often lives across CRM systems, billing platforms, support tools, and social channels. Without a unified view, AI can only see part of the picture, and personalization suffers.
- **Trust and privacy** are equally critical. Belgian consumers are rightly sensitive to how their data is used, and regulations like GDPR and the EU AI Act raise the bar even further. AI-driven engagement must feel helpful, not intrusive. One misstep can damage trust.
- **Channel overload** is another issue. Many organizations added WhatsApp, chat, and social media support without orchestration. When context doesn't follow the customer, frustration rises.

Finally, there is the **human factor**. Front-line employees need to adapt to working alongside AI. Also rusting it, correcting it, and focusing on exceptions rather than routine questions. That shift requires training and change management.

Lay the groundwork
Scale the routine & amplify the human

Start with the foundations: Unify customer data and channels

The foundation for AI-driven engagement is a 360° customer view. Companies should invest in a modern CRM or Customer Data Platform (e.g. Microsoft Dynamics 365 Customer Insights) to break down silos. For example, compiling purchase history, support tickets, web interactions, and social media sentiment into one profile allows AI to make informed decisions. In parallel, integrate channels: ensure your call center, email, chat, WhatsApp, etc., all feed into that unified system

Without this foundation, any AI you add will operate with blinders on.

Call for Action

Invest in a unified CRM or customer data platform and integrate your engagement channels. This is the prerequisite for meaningful AI-driven personalization and proactive service. The Oxygen group has a vast experience in guiding customers in this journey.

Automate the obvious - properly

The next step is to automate routine interactions, but do it right. Deploy AI virtual agents for tier-1 support: order status, password resets, appointment scheduling, basic troubleshooting. Give these agents access to real backend data so answers are accurate and actionable - not scripted.

Design a clean handoff to humans for complex cases.
Customers should never feel trapped.

This delivers immediate value: 24/7 availability, faster responses, and less repetitive work for agents. It sets a new baseline expectation for service.

A Cronos example

An Energy Company in Europe faced the challenge of maximizing operational efficiency by extending automation beyond simple, routine tasks. With an overload of tickets and customer inquiries on the customer service desk, they looked at AI to help them tackle the workload.

The goal was to address more complex customer service operations, improving response times, and customer satisfaction while reducing the workload on the contact center. Our competence center Roborana was brought in to help create the solution.

By implementing AI-driven solutions, we've enabled instant, automated responses to common queries, markedly improving customer satisfaction by reducing wait times and significantly alleviating the workload on the contact center. Overall, this AI solution relieves the customer service center of 2 000 customer requests per month.

Elevate humans with AI copilots

Automation alone is not enough. Many interactions will still involve people and those people should be augmented, not overloaded.

AI copilots can listen to calls or chats, summarize issues in real time, suggest next best actions, surface relevant knowledge articles, or draft responses. Agents spend less time searching and more time solving.

These human+AI “centaur” teams deliver better service than either alone: faster resolutions, better consistency, and lower stress for employees.

Call for Action

Pilot AI copilots in one customer-facing team. Measure improvements in resolution time, and employee satisfaction, then scale. Competence Centers such as Roborana and Numble have extensive expertise in that area.

Make personalisation the default

Reinventing engagement isn't just about service; it's also about marketing and sales being more relevant. Companies should leverage AI in their CRM to segment customers and tailor what they receive. For example: use an AI tool to analyze customer data for patterns (e.g. which product features different segments use, or what content a customer has engaged with) and then automatically recommend or generate personalized content.

- an e-commerce retailer in Belgium could use Azure AI or Dynamics 365 Marketing's AI features to send individualized product recommendations to customers based on browsing history (akin to how Ralph Lauren built an AI stylist chatbot to recommend outfits).
- a B2B company might use AI to draft a custom sales proposal highlighting exactly the solutions relevant to that client, drawn from past info.

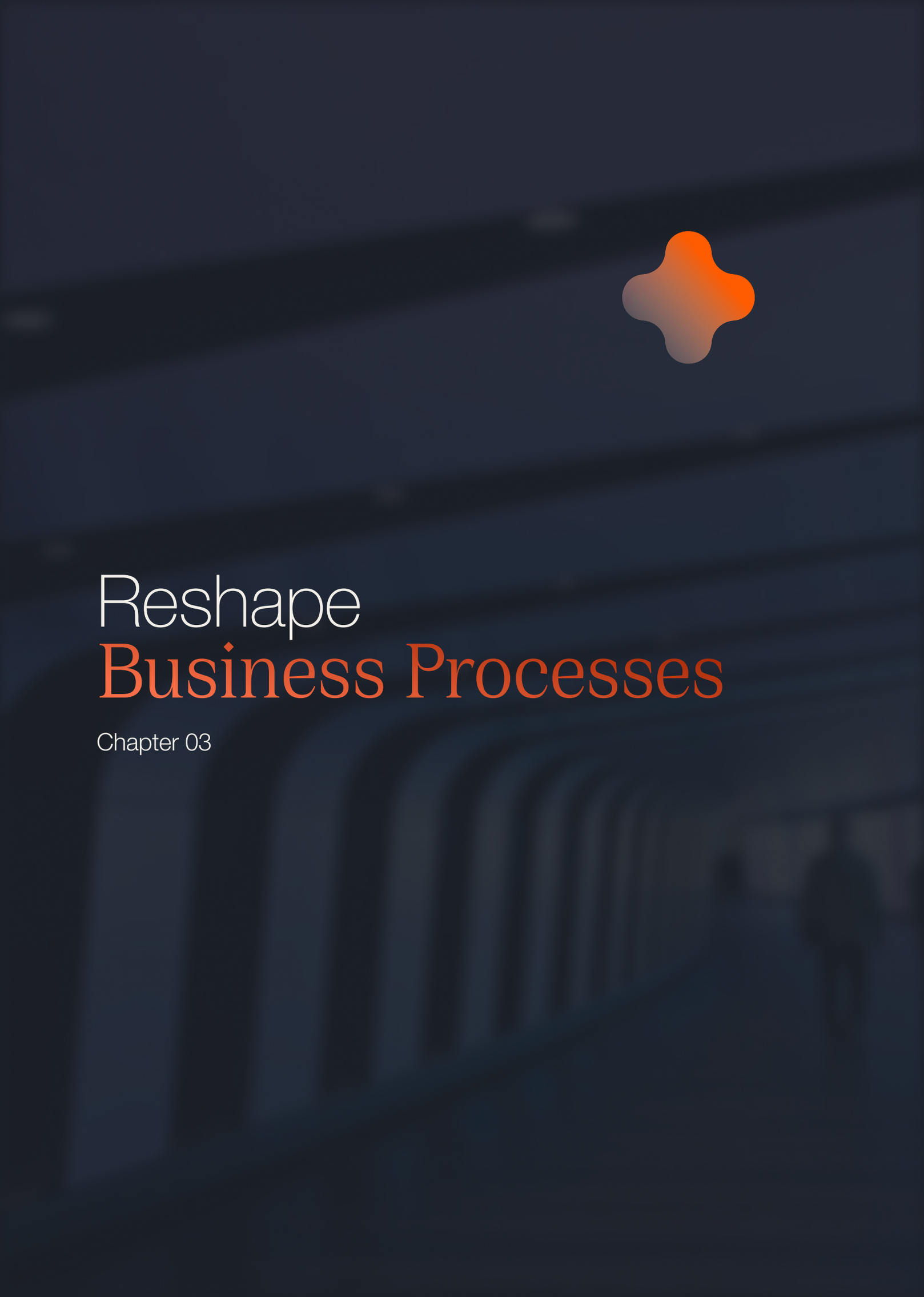
These initiatives turn generic marketing into a one-to-one conversation at scale. The technology can range from AI recommendation engines on websites to email generators that customize messaging. By implementing these, companies often see higher engagement and conversion rates. The key is testing and iterating: use AI to run small experiments (A/B test personalized vs. generic campaigns) and expand what works. Over time, this data-driven personal touch becomes the norm.

From the customer's perspective, they feel the company "gets" them.
From the company's perspective, it's done without needing a huge staff increase.

Design new experiences, not just better channels

Finally, truly reinventing engagement may involve launching innovative experiences that weren't possible before. Think beyond improving existing channels: what new AI-enabled channels or services could you offer? For example, some retailers have introduced augmented reality shopping assistants; others have voice-based AI assistants. A Belgian example: Acco, an education publisher, worked with Cronos to integrate a GPT-based study assistant into their student platform. While that's in education, the concept applies broadly: offering an AI "expert" that customers can interact with to get value from your product. A utility company might provide an AI home energy consultant for customers to chat with about saving electricity. These kinds of offerings change the nature of engagement from reactive service to proactive partnership. This is where engagement shifts from cost center to competitive advantage.

> Reinventing customer engagement isn't about talking faster to customers. It's about acting faster for them. When AI is empowered to resolve problems autonomously, every interaction becomes a moment of trust - and trust is the strongest driver of loyalty.



Reshape
Business Processes

Chapter 03

Stop paving the cowpath.

03

When organizations start with AI, they often start carefully. A pilot here. An automated step there. A smarter report. It feels progress-driven - and it is - but it usually keeps one thing untouched: **the process itself.**

This is the classic “bolt-on” pattern. AI is added on top of workflows that were designed for a different era: human-driven, sequential, filled with handoffs, approvals, and rework. The outcome is predictable: you speed up parts of a broken workflow, but the workflow remains broken.

A manufacturer might use AI to spot defects on a production line, but still require a supervisor to manually log them at day’s end, then wait for a separate quality team to review. Or a construction firm might introduce some automation, while planning still lives in Excel and approvals still happen via email threads.

You may get a 5–10% efficiency gain. Helpful, yes. Game-changing, no.

And the deeper cost remains: **the complexity tax.** As the company grows, coordination grows faster. More people, more handoffs, more waiting. AI doesn’t remove this tax if it’s forced to fit inside 20th-century workflows.

A Frontier organization transforms business processes by replacing traditional human-driven workflows with AI-driven orchestration.

Instead of a linear sequence of tasks passed from person to person, the process becomes event-driven and parallel. AI agents can trigger actions instantly, move data between systems automatically, and only involve humans when something is unclear, risky, or truly exceptional.

The design question changes. It becomes:
“If I had 1.000 experts who never sleep, how would I do this process from scratch?”

Then you build toward that reality.

Take order-to-cash as an example. In the old model: sales enters an order, finance invoices days later, fulfillment schedules delivery, and customer updates happen manually. In an AI-first model, an order can trigger an integrated flow (credit check, inventory booking, invoice creation, delivery scheduling, etc.) automatically. A human is pinged only if something looks off, like an unusually large order, missing data, or a compliance risk.

The human role shifts from doing every step to supervising the system and handling edge cases. The process runs 24/7, not “during business hours.” Cycle times drop from days to minutes. Errors approach zero. And the organization can scale without adding complexity at the same rate.

This is where AI stops being a tool. It becomes a competitive weapon.

Reshaping processes
changes how an organization operates

While the promise of AI-first processes is compelling, the journey is filled with challenges. Organizations face technical, structural, and cultural hurdles that must be overcome for transformation to succeed.

- **Legacy Systems and Infrastructure:** Many Belgian companies (especially in manufacturing, logistics, public sector) rely on older IT systems or on-premise ERPs that are not easily automated or integrated via AI. These can be fragile or lack APIs. Upgrading such core systems or layering AI on top is a non-trivial challenge, often requiring significant investment and migration (which some firms are reluctant to do if the old system “still works”).

- **Process Knowledge and Redesign Skills:** Knowing that a process is inefficient is one thing; redesigning it from scratch is another. Many organizations lack process engineering capabilities combined with AI expertise. The people who deeply understand the current process might not be familiar with what AI can do, and vice versa. This can lead to suboptimal redesign or simply automating existing steps without re-imagining them.

- **Change Management and Roles:** Radically altering processes means roles and responsibilities will change. Some jobs will shift from execution to oversight. Departments might merge or boundaries blur (since an AI can cross silos easily). This can threaten middle managers or others who identify strongly with their current role in the process. Organizational inertia or even politics can thus slow down ambitious process overhauls. Judson Althoff (Microsoft) warned that business-IT misalignment can derail these efforts – both sides need to collaborate closely.

- **Data and Quality Issues:** AI-centric processes require good data flows. If data is incomplete or error-prone, automating the process can lead to automated mistakes. For example, if an AI is replenishing stock but the inventory data is wrong, it could trigger problems. Many companies need to clean up master data and instrument their operations with sensors/IoT for real-time data before they can trust AI to run things. This is a foundational challenge in sectors like manufacturing and logistics.

- **Governance and Exceptions:** Letting AI make decisions autonomously raises governance questions: how do we ensure compliance (in regulated processes), how do we audit decisions, what if the AI encounters a new scenario? Designing robust exception handling (so the AI knows when to stop and escalate to a human) and satisfying auditors/regulators (through logging, controls) can be complex.

Focus, simplify, transform:
Begin with one process that matters

Start by pinpointing one core business process that, if dramatically improved, would yield significant benefits (cost, speed, customer satisfaction). Common candidates are things like order fulfillment, client onboarding, claims processing (insurance), procure-to-pay, etc. Map out all the steps, handoffs, and pain points in the current process. This often reveals obvious delays (e.g. waiting two days for manager approval) or redundancies. In Belgium, many firms have done this via Lean/Six Sigma exercises for years – the difference now is to map with an eye for "what could AI/automation do here?"

A useful approach: mark steps as "H" (human does it) or "C" (could a computer/AI do it). If a step is rules-based or data-driven, likely a candidate for AI/automation. This systematic mapping sets the stage.

The initiative here is essentially a discovery and scoping project: **Process X Reimagination Workshop,** involving IT, process owners, and AI specialists together. The outcome should be a vision of a new streamlined process (often shorter, parallel where possible) and a list of required capabilities (e.g. need an AI to predict failures, or need an IoT sensor feed, etc.).

Digitize and automate
Low-hanging tasks first

Before jumping to full autonomy, automate some obvious sub-tasks in the process. This is akin to laying groundwork and proving value. For instance, use RPA (Robotic Process Automation) to automate data transfer between two systems that the process currently handles manually. Or introduce a document AI to extract data from forms (invoices, applications) that people currently retype.

These quick wins (often doable in weeks with tools like Power Automate or AI Builder) can cut out tedious steps and get teams comfortable with automation. In a Belgian context, think of a city administration using an AI to scan and categorize citizen requests that used to be sorted by staff – that could speed up response by days.

Each small automation not only saves time but also conditions the organization to trust and work alongside digital assistants. As Microsoft notes, even basic automation highlights bottlenecks and prepares everyone for deeper AI integration. Measure improvements from these steps to build momentum and justify further investment.

Upgrade
The decision point

Identify points in the process where a human currently makes a decision or prediction, and introduce AI to assist or take over that decision. For example, in a loan approval process, a human might assess risk – here an AI model could provide a risk score or even an automated approval/reject for low-risk cases.

Initially, use these AI models in a recommendation capacity: let the human decision-maker see the AI's suggestion and factor it in. Over time, as trust in the model grows (and accuracy is validated), you can let the AI make more decisions directly. Belgium's industries have started this: e.g., Colruyt Group (retail) reportedly uses AI to forecast store inventory needs, aiding planners. AB InBev uses AI to optimize brewery operations, helping managers decide when to adjust brewing parameters. These are mid-process decision injections.

The initiative is to develop or adopt an AI model for a specific decision – likely requiring gathering historical data, training an ML model or using a cloud AI service, and then integrating it into the workflow software. This step can significantly improve outcomes (e.g. fewer stockouts, or faster approvals for customers) and sets the stage for the next initiative, which is redesign.

Call for Action

Identify one critical decision point in your workflow, make it smarter (by gathering historical data, selecting or training a mode) and integratie it into the workflow to enable smarter, faster decisions and prepare for full process redesign. Sparkle is one of the Competence Centers in the Cronos Ecosystem that has extensive expertise in that area.

Reengineer
the workflow around AI

This is the moment where most companies hesitate and where Frontier firms pull ahead.

Once you have some automated tasks and AI-driven decisions proving out, **redesign the entire process flow** to fully exploit these capabilities. This is the big step: remove unnecessary steps, reorder tasks, and let the AI operate with minimal checkpoints. Essentially, you move from a human-centric design to an AI-centric design.

For example, if earlier an employee had to batch all AI recommendations and then get director approval in one lump, perhaps now the AI can process each item in real-time and only ping the director's dashboard for oversight of anomalies

A concrete case: A Belgian port operations company reengineered its container scheduling process, after implementing sensors and AI predictions for crane availability, it changed from a once-a-day planning cycle to a continuous optimization. Humans intervened only when the AI flagged a conflict it couldn't resolve. This cut idle time massively.

The initiative here often involves workflow automation software or custom development: basically implementing a new system or using an orchestration tool (like Microsoft's Power Automate for multi-step flows or more advanced BPM software) that codifies the new process logic (including where AI models are called, where approvals happen, etc.).

It's crucial at this stage to update work instructions, retrain staff on their new roles ("you no longer manually assign tickets; the system auto-assigns and you oversee exceptions"), and run parallel trials to ensure nothing breaks.

Microsoft emphasizes that you can't just layer AI; **you must change the process to be AI-centric to get big results.**

From Copilot to autopilot

In the most advanced incarnation, aim for "self-driving" processes where possible. This means the process can run end-to-end with minimal human touch, with AI agents not only deciding but also acting across systems. For instance, a finance process where an AI agent can detect an unusual expense claim, cross-verify it against policy, approve it, and trigger reimbursement automatically. Humans get involved perhaps only in oversight or periodic audits, or if the AI flags something truly out-of-bounds.

Achieving this requires robust integration so the AI agents can execute transactions in underlying systems. It also requires governance: setting boundaries for what the AI can and cannot do (for example, maybe the AI can auto-issue refunds up to €500, beyond that a person must approve).

The initiative for a company is to pilot autonomy in a contained environment: maybe run an "autonomous process trial" during off-hours or on a subset of cases. For instance, an e-commerce company could let AI entirely handle a small segment of orders from purchase to shipment (with humans monitoring in the background). Over time, expand the scope as confidence rises. The final goal is that employees shift to monitoring dashboards and handling exceptions, trusting the "digital workforce" to do the bulk of routine operations. While full autonomy is rare today, incremental steps toward it deliver increasing returns, and it is the logical end-state of reshaping processes.

The Frontier end-state is not chaos. **It's autonomy with guardrails.**

Aertssen use case – A text book example

Cronos helped Aertssen Group (a Belgian heavy construction company) reimagine how they do equipment maintenance. Traditionally, Aertssen serviced their cranes and machinery on fixed schedules or when a breakdown occurred – which either wasted resources or led to costly downtime.

Cronos's Mr. Watts team partnered with them to develop a predictive maintenance approach: AI models analyze sensor and usage data to flag when a machine is likely to need attention. They started with a proof of concept that visualized machine health status in real-time (green to red indicators) and predicted failures before they happen.

Early results showed the AI could indeed catch issues ahead of time, allowing maintenance to be done "just in time" rather than too early or too late. Armed with this insight, Aertssen is now reshaping its maintenance process – instead of routine checks on every machine, technicians focus only on those the AI flags, and they plan work routes more efficiently knowing which machines will need service and where.

The process went from reactive and schedule-based to data-driven and proactive, reducing unplanned downtime and optimizing labor. While humans still make the final call on repairs, the heavy lifting of monitoring and decision-making is now handled by an AI system.

This is a textbook example of taking a 20th-century workflow (maintenance rounds) and rebuilding it around AI's capabilities (constant monitoring and prediction). It showcases how even traditional sectors like construction can achieve Frontier-level process improvements with the right approach.

You can't reach the Frontier by adding AI to a 20th-century workflow. The breakthrough comes when you redesign the workflow for a world where intelligence is always on, always available, and fast enough to run the business in real time.

Bend
The curve on Innovation

Chapter 04

Move from linear progress to exponential discovery

04

For organizations that find themselves stuck in pilot purgatory, innovation often follows a linear path.

A team brainstorms. A plan is written. A pilot is built. It gets tested. It gets refined. Then, if all goes well, it scales. Each step depends on the one before it. And because real-world testing is expensive, slow, and risky, teams tend to place cautious bets.

AI shows up in this world mostly as an add-on: better analytics, slightly improved detection systems, a smarter quality sensor, an “AI-enhanced” feature on an otherwise unchanged product. Useful improvements, but rarely a leap.

This is also why pilot purgatory feels so frustrating. Lots of small experiments, but limited ROI. The experiments aren’t connected to a clear path to scale, and they don’t change the underlying math of innovation: each new idea still requires time, people, and budget to validate.

As companies grow, this gets worse. Coordination increases, risk tolerance drops, and innovation output often plateaus. Even when there’s talent and ambition, the system keeps innovation slow.

> Bending the innovation curve isn’t about working harder. It’s about changing the economics of experimentation.

AI does two big things at once:

- It accelerates discovery and validation
- It democratizes innovation beyond the R&D team

In the Frontier state, AI enables fast cycles of simulation, design, and testing at a scale humans can’t match. Instead of prototyping three options in a month, teams can generate and evaluate hundreds in an afternoon. Instead of spending weeks preparing a first prototype, they can use AI to draft the concept, the business case, and even the first version of the product.

This is why the cost of failure drops. When failure is cheap, teams try more ideas. When teams try more ideas, they find better ones. That’s the curve bending: more shots on goal, at lower cost, with faster learning.

At the same time, innovation stops being a specialized department. With copilots, low-code tools, and natural-language interfaces, a marketing analyst, operations manager, or customer service lead can build solutions in their own domain, without waiting in an IT queue.

Innovation becomes an everyday capability. The business impact is real: faster time-to-market, differentiated offerings, and new revenue streams that were previously out of reach.

The obstacles are real

Bending the curve requires more than tools. It requires a shift in how the organization funds, governs, and rewards innovation.

- **Resource and mindset lock-in** is common. Many firms allocate innovation budget once a year to a handful of “big bets.” That structure is not built for rapid iteration. It also reinforces risk aversion, especially when previous tech investments didn’t pay off quickly.

- **Talent gaps** matter too. Not every company has AI experts who can build complex models or simulations. Domain experts need new skills to work alongside AI tools, interpret outputs, and guide experimentation.

- **Infrastructure can limit ambition**. High-quality experimentation requires data and compute. Cloud services reduce the barrier, but many organizations still struggle with readiness and know-how.

- **Regulation slows radical change** in certain industries. Healthcare, finance, and public services must balance speed with strict oversight, transparency, and compliance.

- **And there’s a final trap: integration.** Many organizations can prototype, but cannot industrialize. Without a clear path from prototype to production, faster experimentation simply creates more pilot purgatory.

Build an innovation engine
not a one-off project

The goal isn't "do more innovation activities." The goal is to build a repeatable system that turns ideas into outcomes. Establish "AI Innovation Labs" with Access to Tools & Talent

Set up a dedicated innovation program focused on applying advanced AI to business challenges. This could be an internal AI lab or center of excellence (possibly in partnership with universities or companies such as Cronos). Ensure this lab has access to necessary resources: cutting-edge AI platforms (Azure AI, OpenAI APIs, etc.), high-performance cloud computing, and a mix of data scientists and domain experts.

The mission of the lab: rapidly prototype and simulate ideas. The lab should operate with agile methods – short sprints to test an idea, and clear criteria for success or pivot. For example: Colruyt Group has an AI and Robotics R&D hub; IMEC in Leuven offers partnerships where companies can tap into advanced AI research for product innovation. Cronos Group itself fosters innovation at it's core through its ecosystem of competence centers

Call for Action

Create a small AI innovation program with access to modern AI tooling, cloud compute, and a mix of domain experts and data/engineering support. Run short sprints with clear success criteria.

Use Generative AI
to expand the idea space

Encourage teams to use generative AI tools to boost creativity and speed in the early stages of innovation. For instance, use Copilot to brainstorm product ideas, to write draft proposals or even code for a prototype app. A practical step: train employees on how to use Copilot in their innovation workflows. Perhaps run an "AI ideation hackathon" where cross-functional teams spend a day using AI to come up with solutions to a problem.

Generative AI can also produce synthetic data for simulations, overcoming data scarcity in testing new concepts. For example, a telecom could generate simulated network traffic patterns to test new algorithms for routing without risking the real network.

This initiative democratizes participation because you don't have to be an AI expert to use these tools for creativity. It helps overcome the blank page syndrome and can produce surprising, outside-the-box concepts that purely human teams might miss. The cost of experimenting with ideas drops dramatically when an AI can churn out prototypes (be it text, design, or code).

Call for Action

Start by training your teams on GenAI tools and organize an AI ideation hackathon to accelerate brainstorming and rapid experimentation. The Flow is one of the competence centers in the Cronos ecosystem that can help in this area.

Enable citizen innovators
with low-code and copilots

To spread innovation beyond the R&D or IT teams, roll out low-code development platforms (like Microsoft Power Apps) and encourage employees in all departments to create their own solutions for local problems. Also introduce AI copilots for development (like GitHub Copilot) to help those with limited coding experience to build functional applications or workflows. The initiative can be structured as an internal innovation challenge: e.g., invite employees to build a useful app or automation in a day, offering training and prizes. Many organizations have had success with Power Platform hackathons, where non-engineers create applications (e.g., a maintenance request app built by facility managers, or a customer FAQ app built by a customer service rep) essentially allowing the people closest to the problem to craft the solution, with AI assistance. It shortens the feedback loop and increases adoption.

This not only increases the pipeline of innovation (more minds working on it) but also drives adoption of new solutions (people build tools they need, so they use them). Microsoft's Copilot Studio and the upcoming ability to create entire apps via natural language will supercharge this. By getting in early and training staff on these, companies prepare to unlock a new wave of grassroots innovation.

Make failure cheap
through simulation

Digital twins, scenario models, and AI-driven testing allow companies to "fail" virtually, learn quickly, and reserve real-world pilots for the most promising options. When done well, simulation becomes the safest way to be bold.

This applies far beyond manufacturing. Service organizations can simulate customer demand, operational flows, or market responses. Strategy teams can model competitive scenarios. Product teams can stress-test new business models before investing heavily.

The core idea is "fail" virtually to learn quickly, so you only invest in physical trials or pilots for the most promising ideas. This dramatically lowers cost of innovation.

As one tech exec put it, when the cost of curiosity drops to near zero, you ask more questions and try more things. That's bending the curve – more shots on goal at low cost to potentially find a game-changer.

Call for Action

Identify areas where expensive experimentation can be replaced or augmented by simulation. Then, either acquire or develop the AI tools to do it. Mr Watts is one the Competence Centers that has built an extensive expertise in this area.

Add the missing link:
A fast path to scale

Finally, to avoid turning “fast innovation” into just more pilot purgatory, establish a clear pipeline to production for promising innovations. This might mean having an “innovation deployment team” or budget that takes a successful prototype and integrates it fully into operations (or launches it as a new product line).

Essentially, treat scaling as a discipline of its own: establish criteria for when a pilot graduates (e.g., has proven X% improvement or Y user acceptance in test), and then allocate resources to implement it company-wide. Also, kill projects that don’t meet criteria to free resources. This ensures continuous innovation doesn’t just result in a shelf full of demos, but real business impact. It also signals to employees that innovations will be rewarded by actual use, not endless testing.

Many large firms struggle here, but one approach is embedding innovation teams into business units once the concept is proven, to shepherd adoption.

Another is corporate venturing: spin out the new solution into a startup (internal or external) that can move faster to scale it, with the parent company as a customer. A technique very well known to The Cronos Group by incubating ideas into separate companies and then scaling them in the market. A traditional company can mimic that by giving a successful internal innovation a startup-like team and autonomy to grow (with funding).

In all cases, this step closes the loop: the organization actually realizes the exponential value from the innovations discovered.

In essence

Bending the innovation curve is about making innovation an always-on, pervasive activity powered by AI, rather than a slow, occasional initiative. When Belgian companies fully harness AI in this way, we’ll likely see them punching above their weight on the global stage with new products and solutions. The country’s strong base in digital adoption and its high-quality talent (engineers, researchers) give it an advantage, but the differentiator will be those organizations that break out of the linear mindset. By leveraging AI to drastically reduce the cost and time of experimentation, and involving more brains in the creative process, even mid-sized firms can compete with much larger ones in innovation. The forward-looking perspective is that when curiosity becomes almost cost-free, creativity becomes the sole constraint and Belgium is abundantly rich in that.

When AI makes experimentation affordable, innovation stops being a scarce resource. It becomes a habit. And when that happens, the only real limit is imagination.

In conclusion

Belgium has reached a critical juncture: high enthusiasm for AI and digital tech, but a gap between experimentation and true transformation. To **scale beyond Pilot Purgatory**, Belgian businesses must embrace the four Frontier pillars as a holistic agenda. Each pillar: **Employee Experience, Customer Engagement, Process Optimization, and Innovation Velocity** addresses a different facet of the AI transformation, but they reinforce one another. Freed-up employees (Pillar 1) can drive better customer service and creative ideas. Better customer insights (Pillar 2) inform what processes or innovations to focus on. Efficient AI-driven operations (Pillar 3) free resources to invest in innovation. And a culture of innovation (Pillar 4) in turn finds new ways to empower employees and delight customers. In short, becoming a Frontier Firm is a synergistic effort across the enterprise.

From the **Belgian market** perspective, companies should leverage the country's strengths: a digitally savvy workforce, strong infrastructure, and supportive government initiatives; while directly confronting the challenges highlighted (skill gaps, siloed data, risk aversion). The insights from KPMG, PwC, EY and others all point to the same imperative: **scale what works, govern it well, and invest in people.** That means moving past isolated AI pilots to integrated solutions, with robust cybersecurity, data governance, and upskilling programs as foundations.

The Cronos Group shows what a practical, hands-on approach to innovation can achieve: rapid prototyping, embracing new tech early, and spinning up solutions with tangible ROI. Companies can take a page from this playbook: start small but have a vision to scale fast once value is proven. Whether it's an AI assistant for employees, a chatbot for customers, a predictive algorithm in operations, or a novel AI-driven product, don't stop at the prototype. Push it to production, measure impact, and iterate.

To summarize the key actions aligned with each pillar for Belgian businesses:

Empower your People with AI

Give employees modern AI tools and training; alleviate drudgery now (e.g. automate one painful task this quarter); openly address fears and show how AI will help them shine. An engaged, AI-augmented workforce is the engine of all other changes.

Delight your Customers intelligently

Make it easy for customers to get what they need, when they need it. Start with a smart self-service capability and build up to predictive service. Listen to feedback and iterate. Remember, every percent increase in customer satisfaction can translate to significant loyalty and revenue gains.

Streamline your Operations

Pick a process that feels slow or costly, and re-imagine it with today's technology. Even a 20% improvement in a core process can equate to millions in savings or capacity. Use those wins to fund the next automation. Over time, aim for processes that run so smoothly that your team can manage by exception, focusing on improvement rather than fire-fighting.

Invest in Continuous Innovation

Don't treat AI or innovation as a one-off project. Build it into regular business rhythms. Encourage pilot projects, but more importantly, ensure you have a path to scale the successful ones. Use AI to innovate how you innovate (through simulation, co-creation, etc.).

For leadership: it's crucial to set bold goals (e.g., "Within 2 years, aim to automate 50% of tier-1 support queries" or "Reduce product development time by half using AI tools") and empower teams to achieve them. Track progress with meaningful metrics. Not just productivity metrics, but also metrics like employee sentiment, customer NPS, time-to-market to truly gauge transformation impact. As illustrated, some global peers have cut cycle times by an order of magnitude and saved tens or hundreds of millions; Belgian firms can too, with a pragmatic yet ambitious approach.

In conclusion, the Frontier is here. It's not science fiction, but a set of practices and technologies that are available now, as evidenced by the cases and research cited. The difference between companies that plateau and those that prosper will be their ability to scale AI effectively across the organization. This whitepaper has outlined the blueprint: focus on people, customers, processes, and innovation in tandem, and use AI as the lever in each area.

A MiCRONOS whitepaper by Michiel Gedopt en Tom Verbruggen