CETO White Paper – From Vision to Reality

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Executive Summary

In an era where customers demand optimized solutions, traditional mass customization has largely failed to live up to its promise. Many firms discovered that offering infinite choices and one-off designs is far more complex than anticipated. So much that mass customization remains a niche practice, that has not had the broad impact once expected.

Mid-sized manufacturers, in particular, struggle to reconcile **Engineer-to-Order (ETO)** complexity with the speed and efficiency of mass production combined with high quality. The result is an operational impasse: customers expect quality and customization as the norm, yet manufacturers are bottlenecked by limited expert resources and legacy tools, information and processes that cannot scale to this demand.

CETO (Configure-and-Engineer-To-Order) emerges as a new Product Business Model defined in The Journey to Product Wellbeing™ (by Nextage Advisory Services [1]) a model to break this impasse when equipped with required platform. CETO is a holistic approach that can combine cross-functional process change with technology to deliver truly configured and engineered products at scale.

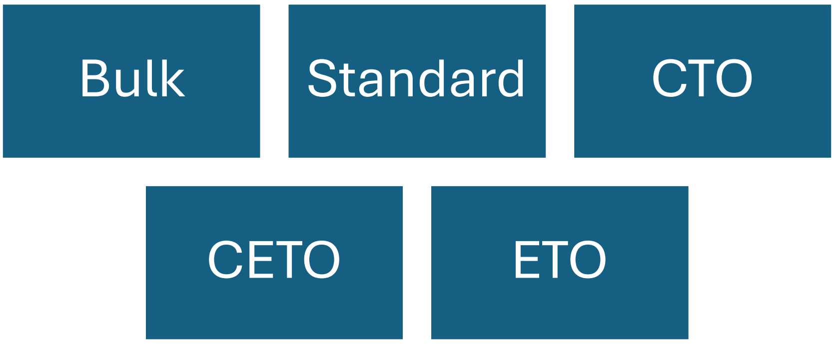

Figure 1 The Five Product Business Models – as outlined in The Journey to Product Wellbeing [1]

CETO Product Business Model (short name: CETO model), interpreted as product centric operating model, was introduced by Nextage Advisory Services, requires to be powered by ***Cross-Domain Product Intelligence*** model. This type of complete platform can bridge silos between sales & marketing, engineering, and supply chain.

Unlike piecemeal solutions (PLM, CPQ, ERP) that address parts of the problem and work in **Configure-To-Order** (CTO) world, the **CETO Platform** integrates all domains into a unified intelligent system. The payoff is transformative: lead times cut by up to 50%, orders processed *right-first-time*, project engineering throughput freed up to 80%, seeing the offer and order material backlog of all material levels for years ahead, and an ability to handle product variety beyond human limits. These levels of benefits and even bigger I saw already in very early years of my career in Rolls-Royce during oil and gas boom and now seeing same direction in recent years in other large enterprises, when all organizations and levels work towards the same common goal.

This white paper analyses why the old model of mass customization broke down and visualizes how ETO transforms into CETO and how CETO Platform's *Cross-Domain Product Intelligence* (later explained in detail) approach will rise to finally support the CETO world, and what this means for the competitive landscape.

We explore some of the constraints of legacy PLM/CPQ/ERP systems and illustrate how and for who CETO Platform works in practice best. CETO Platform enables scaling and customization to levels previously unimaginable. And if you get lucky you eventually could transform the product business model further to vanilla CTO.

Finally, we outline why adopting the CETO model is an urgent imperative for category of manufacturers seeking to thrive in a market where one-size-fits-all is dead and "custom-built" is must have.

The Broken Model of Mass Customization

Mass customization, the idea of delivering individualized products with near mass production efficiency, was once hailed as the future of manufacturing in practice, however, it has proven broken and elusive for many companies. Numerous startups and initiatives in this space have faltered. One study of 500 mass customization companies found that over just one year, 17% of them went out of business [2]. Scholars noted early on that mass customization hadn't achieved the sweeping impact anticipated, remaining "much of a niche business" rather than the new normal [3]. The vision was compelling, the execution, far more challenging.

Why has the mass customization model struggled? A critical issue is complexity, both for customers and producers. On the customer side, offering too many configurations backfires very easily [4]. Companies often "start off giving their customers too many choices," which leaves buyers overwhelmed and disengaged [5].

Your portfolio becomes too wide to be profitable. When faced with hundreds of features or variants, many customers experience choice paralysis; the sales experience deteriorates instead of delights. And from the business perspective, each additional choice or option incurs costs in development, inventory, and support. Too much variety can paint yourself into a corner financially. In short, while the concept of mass customization seemed empowering, the reality proved far more complex. This sets the stage for a deeper question: do we need infinite variation at all?

On the production side, the operational complexity of mass customization has been even more prohibitive. Traditional manufacturing and engineering processes were built for repetition, not variation. Trying to bolt customization onto a mass-production pipeline often exposes bottlenecks at every stage: sales struggles to capture the right specs, engineering has to custom-design or validate each order, procurement and production face constantly changing Bill-Of-Materials (BOMs) and routings. Research on implementing mass customization in ETO environments shows that the challenges span multiple decision areas, manufacturing as well as engineering and design phases, are all interdependent and strained by high variability [6]. In essence, mass customization breaks the traditional departmental model: it requires coordination across silos that most organizations aren't structured to handle.

The outcome has been that mass customization largely stalled at "configure-to-order" products with limited feature combinations (like cars or PCs), and even there it required heavy upfront investment in configurators and modular product designs. Truly engineering-to-order businesses, makers of specialized industrial equipment, machinery, custom solutions, found the mass customization paradigm unworkable with their existing tools. The promise turned into a paradox: customers expect more personalization than ever, yet manufacturers stuck in the old operating model find it unsustainable to deliver. This broken model set the stage for a new approach to emerge.

From Illusion to Insight: The Overpromise of Personalization

If mass customization failed, it wasn't just because the tools were weak, it's because the *premise* was flawed.

For the past two decades, industries were sold a vision: everything must be tailored, personalized, and unique. Software vendors, consultants, and futurists promised a world of infinite individualization. It was the era of the "segment of one." The idea was that everyone, consumers and companies alike, would need exactly what they wanted, how they wanted it, and when they wanted it. But this dream lacked something essential: reality.

In truth, most people don't know exactly what they need, especially when faced with complex technical products. Even companies buying industrial equipment often cannot specify their needs clearly, leading to vague requirements "wants", iterative engineering loops, and inevitable project overruns. The illusion of precise customization masks a practical truth: there are often only a few good ways to solve a problem.

Mass customization, in this context, did not fail because the ambition was too high. It failed because the ambition was misplaced. We don't need 8 billion different hammers. We don't need 8 billion different cars, we do not need 8 billion different houses to live in. We need a focused number of well-designed, adaptable solutions that solve real problems effectively and repeatably. Excessive variation is not a sign of innovation. It's a tax on quality, speed and cost.

In high-stakes industries like aerospace and medical devices, this is well understood. Quality demands consistency. Variability requires rigorous controls, extensive testing, and significant overhead. The more variation introduced, the harder it becomes to ensure safety, reliability, or performance. These industries achieve excellence not through infinite choice, but through repeatable engineering and controlled modularity.

AI may one day mitigate the cost of variation by automating control of complexity management. But that day is not yet here. And even when it comes, the question will remain: do we need this much variation?

There's a reason Apple revolutionized the consumer device market in 2007 not with infinite choices, but with one iPhone, a fixed platform, beautifully designed, and extensible through apps offered in a digital marketplace . Variability lived in the software layer, not the hardware. This wasn't a compromise. Simplicity became the strategy.

What manufacturers need today is not more ways to create more variants. They need better ways to decide *which variants matter*, and the operational discipline to engineer and deliver those variants efficiently.

That's what the CETO model enables. It doesn't chase infinite customization. It embraces intelligent minimum variety, grounded in market needs, supported by rigorous configuration rules, and designed so that each new variant maintains known manufacturability and compliance rules, regardless of order volume, and it controls customization where it is sensible and possible and guides user through customization.

The Rise of CETO

CETO, **Configure-and-Engineer-To-Order**, has arisen as the answer to the mass customization conundrum. It is not merely a new software or a fancy acronym, but a fundamentally different *model* for manufacturing in the age of high variability and ubiquitous customization. CETO takes the core idea of mass customization – customer-specific products – and adapts it to the realities of ETO production environments. Instead of trying to force-fit ETO companies into a mass production paradigm, it embraces the uniqueness of each order *and* harnesses modern digital intelligence to achieve efficiency at scale.

The need for CETO is evident in today's industrial landscape. ETO manufacturers stand at the crossroads of innovation and complexity: on one hand, they *must* deliver high variability, engineer-to-order products to meet specific customer requirements; on the other, they *must* control costs, by streamlined processes, and deliver quickly to stay competitive; and thirdly they *must* deliver high quality first-time. Traditional methods can't reconcile this trade-off. As one industry observer put it, *is the ETO model sustainable at the speed customers now expect, without better digital and AI-enabled systems?* The uncomfortable truth is that it isn't – not with out-of-date tools and siloed organizations and processes. Thus, a new model had to rise.

CETO represents this new model where customization is not an ad-hoc extension of the process, but the core operating principle. It builds on *deep data*, from known realities and lessons learned from past success and failure: restricting choice is not the answer; rather, *managing complexity intelligently* is. The companies pioneering CETO focus on developing flexible, modular product architectures and advanced configuration processes that allow tailored solutions without reinventing the wheel each time. Crucially, they recognize that implementing customization requires integrating across the entire value chain (from engineering to manufacturing to logistics). Past attempts fell short because they optimized just one piece (e.g., a slick web configurator for sales or fantastic modular structure for engineering forgetting manufacturability and rest of the supply chain) while neglecting downstream implications. CETO instead treats a custom order as a *multi-domain problem* to be solved holistically.

Enabling this is what we call **Cross-Domain Product Intelligence**, essentially the "brain" of the CETO model. This approach leverages data and knowledge across all domains to architect most successful portfolio of modular design blocks, utilizing minimum base variability and support controlled customization impact of product for orders. By doing so, it systematically addresses the major issues that plagued mass customization in ETO. No longer are the challenges isolated; they are tackled with a unified model. In fact, academic and industry findings indicate that major issues of implementing mass customization in an ETO context are *interdependent* across departments, which implies only an integrated solution can resolve them [6][7]. CETO, through cross-domain product intelligence, provides that integration as a built-in capability rather than an afterthought.

In summary, the rise of CETO marks a paradigm shift. It’s the evolution from seeing customization as a costly exception to embracing it as the default mode of operation, supported by probability rule and constraint-solving engines and reversed characteristics impact algorithms built to handle multi-domain product and delivery logic. Companies adopting this model are effectively saying: *We will engineer every order to each customer’s needs (=true wants), but we will do so using a smart, unified system that makes it as fast and error-free as if it were mass-produced*. This conviction-led yet technology-enabled stance defines the CETO model, a direct response to the failures of the old mass customization playbook.

Mapping the ETO Market: Complexity, Conflict, and the Path to CETO

In traditional Engineer-to-Order (ETO) markets, every customer project feels like a new journey. Each buyer arrives with a specific set of technical, operational, and contextual requirements. These requirements, ranging from mechanical dimensions to compliance needs, software integrations, and environmental conditions form long, nuanced requirement lists that define the total addressable market (TAM).

Visually in figure below, we can imagine this market as a horizontal plane, where each individual customer is represented as a point on the surface. Beneath each customer point is a vertical stack of requirement blocks. Each block representing a specific customer requirement. While each stack is unique, certain requirement blocks (e.g., "IP65 protection", "EU safety compliance", "touchscreen UI") recur across many nearby customers. These are visually encoded by colour: the same colour means a shared requirement. As you move across the market plane, patterns emerge, clusters of similar needs and adjacent variation.

Above the plane sit product variants. The specific configured or engineered product offerings from suppliers. These are visualized as vertical translucent cylinders standing over portions of the market. Their diameter represents how broadly a single product variant can serve nearby customers, how much ground it covers in the requirement space. Their height represents profitability: not how much revenue a variant generates, but how much value it retains after operational cost.

Critically, in today's ETO market, these supplier cylinders often overlap, sometimes directly sitting inside each other’s space. That overlap signals competitive conflict. Multiple vendors are offering very similar solutions to a similar requirement set. Yet, while these products overlap in function, their profitability often differs widely. This leads to market inefficiency, where too many companies compete for low-margin orders, and no one sees the bigger picture.

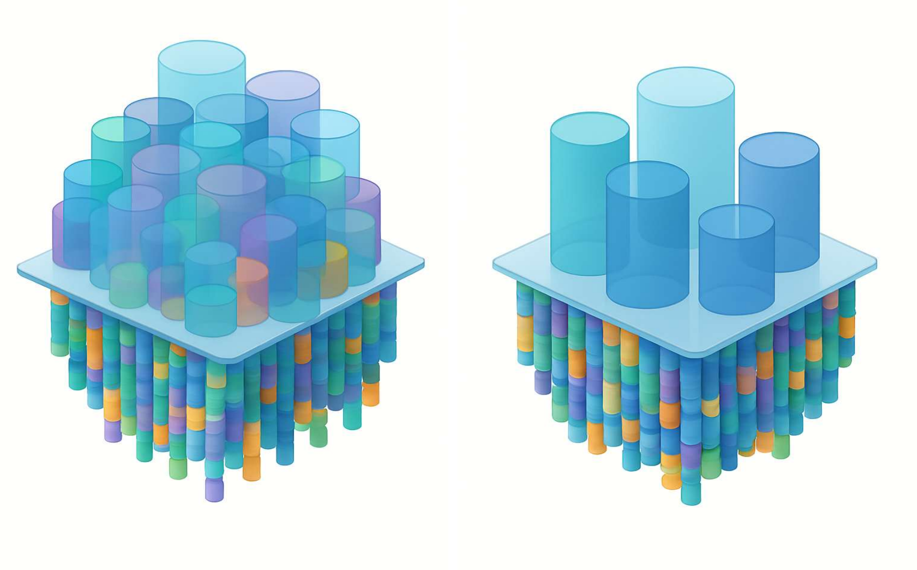

Figure 2 Shifting from ETO Chaos to CETO Clarity

In this chaotic structure, it's also worth noting what's missing: structure itself. The entire ETO market is a red sea, crowded with companies trying to fulfill overlapping yet variant-rich customer "wants". Each product is designed reactively. Requirements flow downstream to engineering, supply chain, and production, often with little reuse, modularity, or learning. Engineering bears the brunt. But so does supply chain, who must source what engineering has over-designed to be on the safe side or designed badly, because project time does not allow slow thinking, often with no alignment to standardized procurement or production.

The ETO landscape is full of overlapping products, overlapping requirements, and crowded competition. But when company moves to the CETO Product Business Model, the map changes dramatically. The field becomes clearer. The company kills their weakest offerings that stall everything and strengthen their best solutions to find best high-up battle ground. The strong CETO ones grow in reach and profitability. What you see is survival of the fittest, engineered intentionally through modularity, configuration, and portfolio focused customizations. CETO products enjoy the smart funding from customers to incrementally improve the product in areas strategically needed, while the overall profitability enables consistent R&D funding to strengthen fortifications of strategic market areas and find new land to concur. CETO doesn't just keep you afloat in a crowded red sea, it gives you the clarity and control to chart a smarter course towards monopoly position.

Yes, you can still apply traditional differentiation tactics: unique features, brand positioning, niche targeting. You can aim for what's often called a "blue ocean" or a "blue lagoon", a space where you operate alone, and as Peter Thiel points out, *competition is for losers*, but the truth, finding a truly uncontested market is a fantasy for most and not long-lasting.

Today, blue oceans are more like blue sunrises, brief windows before competitors swarm around you like sharks. You may invent something novel, but in a matter of months, others will follow, often with improvements. Patents only delay the inevitable. The moment you publish, someone is building a better version of it.

AI is accelerating this cycle. The time between first mover and fast follower is shrinking to days, not months. Ideas are copied, iterated, and shipped faster than ever. AI agents are following your every movement.

This is why CETO is a competitive foundation. It lets you work with the reality of the red sea, not trying to escape it. It helps you find the diamonds in your portfolio, polish them with real productization, and create modular, profitable configurations that block commodification through intelligence and speed. You don't have to invent a new category. You must manage your complexity better than anyone else. CETO is how you do that.

The four aspects, also identified by Nextage Advisory Services in their book, which you need to master to build a lasting CETO model, are processes, people, data and technology, the PPDT model by Nextage Advisory Services. [1]

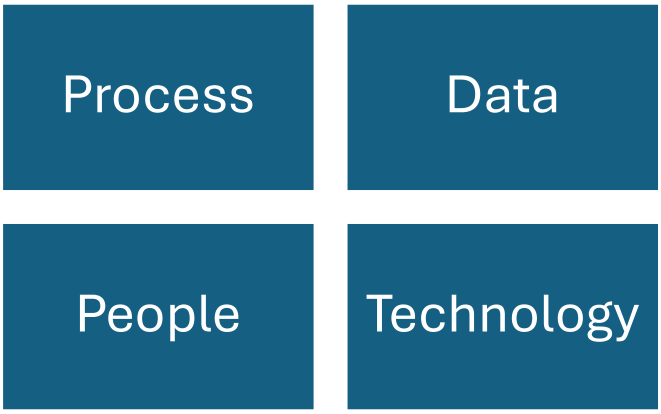

Figure 3 The PPDT Framework – People, Process, Data, Technology – described in the Journey to Product Wellbeing [1]

Next A to D sections describe these in detail in order how the CETO Platform looks at these 4 aspects.

A : PEOPLE

The People Who Lead

Without people do not start. Process, data and technology alone cannot transform a company. At the centre of every change and every breakthrough are people. What separates the companies that succeed with CETO from those that hesitate, or stall is not budget or headcount. It's conviction. *CETO is not for followers.*

It is not a trend to adopt because others did it first. It is a system for those who intend to lead, companies with a clear growth ambition, realistic first mover risk taking, a real understanding of their total addressable market, and the discipline to reorganize how they deliver product value.

The most successful transformations begin with leadership that sees both the opportunity and the necessity. They know their ETO product complexity is becoming unmanageable if they need to scale. They know their sales, engineering, and delivery processes are too manual to scale. But more importantly, they believe in doing something about it and building the systems that support 2x, 5x, even 10x growth.

Different Paths, Same Destination

Every organization faces different constraints. CETO does not prescribe a one-size-fits-all transformation method. Instead, three primary implementation models have emerged:

- **The Big Bang:** A full commitment across the business to operate under the CETO model. Most effective when leadership alignment, product clarity, and process maturity already exist.
- **The Pilot Track:** A focused CETO implementation around one product family or business unit. Ideal for testing the model and building internal proof before wider adoption.
- **The Spin-Off Model:** Establishing a separate CETO-focused company. This allows the legacy operation to continue, while a new team builds CETO capabilities without disruption.

These models are not exclusive. Many organizations use a combination: a pilot to learn, a spin-off to scale, and eventually a broader rollout.

Understanding When CETO Is the Right Model

As described in the CETO Manifesto, the CETO space sits between pure CTO (standardized, repeatable) and pure ETO (fully custom). It is defined by five key forces:

1. **Market Volume** – Is the market large enough to justify repeatability, but still fragmented enough to require differentiation? Is the TAM for the market and the SAM for the company scalable for 2-10x growth? And where the market is heading, what it is maturity?
2. **Product System Complexity** – Does your product consist of interacting mechanical, electrical, and software components, multiple engineering domains? Is it single product and system (product in product)? How complex the manufacturing system is? How distributed the supply chain ecosystem is?
3. **Investment Size** – Is each order significant enough to justify engineering attention, but not so large that you start over each time? Again, the market maturity and position in coming year or two will dictate the right moment for selection of correct product business model.
4. **Context of Delivery** – Are requirements shaped by project-specific environmental, regulatory, or logistical constraints? Are the projects product deliveries or system deliveries? Is there single main actor or even hundred companies working together?
5. **Resource Availability** – Do you have the skills, data, and leadership capacity to productize and scale? Are the logistical ecosystem and manufacturing capacity ready to scale and in what timescales?

If you ask yourself and recognize your business in this description, then you're already in the CETO zone – whether you've acknowledged it or not.

The decision to act is yours. But as market complexity increases and customization becomes the norm, inaction is no longer neutral.

B : PROCESS

Legacy Processes: Where Execution Broke Down

While legacy systems have held back customization, the bigger constraint often lies in the processes built around them. Most manufacturers did not fail because of poor tools alone; they failed because they applied the wrong playbook to the wrong game.

Traditional industrial process design was built on assumptions of stability, linearity, and departmental separation. Sales teams gathered requirements, often forwarding incomplete or biased interpretations into solution proposals. Engineering then processed these into technical designs, again based on assumptions, simplifications, or silent compromises, before handing them over to manufacturing for execution.

At each step, something important is lost or forgotten. Not because of malice, but because some questions are too complex, too uncomfortable, or too easy to skip. In today's traceability discussions, the real issue is not tracking — it's translation errors. Every department interprets and filters the information in its own way. Each function optimizes its phase in isolation. In the era of fixed product lines and repeatable processes, this worked well enough. But in today's high-mix, custom-engineered world, it creates a system built on cracks.

But CETO demands something different: cross-functional, and iterative collaboration. Engineering, sales, sourcing, and even the customer must co-navigate complexity. In most companies, this challenge was met not by redesigning the process, but by patching it. More steps. More approvals. More spreadsheets. What was once linear became layered and fragile.

This led to a brittle operational structure. Small changes in customer requirements ripple backward, triggering delays, rework, or silent compromises. The result? Weeks of churn just to validate a quote. Entire departments waiting on each other. And in the worst cases, delivering solutions that satisfy no one.

The core failure isn't complexity; it's mistrust of variation. Traditional processes treat every exception as a risk to be controlled, rather than a signal to be processed. They emphasize predictability, when what's needed is agility with accountability.

CETO doesn't eliminate process; it demands better ones. Integrated, responsive value flows where each step understands its context, and where customer requirements inform design and manufacturing in near real time. This isn't just about efficiency, it is about executional resilience in a world where customization is the default. How do we do this in reality?

CETO Platform in Action: The Four-Step cyclic Process

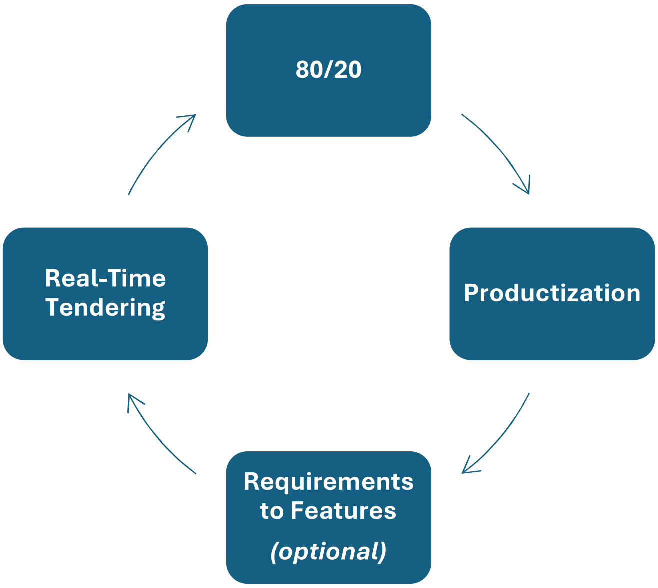

Figure 4 The CETO Platform: Four-Step Operating Model

Figure 5 Building the CETO Platform – The Initial Setup Sequence

CETO Platform is built in different order than it is executed as operational model in case the optional 4. Element of Requirements to Features is needed. The order is now explained from the build up order perspective.

1. 80/20 Analyse and Focus

Transformation begins with a brutal, data-driven self-reflection. What have we really been building? Where do we earn our margins, and where do we burn them?

The first phase of the CETO process needs to be powered by an **80/20** application, named after the Pareto principle and designed to extract and expose the real structure of a company's product, sales, supply chain, and performance data.

80/20 doesn't just pull part numbers or sales figures. It ingests the entire historical footprint of customer-specific deliveries, including:

- Customer requirements, both formal and informal
- All proposals and quotations, including early drafts and revisions
- Engineering data from PDM/PLM/ERP or Excels (both product templates and delivered BOMs)
- CAD models to extract topology and characteristics
- Logistics and supply chain behaviour: RFQs, POs, supplier variations
- Time stamps and trace logs: when specs were approved, designs frozen, POs placed
- Inventory and scrap data: revealing mismatch, redundancy, or waste
- Issue and warranty logs tied to specific variants or features

This is not just data integration. It is a multi-domain diagnostic.

Most companies have fragments of this data, but few have ever connected it. 80/20 turns information into a forensic product knowledge history: what was really sold, built, changed, delayed, scrapped, and failed.

The output of 80/20 is not a spreadsheet. It is a strategic insight decision map.

- Product families are clustered based on real-world use and profitability.
- Variants are ranked: which ones generated margin, which ones lost money.
- Feature patterns emerge which options drive complexity, which go unused.

- Supply chain friction points are flagged, not from policy, but from behaviour.
- Engineering churn is visible: where projects needed rework or exceptions.

The results are always both enlightening and painful. Companies discover they've spent years customizing the wrong things, creating red-sea variants that serve no one well and erode operational coherence.

80/20 shows the 80% of product value that comes from 20% of well-designed, reusable logic, and just as clearly shows the 80% of overhead created by ungoverned variation.

At the end of this step, a company faces a decision:

- Will we commit to a product portfolio transformation?
- Do we separate the valuable from the legacy?
- Do we structure a CETO spin-off, or refactor the current organization?

This is where the to-be state is chosen. And the boundary is drawn: what will be carried forward into the CETO model, and what remains in the legacy operating system (as-is)?

At the system level, this means initiating structured handoff into a **Product Portfolio Manager**, or equivalent portfolio architecture, to begin CETO modularization and configuration modelling.

2. Productization and Modular Portfolio Structuring

Once the data is separated and the decision made, the work of shaping the shiny diamond begins. This step is about turning insight into structure, building a product portfolio that is modular, understandable, and profitable.

In most cases, the transition is not a complete overhaul. Many modular building blocks already exist. But they are hidden, inconsistent, or poorly governed. The real task is clarity and intentionality.

This process starts in a **Product Portfolio Manager (PPM)**, or an equivalent structured product portfolio environment. Here, the team defines a clean separation between:

- Base product families
- Sales, technical and other Features
- Modular options and parameters
- Customizable extensions (and their cost and risk)
- Logistics and manufacturing impacts of each variation

Crucially, this is not a product engineering task. It is a commercial and operational design process. Each product or module is shaped with:

- Sales-to-engineering-to-supply chain-to-service traceability in mind
- Customization scenario planning: which adaptations are expected, which are rare, and what their impact is
- Product and process costing

- Feature-level pricing, and always traced to source and the cost
- The requirement that all variants be profitable, measurable, and governable

This is where the CETO model becomes tangible. While CTO demands standardization, and ETO tolerates chaos, **CETO focuses on configurable modularity with controlled customization**. The 80% scenario coverage rule applies: we do not try to pre-design everything, but we cover enough ground to ensure sales can operate with confidence and without bottlenecking engineering and manufacturing.

Finally, what makes this phase distinct is the speed of deployment. Traditional CTO product to market setup processes can take months to prepare product data for sales ready. In CETO, automation takes over. Once the portfolio structure is in place, PPM and next step solution shall automate the rest to minutes.

This unlocks Step 3: Real-Time Tendering, where sales, quoting, and engineering converge in minutes, not weeks.

3. Real-Time Tendering and Guided Customization

The third step in the CETO process is not about quoting faster, it's about quoting smarter. This is where **Real-Time Tendering** takes over.

Unlike traditional organizations, CETO products do not wait for customer to give specs to begin. CETO sales are based on attack mode and fastest takes control. CETO products operate on the principle of proactive readiness. Selector receives all sales, product, process, costing, and pricing models directly from Product Portfolio Manager. The system is always ready, configured to respond in real-time, not weeks later.

This matters because reacting to a customer's predefined specification almost always leads to poor outcomes. Too often, those specs are modelled after a competitor's product, forcing the manufacturer into reactive design compromises. Even when the contract is won, profitability suffers due to misaligned configurations and scope creep. This is the trap many ETO companies fall into, winning the contract by pricing, losing the margin.

CETO flips that script. The tendering process begins with a dialogue, not a document. Real-Time Tendering is designed to facilitate this conversation. Its primary role is not to "pick part numbers," or ask directly what technical features customer wants, but to guide solution development in a language both the customer and the manufacturer understand. It helps customers express what they truly need, not what they've thought wanting or been sold elsewhere. Meanwhile, internally, the system translates that into what must be delivered, automatically factoring in feature relationships, production constraints, logistics, probabilities and cost.

When customization is required, Selector does not treat it as a note or add-on plaster. It analyses the impact of each requested deviation at multiple levels:

- Product features and structure
- Delivery timeline
- Production and supply chain load
- Cost and margin models

This enables the sales and engineering teams to see immediately whether a customization is feasible, risky, or strategically misaligned. The goal isn't to block customization, it's to understand it. Real-Time Tendering brings forward the deep knowledge from the earlier 80/20 and PPM phases, revealing the implications of each change in real-time. This is not guesswork; it's informed decision-making, backed by patterns and models no human alone could manage.

In best-case scenarios, Real-Time Tendering is all that's needed. Tendering, configuration, pricing, and validation happen in a single loop. But in project-driven industries, customers often require detailed requirements specifications, especially in public or regulated procurement. This is where the optional Step 4 comes in.

4. Requirements-to-Features (Optional Loop)

When a customer issues a formal specification in many industries and large investments often hundreds to thousands of pages, the CETO process expands. **Requirements to Features** fusing activates.

Requirements-to-Features operates as a reverse requirements engine, analysing large-scale technical documentation and mapping it to the internal feature and product logic built in the earlier phases. It does not just extract keywords or match terms; it understands context, dependencies, and trade-offs, in AI words **Large-Product-Model (LPM)**, part of the overall Cross-Domain Product Intelligence model. It can compare new versions of customer specs to earlier ones, highlight connections to product features and identify the most impacted modules or configurations.

This allows manufacturers to:

- Translate vague or complex specs into actionable feature sets
- Align customer needs with actual product capabilities
- Highlight and challenge contradictory or infeasible requirements
- Avoid over-promising in competitive tenders

The system is especially useful in public tenders or structured investment projects where the specification itself becomes the controlling document. In these situations, CETO Platform's strategy becomes what might be called proactive Machiavellianism: instead of responding to the specification, Requirements-To-Features can be used to generate it, helping the customer define their need using your optimized CETO product. In this way, you shape the request in a way that aligns with your platform, not your competitor's.

Once the system has translated or authored the requirement-to-feature mapping, the proposal flows back to Real-Time Tendering for final validation, customization logic, and tender approval. The loop repeats until both customer and supplier reach agreement.

When the customer accepts the proposal, the data is pushed directly to operations, engineering, production, and supply chain receive a complete, validated package ready for execution.

C : DATA

Where Data Fails – and How Intelligence Replaces It

While broken processes are visible roadblocks, the deeper failure is often data itself. Not just the lack of it, but the way it's fragmented, incomplete, and contextless across the lifecycle of an order.

Most companies operate on an illusion of data-driven processes. Companies juggle *multiple versions of truth*. Engineering teams have one set of design rules locked in PLM. Sales teams improvise quotes using tribal knowledge and spreadsheets or have CPQ tool to sell and quote. Manufacturing runs on BOMs that rarely reflect what was sold. None of this is inherently malicious, but it's a structural flaw. The architecture of data has not kept up with the complexity of the modern custom business.

CETO exposes this flaw. To configure and engineer complex orders in real time, data must flow across domains. It must retain traceability and relevance as it passes from marketing and sales to engineering and operations. That requires more than data availability, it demands data intelligence.

Cross-Domain Product Intelligence

At the heart of the CETO model is **Cross-Domain Product Intelligence (CDPI)**. This is the "brains" of the operation, a unified intelligence layer where knowledge from all relevant domains (mechanical design, electrical, software, controls, logistics, manufacturing, costing and pricing, etc.) converges to drive product configuration and engineering decisions. Instead of isolated rule sets and data in each system, CDPI provides a *central decision engine* that can instantly evaluate a customer order against all constraints and requirements across domains.

Why is this cross-domain approach so critical? Because, as noted earlier, the major hurdles in customization are cross-disciplinary. To configure a complex product correctly, one must consider mechanical fit and function, electrical power and connectivity, control software compatibility, compliance rules, cost and lead time implications, and more – all *simultaneously*. Legacy toolchains struggle here because each domain has its own system. A PLM might ensure the mechanical parts fit together, but it doesn't know the electrical load constraints; the electrical engineer's CAD knows the wiring, but not the physical assembly's impact; the ERP knows stock levels and past cost in best case, but not whether the design will physically work. Without a synchronized, cross-domain view, "end-to-end configuration, seamless or not", is impossible. When data and rules live in silos, no single person or system ever sees the full picture until it's too late (e.g. a problem emerges on the shop floor or worse at customer's site).

Cross-Domain Product Intelligence solves this by acting as a shared language and knowledge base that all functions contribute to and draw from. One can think of it as an expert system (supercharged by AI) that contains *all the configuration rules and relationships* of the product across domains. For instance, consider a machine with both mechanical and hydraulic options: a CDPI engine would know that if an *electro-mechanical infeed* is chosen, it can pair with a hydraulic changeover module, but if a *hydraulic infeed* is chosen, an electro-mechanical changeover is not allowed.

Moreover, it would know that a hydraulic infeed requires certain hoses, pumps, and control logic, whereas an electro-mechanical one needs different cabling and software settings. These kinds of cross-domain constraints and dependencies are all captured in one place. So, when a sales rep or customer configures the order, the system isn't just picking catalogue numbers, it is *intelligently engineering* the product in real-time across all domains.

A key benefit is that everyone works from one source of truth. Cross-domain intelligence creates what manufacturing tech analysts often call a *single source of truth* for configuration data. Rather than sales and engineering maintaining separate sets of rules, or tribal knowledge residing in a few experts' heads, all of it is codified in the configuration intelligence. This shared brain ensures that when a configuration is proposed, it is instantly valid from engineering's perspective as well as sales'. The system itself *bridges the gap* between those functions. The result: no more back-and-forth to check if something can be built.

Crucially, Cross-Domain Product Intelligence is not just a static rule database; it will increasingly leverage AI and automation to enhance its power. Modern AI techniques, such as constraint-solving algorithms and machine learning, are used to maintain and even *discover* configuration rules. For example, a constraint-solving configurator acts like a smart GPS: you input the customer's requirements (destination), and it dynamically calculates a viable configuration (route) rather than relying on pre-computed static combinations. This is far more scalable as product complexity grows.

Additionally, AI-driven generative design tools are being integrated, where the system can automatically create or suggest optimized design modifications to meet a unique configuration request. Imagine inputting a performance specification and having the system adjust certain component designs or parameters to meet that spec, all while ensuring manufacturability and cost targets. This is the direction cross-domain product intelligence is heading. Early uses of AI in quoting and engineering have shown they can predict bottlenecks and propose solutions far faster than humanly possible.

In sum, Cross-Domain Product Intelligence turns the historically human-intensive art of custom engineering into a software-driven, intelligent process. By unifying knowledge across domains, it slashes the time and effort needed to configure complex products and virtually eliminates errors upfront. It empowers mid-sized companies to offer optimized but still maximizing modular solutions without a proportional increase in cost or lead time. This is the engine that makes the CETO model viable and it's the core of how CETO Platform will be built.

CDPI doesn't just unify product logic, it reconstructs the DNA of a custom business into a cohesive, computable, and actionable model. That is what data was always supposed to do.

D : TECHNOLOGY

Legacy Systems: The Technology Bottleneck

If mass customization failed, a part of the blame lies with the legacy systems and tools most manufacturers are using. Product Lifecycle Management (PLM) systems, Configure-Price-Quote (CPQ) software, Enterprise Resource Planning (ERP), Manufacturing Execution Systems (MES) and CAD platforms, these were all developed in an era of more stable, low-variation product lines. Trying to force high-variation, custom-engineered products through these disparate systems has exposed them as the *bottlenecks* to customization.

In a conventional setup, the sales team works in a CRM/CPQ tool taking an order, engineering works in CAD and PLM, and supply chain with manufacturing in ERP/MES. These systems often do not talk to each other in real-time, nor deeply connect each other's data, leaving humans to fill the gaps. Without integration, salespeople must manually interpret engineering data, mapping customer requirements to what engineering can deliver. This manual translation is slow and error prone. It is easy for a sales quote to promise something that doesn't exactly match an engineering product definition. Conversely, involving an engineer, supply chain and manufacturing in every sales inquiry (to verify feasibility) ties up precious resources and introduces delays for the customer. This disconnects between departments creates serious bottlenecks in bringing customized products to market. It's not uncommon for a custom order to bounce back and forth for weeks and months as sales, engineering, and production reconcile discrepancies.

Many mid-sized firms resort to the lowest common denominator: Excel spreadsheets and email. Astonishingly, many SME manufacturers and many *giants* still rely on Excel as their primary "configurator" and quoting tool [8]. The spreadsheet might list hundreds to thousands of options with manually maintained rules. This approach is a nightmare to maintain and inevitably leads to costly mistakes, a mis-keyed entry or a forgotten dependency can result in incompatible options being quoted, manufacturing delays, cost overruns and upset customers. Moreover, Excel offers *zero integration*: it doesn't know anything about your CRM, inventory, or production schedule. Every order configured in a spreadsheet must be re-entered into other systems for fulfillment, multiplying labour and the chance of error.

Even purpose-built systems like traditional CPQ software or variant configurators (often bolted onto ERP or PLM) show their limits with true ETO complexity. They typically assume a defined set of modules or options. If a customer's requirement falls outside those predefined boxes, the system hits a wall, and manual engineering work must take over, breaking the seamless flow. For example, a standard CPQ-to-ERP integration can handle configure-to-order scenarios (selecting among existing part numbers) but cannot generate an instruct for how to manipulate a new BOM for a novel configuration; any need for a custom part or design triggers an out-of-system process. Thus, legacy setups inherently limit how much customization can be offered. They force either a compromise on the offering, stick to what the system can handle, or a costly manual exception process for each truly custom order.

In short, the IT and process infrastructure at most manufacturers has been the *real bottleneck* preventing scalable customization. Siloed systems mean siloed thinking: sales don't see what engineering knows, engineering doesn't know what was promised, and production plans aren't updated until everything is finalized. The CETO model recognizes that overcoming these bottlenecks isn't about working harder, it's about working smarter through integration. To deliver custom-engineered products quickly and efficiently requires tearing down the walls between systems, which is exactly what Cross-Domain Product Intelligence is designed to do.

Scaling Beyond Human Limits

One of the most powerful outcomes of adopting a CETO model with cross-domain product intelligence is the ability to scale beyond human limits in managing product complexity. In traditional organizations, the knowledge that drives configuration is in human brains (and maybe scattered documents/spreadsheets). There is a natural limit to how many options and rules any team can juggle. But an intelligent system doesn't get overwhelmed by complexity; it *thrives* on it. This fundamentally changes the game for high-variability manufacturers.

To appreciate the scale of modern product complexity, consider a simple example: the Ford F-150 pickup truck. By one analysis, there are over 1 billion different ways to configure an F-150 when you consider all the combinations of drivetrains, cab types, bed lengths, engines, trim levels, and so on [9]. That is a staggering number, more than the number of stars in a typical galaxy, for just a single product line in automotive. In industrial equipment and machinery, the number of possible configurations for a product family can likewise explode into the billions or trillions once you consider every permutation of features, attachments, and customer-specific parameters. No engineering team, and certainly no sales team, can effectively manage decision-making across such a vast solution space using manual methods or disconnected tools.

This is where Cross-Domain Product Intelligence truly demonstrates its value. Advanced configurator engines (particularly those using constraint-solving or AI) do not need to enumerate all billion possibilities; they simply need to enforce the constraints so that only *valid* combinations are produced. The heavy lifting of ensuring a configuration is consistent across domains is handled by the system's algorithms. For a human, understanding the ripple effect of a single change in specification (e.g. choosing a bigger motor might affect the power supply, the cooling system, the frame size, etc.) is error-prone and time-consuming. For an intelligent system, tracking thousands of such interdependencies is just a matter of computation. This allows companies to offer far more variety and customization than they ever could when relying on human engineers to check every combination.

Moreover, scaling beyond human limits isn't just about *volume* of combinations, it is also about speed and iteration. A human engineer can perhaps evaluate a handful of design alternatives in a day. An AI-driven design generator can explore millions at the same time. For instance, some manufacturers are using generative design AI to iterate through countless design variations to meet a set of requirements, something no human team could feasibly do. On the configuration front, a well-implemented intelligence engine can instantly validate a configuration or find a solution if one exists, whereas a manual approach might require multiple meetings and calculations over weeks to ensure everything fits and works. This essentially compresses the decision cycle from human time to machine time. There are reports and articles of design iteration loops that used to take days now completing in minutes with advanced CAD and simulation integration, an illustration of what's possible when computation augments human effort [10].

Another dimension is maintaining and updating the knowledge base. In the past, if a company offered 100 options and then expanded to 150, the configuration rules might increase exponentially, leading to what's known as a "combinatorial explosion" for rule-based systems. Many older CPQ implementations have collapsed under the weight of thousands of hard-coded rules, which become unmanageable. Several sources note that in rule-based configurations, the number of rules grows so rapidly with each new feature that it "quickly becomes an administrative nightmare" – rules conflict, get outdated, and maintenance grinds to a halt [11]. Humans simply aren't good at manually maintaining thousands of interlinked logical statements without error. By contrast, a constraint-based or AI-based approach handles new options much more gracefully. Constraints can be added modularly, and the engine figures out the implications without someone pre-defining every combination. This reduces that exponential maintenance burden to a more linear one. As a result, scaling the product offering (more features, more variants) doesn't overwhelm the team or the system. In fact, configuration intelligence flips the script, complexity becomes a competitive strength rather than a weakness. Companies can confidently say "yes" to unique customer requests knowing their system can absorb the added complexity.

Finally, scaling beyond human limits also means transcending organizational limits. In a traditional setup, if you grow your custom business, you'd have to hire more application engineers, more drafters, more quote specialists. Essentially scale headcount with revenue. With the CETO model, much of the heavy work is automated, so the business can grow without a proportional increase in staff. One case in point: company was able to achieve 95% reduction in manual data analysis time, a 75% savings in workforce cost, and cut the time from order intake to production down to a few days, demonstrating how AI can dramatically streamline engineering and configuration workflows [12]. When these types of solutions become cloud and SaaS enabled, it will allow mid-sized firms to punch above their weight, taking on levels of complexity that previously only much larger organizations with big pockets and large engineering departments could only manage.

In summary, CETO Platform's cross-domain product intelligence approach equips companies to scale their custom offering in ways that were once impossible. The combination of handling astronomical configuration spaces, accelerating design/quote cycles, easing rule maintenance, and decoupling growth from headcount, means manufacturers can ambitiously expand their customizable product lines. The limiting factor is no longer human capability, but imagination. The technology will support whatever new variants or ideas you can come up with, which is a truly liberating position for any innovative firm.

Competitive Landscape

As the CETO model gains traction, it's important to understand how it contrasts with the established solutions from traditional PLM, CPQ, and ERP providers. Key players in the market: Siemens PLM, Dassault Systems and PTC (with their PLM/CAD-centric platforms), specialized configurator companies like Tacton, Cincom and Configit, and large corporation ERP systems like SAP, Oracle, Microsoft, Infor and IFS (with their massive ERP platforms in cloud) each address pieces of the customization puzzle, but none fully delivers the cross-domain, integrated product business model that CETO represents. This new approach can be seen as both a response to and an evolution beyond these incumbents.

Siemens PLM, Dassault Systems and PTC (PLM Suites): Industrial giants like Siemens PLM (with solutions such as NX CAD, Teamcenter PLM, and even their own ETO Configurator add-on Rulestream), Dassault Systems (with Catia CAD, Enovia PLM etc.) and PTC (with Creo CAD, Windchill PLM, etc.) offer comprehensive enterprise toolchains. These are powerful for product development and data management in traditional NPI (New Product Introduction) and variant management. However, when it comes to agile, on-the-fly configuration of custom orders, their architectures tend to show rigidity. Typically, a configurator in these environments is an add-on solution that pulls data from the PLM or ERP and connect back for order delivery. Implementing a fully integrated configuration process with these suites often requires extensive systems integration and customization projects. For instance, to handle a true engineer-to-order scenario, a company might need to integrate CAD, PLM, and ERP so that a new Engineering BOM can be generated for each order. PLM systems can technically support this, Teamcenter can store variant rules, Creo or NX can automate CAD via parameters and scripts, and ERP can take custom BOMs, but making it seamless is a significant undertaking even for large corporations. It's often beyond the reach of mid-sized firms both in cost and expertise. In practice, many companies running these systems still rely on manual or semi-automatic processes for custom orders because their "big iron" PLM/ERP is too inflexible or slow to adapt.

CETO Platform differentiates by providing an out-of-the-box unified approach tuned specifically for high-variability customized products. Rather than treating configuration as a layer on top of PLM, CETO Platform essentially *is* the configuration-centric PLM for the company. It manages product rules, understands BOM and CAD model topology, and PLM and ERP outputs as a cohesive whole under the Cross-Domain Product Intelligence data model engine. This means mid-sized manufacturers can achieve what the enterprise PLM/ERP stack would deliver, but without the army of consultants and multi-year development and deployment. It's built from the ground up for the CETO use-case: quick to implement, easy to update with new product logic, and focused on cross-functional usability (sales can use it, engineers can use it, etc., all in one).

Tacton, Configit and other CPQ/Configurator Specialists: Tacton and Configit represent the more nimble, focused solutions in the market targeted at complex product configuration. Tacton, for example, has a powerful constraints-based configurator and even offers design automation that plugs into CAD systems. Configit introduced the concept of Configuration Lifecycle Management (CLM), aiming to unify configuration knowledge across engineering and sales, similar in spirit to cross-domain intelligence. These solutions have indeed helped many manufacturers streamline their quote processes and reduce errors. They are often used alongside big PLM/ERP systems to fill the configuration gap.

However, these tools also have their limitations. Many CPQ platforms (including older versions of Tacton or others) required extensive rule-writing and upkeep. As noted earlier, relying on hundreds or thousands of hard-coded rules can become unsustainable as products evolve. While modern constraint engines mitigate this partly, companies still face the challenge of modelling *all domains* of knowledge. Often, a CPQ like Tacton is primarily used by the sales side and enforces sales and basic engineering rules, but it may not capture the deep CAD-level or physics-level rules; those still reside in engineering documentation or require a separate CAD automation step. Configit's CLM approach stores configuration data for the enterprise, but again, it needs to tie into CAD and other systems for detailed validation, integration that can be complex to maintain. In short, these solutions excel at sales configuration (ensuring the quote is valid), but they do not natively manage customization impact management for a manufacturable design without additional engineering workflow.

CETO Platform's strategy must be to go beyond CPQ, to create a true cross-domain platform. Think of it as CPQ meets PLM meets CAD design topology and ERP data, all unified. Unlike a typical CPQ which might stop at delivering a configured BOM to ERP (and then engineers must manually refine things), CETO Platform's cross-domain product intelligence drives into the engineering realm, understanding most important impact chains from CAD data, checking multi-domain constraints, and so on in one loop. This holistic coverage is what sets the CETO model apart. It acknowledges that for engineer-to-order, you can't separate "configure" from "engineer", the system must do both together. Competitive offerings often require stringing together multiple software (one for configuration, one for CAD automation, one for workflows). Each interface between software is a potential breakpoint or source of delay. CETO Platform removes those seams by design.

Additionally, mid-sized firms often find even specialized CPQ systems challenging because of resource constraints. The cost and expertise needed to implement CPQ system properly (including developing all the configuration models) can be high. Many smaller companies end up under-utilizing such tools, using them like a fancy Excel instead of fully integrating. CETO Platform's model, focused on Cross-Domain Product Intelligence, emphasizes ease of knowledge capture, using hybrid first principle industry logics and AI to ingest rules, using intuitive modelling of products, reducing the burden of initial setup and ongoing maintenance. In essence, it seeks to democratize advanced configuration for companies that don't have a team of Ph.D. configurator experts on staff.

In terms of specific names: Siemens PLM's closest analogue might be their *Rulestream* (a design automation tool) combined with Teamcenter Product Configurator. PTC has a tie-up with Configit for CPQ and has its own options modelling in Windchill. Tacton is known for strong constraint solving and a loyal customer base in machinery; Configit is known for its Virtual Tabulation™ technology for high-performance rule processing. Each of these, however, addresses a part of the overall problem. CETO Platform must aim to cover end-to-end: from initial customer request to analysed ready engineered product, in one flow.

To put it succinctly, the competitive landscape is mostly fragmented. Companies have had to choose a primary system of record (PLM or ERP) and then bolt on a CPQ, plus custom code to make it all work. By contrast, CETO Platform proposes an integrated *product business model*, not just a software tool. This is a leap akin to moving from disconnected GPS, map, and traffic apps to a single unified navigation system that just takes you to your destination. Industry best practices are indeed moving toward more integration (for example, experts advocate linking PLM and CPQ tightly to create a single source of truth). CETO Platform's approach essentially internalizes that best practice and offers it as a cohesive solution.

Finally, it's worth noting that others in the market are recognizing pieces of this vision. Salesforce (a newcomer in manufacturing CPQ) is introducing constraint-based configuration engines; ERP vendors like SAP have been touting digital thread concepts. But these tend to be incremental improvements within the old framework. CETO Platform's competitive edge is in reimagining the framework itself. The conversation shifts from "which software do we integrate?" to "how should our entire business operate to sell and build custom products efficiently?" That is a conversation most traditional vendors aren't incentivized to have, but it's exactly what mid-sized manufacturers need. In the race to enable high-mix, low-volume production, the winner will be the approach that simplifies the complexity, not just shuffles it around. The CETO model, championed by CETO Platform, is positioned as that winning approach.

Conclusion: The CETO Model

Mass customization as we knew it was a bold dream that hit hard realities. The failure wasn't in the desire to serve customers uniquely; it was in clinging to an operating model that wasn't designed for high variability. The CETO model is the paradigm shift that takes the industry from that failed promise to a new era of possibility. It is a conviction that *custom-engineered* can be done at *scale*, and a practical roadmap for making it happen.

The journey we've outlined moves through a clear arc: recognizing the broken state of mass customization, introducing a holistic solution (CETO powered by cross-domain product intelligence), and demonstrating its transformative impact. The end point of this arc is a call to action for mid-sized manufacturers and industrial firms to embrace a new operating model built on these principles. This is not just about deploying a new software; it's about reorganizing how your company approaches product variety and customer-specific orders. It's about replacing fragmented workflows with a digital thread, connecting requirements to design and delivery without interruption.

What does the CETO product business model deliver at full maturity? It delivers nothing short of a new competitive paradigm. Companies running on CETO will be able to say "Yes" to customer requests that their competitors must decline or delay. They will offer personalization with the lead times and costs closer to mass production. In fact, as digital and AI technologies continue to advance, we are likely to see even complex engineered orders being processed and manufactured at near mass-production efficiency, essentially fulfilling the original vision of mass customization, but with far smarter systems enabling it. Early adopters of digital configuration platforms are already linking marketing, sales, engineering, and manufacturing on a single source of truth, moving toward that reality. CETO formalizes this into an operating model that any company can adopt, not just the billion-dollar enterprises.

For the mid-sized firms, this is an opportunity to leapfrog. While larger competitors are bogged down integrating legacy systems, a mid-sized company can implement a CETO approach more nimbly and suddenly offer a customer experience on par with, or better than, anyone in the market. The barriers that once held smaller companies back, huge IT investments, massive engineering departments are eroding. In most firms, digital transformation meant new software and the same old habits. CETO flips that. (It’s worth noting that cost and resource constraints have been a top barrier to digital initiatives for smaller firms, which is why focusing on an integrated model like CETO can be more effective than piecemeal tech projects.)

In concluding, we return to the bold, analytical tone that this paper started with the status quo is untenable. Sticking with the old approach, hoping a patchwork of PLM, ERP, CPQ, and manual workarounds will somehow handle increasing demand for customization is a recipe for being left behind. The world is moving to customizable, configurable products in every domain. Modularity is must. In military technology 10x to 100x cheaper swarm technologies and start-up companies are beating right and left the old technology and, in many cases, introducing much more scalable and powerful hybrid combinations. The winners will be those who adopt a new operating model that *assumes* variability and harnesses it, rather than those who view customization as a headache to be minimized. The CETO model is that assumption, codified: it says *every order is engineered to order, and we’re built to excel at it*. It is, in essence, a new manufacturing operating system for the age of personalization.

Our call to action is simple: reimagine your product business model. Audit your current processes and tools against the vision outlined here. Are your systems unified or siloed? Is your product knowledge centralized or scattered? How long does it take to go from customer request to delivered product, and how much of that time is non-value-added churn? These questions can reveal where the old model is holding you back. From there, chart a roadmap toward CETO – whether that means partnering with developing platforms like VEIMAN or developing internal initiatives that embody Cross-Domain Product Intelligence.

The shift to CETO is phased and each step delivers immediate clarity, automation, and speed. Every bottleneck removed, every manual task automated, every domain connected will boost your responsiveness and efficiency. And as you progress, you’ll find a tipping point where configured-and-engineered orders become *just as routine as standard ones* in your organization. That is the hallmark of a CETO-driven company.

In closing, remember that a century ago the assembly line revolutionized manufacturing by introducing a new operating model for mass production. Today, we stand on the cusp of a similar revolution for CETO production. The CETO product business model is poised to be the assembly line of the 21st century, not a physical conveyor, but a digital thread and intelligent engine that will redefine how products are conceived, configured, and created. The manufacturers who embrace this will not only deliver the right solutions with confidence and shape the competitive rules instead of following them. The failure of mass customization gives way to the success of Configure-and-Engineered-To-Order. The challenge now is to seize this model and lead in the new era of manufacturing it heralds.

Apply to join the VEIMAN Pilot Program: Shape the future of CETO Platforms

The VEIMAN Pilot Program
VEIMAN is the first industrial-grade platform to be built to fully realize the CETO product business model. We're now assembling pioneering companies to shape and validate this approach. The Pilot Program offers early access to collaboratively discuss your path from ETO to CETO, realize in detail the principles behind CETO, know what type of implementation methods are available for your company, and understand data insights — while directly influencing the platform's evolution.

If your company is considering moving toward a CETO Product Business Model, we are inviting carefully qualified and selected SME manufacturers to apply for our **VEIMAN Pilot Program**. A limited number of slots will be opened in Q4 2025.

Or do you Need to assess your CETO readiness in just 5 days?

Contact us at: niko.salonen@nextagesoftware.com

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