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The Architect of Execution

BY **JON BALL & MARIE-CAROLINE CHAUVET**

As EVP & Chief Digital Officer at one of the world's largest biopharma companies, **Emmanuel Frenehard** is building an execution engine to turn Sanofi's ambitious vision into a reality.

Digital Disruptor
As an execution-driven technologist reshaping enterprise performance, Sanofi EVP & Chief Digital Officer Emmanuel Frenehard is fusing AI ambition with disciplined operating cadence to turn vision into velocity.

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> EVP & Chief Digital Officer, Sanofi

There are leaders who adapt to change, and then there are leaders who refuse to inherit its pace. Emmanuel Frenehard belongs to the latter category: an executive who treats velocity not as a byproduct of strategy but as the design constraint of modern leadership. He believes the rhythm of an enterprise is not predetermined by its size or history; it is engineered through the discipline to turn intent into action and vision into velocity.

Onstage at a recent gathering of executives, he opened with a question that sounded less like speculation and more like a quiet indictment of slow-moving organizations:

"What if I told you that by 2030, half of your closest collaborators won't be human?"

The line landed without theatrics; just a truth stated plainly by someone who has already begun architecting that future inside Sanofi—the R&D-driven, AI-powered biopharmaceutical company committed to discovering, developing, and delivering medicines and vaccines for millions of people around the world—where he serves as Executive Vice President, Chief Digital Officer. The question wasn't really about artificial intelligence. It was about execution. It was about whether institutions built for one world can operate in another.

"That doesn't mean AI will replace humans," he told the room. "But humans who use AI will outperform those who don't."

It wasn't hyperbole; rather, it was a call to arms.

Sanofi has no shortage of ambition. Yet, with a global workforce of over 72,000 employees, 39 manufacturing sites, and 13 R&D facilities globally, the company thoroughly understands that ambition collapses without the infrastructure to carry it. Mr. Frenehard's work—his obsession—is converting aspiration into something

An Accelerated Future
The Sanofi "Digital Manufacturing & Supply Accelerator" is a dedicated hub launched in May 2025 (in Lyon) designed to embed digital-first tools—such as AI, digital twins and IoT—across its manufacturing and supply-chain operations; its purpose is to accelerate and de-risk the path from lab to large-scale production, making it possible to deliver medicines and vaccines to patients more quickly, reliably and efficiently, thereby improving access and outcomes for customers and patients.

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Innovation Amplified
At VivaTech 2024 — a major European conference on technology, startups and innovation —Mr. Frenehard formally showcased how Sanofi is "all-in" on AI, unveiling how artificial-intelligence tools are being applied across drug discovery, clinical trials, manufacturing, supply and commercial operations to accelerate the journey from molecule to medicine and ultimately deliver faster, more effective care to patients.

operational, measurable, and real. Something that works on Monday morning, not just in the boardroom.

To understand how he does that, you need to understand how he thinks—and how a career shaped by entertainment, technology, streaming platforms, and consumer behavior became the foundation for one of the most ambitious AI transformations in the world.

The Execution Architect

Before he entered the biopharma industry, Mr. Frenehard spent years building consumer platforms at breakneck speed. At Disney, he helped launch the company's first direct-to-consumer service, DisneyLife, and later at iFlix, he oversaw explosive adoption across Southeast Asia.

That world—volatile, fast, unforgiving—taught him a simple rule: speed is not an advantage; speed is survival. Whether the stakes are entertainment or medicine, friction—while challenging—drives innovation.

In a 2016 interview with *Variety*, he put it plainly: "We weren't just building an app. We were building a new relationship between a company and its audience."

It's an unassuming line, but it reveals a core principle that now shapes the way Sanofi builds digital capability: technology is irrelevant if people don't use it. Adoption is the currency. Execution is expressed through behavior.

That mindset deepened at iFlix. Rolling out a platform across emerging markets meant reinventing everything—pricing models, infrastructure, distribution, licensing. Nothing came off the shelf;

everything was designed under pressure. The only constant was velocity.

This is what Mr. Frenehard brought into biopharma when he joined Sanofi in 2020: a worldview that sees digital not as a set of tools but as a systems-design challenge—how to remove friction and unlock human capability.

"When I joined Sanofi, the stakes multiplied," he says. "Instead of movie nights and binge-watching habits, the outcomes involved drug discovery, regulatory pathways, payer systems, clinical access, supply chains, and, ultimately, patient lives. The principle, however, remained unchanged. Intent means nothing without execution."

In an industry where execution is measured in time saved, treatments delivered, and lives improved, Mr. Frenehard's words underscore the reality that velocity is not optional; it is existential.

The Ambition: AI Power at Scale

Sanofi's stated ambition is audacious: to become the first biopharma company powered by AI at scale. This means leveraging AI globally and at enterprise scale to transform its entire biopharma model—from discovery through to patient delivery—so that generating breakthrough medicines is faster, smarter, and more reliably impactful.

Beyond merely a vision statement, it's a directive that Mr. Frenehard refuses to let drift into rhetoric.

"We want to be the leading biopharma using AI at scale," he told employees. "It wasn't motivation; it was a mandate."

But he also knows declarations don't execute themselves. Models alone don't drive outcomes. Infrastructure does.

"We learned the hard way that if your data isn't governed, trusted, or of quality, you're going to get poor decisions out of it," he says.

At Sanofi, AI is not allowed to run on any data that fails foundational criteria—quality, ownership, governance, metadata, and lineage.

"If your data is not AI-ready," he says, "we will not run on it."

For Sanofi and Mr. Frenehard, it's a discipline forged by setbacks, challenges, and ingenuity.

"We failed plenty of times on a dataset we thought was good enough," he says. "And when they're not good enough, the recommendations can be a disaster."

This is not the romantic version of AI transformation. Rather, it is the unglamorous engineering required to make AI useful at scale; something to which Mr. Frenehard is keenly aware.

Shifting From Systems of Record to Systems of Work

While many companies approach AI like a cost-cutting initiative—automate tasks, trim headcount, reduce human dependency, Mr. Frenehard views that it is not only shortsighted, but strategically backwards. Automation may save money, but it doesn't change capability. It doesn't create an advantage. It doesn't make an organization faster, smarter, or more adaptive.

"Automation might be cheaper than people," he says. "But augmentation—the ability to change the capabilities you give your workforce—that is where the real value lies."

That distinction becomes the fulcrum for a much larger paradigm shift: the move from systems of record to systems of work. For decades, enterprises have architected their operating systems around tools—ERP, CRM, HRIS, procurement platforms—each designed to streamline a specific vertical.

Each has its own database, permissions, structures, and integrations. These systems standardized business processes, but they also created organizational gravity. Work conforms to software, not the other way around.

"Most of us do not know how to start building a workflow," he says, "because we've been formatted by the system of records."

Agentic AI flips that logic. If data is liberated and workflows can run across systems rather than inside them, the record-keeping layer becomes secondary—important as a ledger, but no longer the architecture through which work flows.

This is where Mr. Frenehard sees the next frontier: AI workflows that fuse deterministic decisioning (yes/no logic) with agentic autonomy (retrieval, synthesis, coordination, drafting). Simple decisions remain simple; complexity activates capability. The goal is not to replace systems. The goal is to reduce the friction between them.

"For example, we're reinventing procurement at Sanofi," he says. "Procurement touches every department, every cost center, every supplier. It is a battleground of inefficiency. The workflow today is a maze—best-in-class systems stitched together through handoffs, approvals, reconciliations, and workarounds. The technology isn't the problem. The workflow is."

AI doesn't merely fix that by making the maze faster, says Mr. Frenehard. It redraws the map.

"One workflow initiative alone is projected to drive a billion euros in top-line uplift," says Mr. Frenehard.

When Mr. Frenehard presented the initiative to the executive committee, he did so with a condition that sounded more like a challenge than a proposal: if it cannot generate that level of value, stop the project. This is his operational philosophy in its purest form: pick problems worthy of transformation and solve them in ways that restructure how the organization works—not just how it automates. This is execution by design.

Smarter. Faster. Scalable.
In biopharma, every second matters, and Sanofi is rebuilding its industrial engine to deliver with greater speed and accuracy. By infusing AI into every stage of development —from discovery to full-scale manufacturing —the company is cutting time-to-market by up to a year and positioning itself to triple new medicine launches, accelerating critical therapies to patients worldwide.

60K

Sanofi Concierge—used by 60,000 Sanofians—is an internal generative-AI assistant deployed to help employees with everyday tasks; from answering questions about company policies and procedures to summarizing documents, automating workflows, and generally streamlining low-value tasks so employees can focus on higher-value work.

"You don't scale AI. You scale human judgment enhanced by AI."

–**Emmanuel Frenehard**
EVP & Chief Digital Officer, Sanofi

The Culture Challenge: Adoption, Not Technology

If systems design is the structural challenge, adoption is the human one—and Mr. Frenehard is blunt about where most transformations fail.

Citing a recent MIT study that 95% of generative AI projects fail to scale, he believes the problem isn't algorithms. The problem is people.

"Two-thirds of the problem is change," he explained. "Not technology."

Enterprises can build dazzling prototypes, run pilots, launch labs, showcase demos—yet never change how work is done. The failure mode is not innovation; it's integration.

"Those of us who have been part of large transformational initiatives know that you have to take multiple bites at the apple," he says. "It won't happen the first time. And when things get toughest and you feel like giving up…that's exactly when you shouldn't."

This is where Mr. Frenehard diverges from technologists and begins to sound like a coach. His leadership vocabulary centers on resilience, optimism, and persistence.

"Just believe," he says. "Be an optimist in that journey."

Optimism, in his hands, is not sentiment. It is a requirement. Because adoption is psychological, it demands identity change, not just skill change. It asks people to trust a new way of working while letting go of what made them excellent in the first place. This is why Sanofi deploys AI tools the way consumer platforms are launched: intuitive, inviting, familiar. Concierge, the company's internal agent, isn't positioned as an enterprise system—it's positioned like a digital companion.
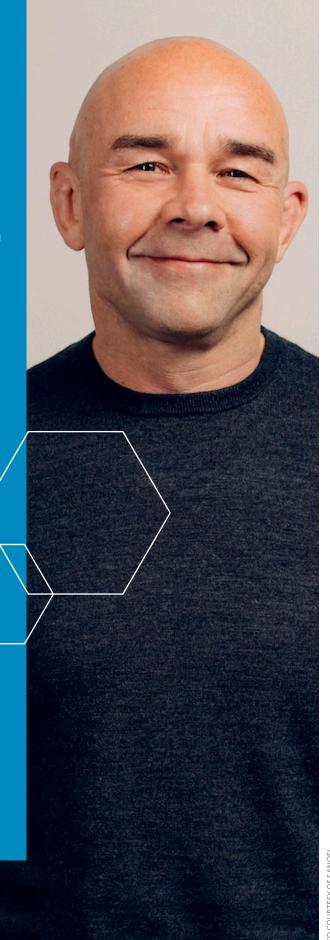
BONJOUR, EMMANUEL

Having joined Sanofi in 2020, Emmanuel Frenehard—based in Paris—leads the company's digital, data and technology strategy to help transform the practice of medicine, empower healthcare professionals, and better serve patients.

Prior to being appointed Chief Digital Officer, he held the positions of Global Head, Digital GBU teams and Digital Products. He also led the Sanofi Digital Accelerator and several digital commerce initiatives, launching best-in-class digital experiences.

Before Sanofi, Mr. Frenehard spent 20 years leading large global organizations as well as three years in startups. He has built and launched multiple global digital products in support of existing and new business models, using the Agile methodology at scale. In particular, he managed iflix's explosive adoption across Southeast Asia, and led the launch of DisneyLife, Disney's direct-to-consumer digital subscription service in the UK.

Learn more at
sanofi.com

Interface choices are strategic. Onboarding is emotional. Adoption is earned.

Sixty thousand employees use it, not by mandate, but by desire. That is not technology spread across a workforce; it is culture shifting at scale.

Inside Sanofi, digital tools are meant to reduce barriers to collaboration, not replace collaboration itself. They are meant to augment human connection, not simulate it.

"That's why Concierge wasn't launched like internal software—it was launched like a consumer experience: polished, inviting, responsive, even playful. Not to dazzle employees, but to ensure they actually use it."

For Mr. Frenehard, meaningful adoption isn't compliance, it's desire. Thusly, this is how he thinks about technology in aggregate: not as a frictionless substitute for human interaction, but as an accelerant for it. Tools make work easier; they should not make people optional.

Measuring Velocity

Many enterprises measure digital transformation with dashboards—usage charts, cycle times, automations, and savings. To Mr. Frenehard, these are fine as diagnostics but weak as a strategy. They measure motion, not momentum. They count activity, not value.

"We measure velocity in economic terms," he says. "Not in digital maturity level or innovation count, but rather actual enterprise contribution."

He set a rule: no AI initiative moves forward unless it can generate at least €100 million in value—either in efficiency or revenue. The billion-euro workflow is the prime example. It is not a moonshot; it is a standard for focus, because scale demands proportional outcomes.

If it doesn't generate a billion in lifted sales," says Mr. Frenehard, "then we should not do it. We should apply our capacity somewhere else."

This is not bravado. It is a constraint as a strategy. AI is expensive.

Organizational capacity is finite. Focus is a competitive advantage.

"If you are working at the fringes, you won't have a big impact," he says.

His metrics are not about adoption for adoption's sake. They are about enterprise performance: *Does this capability make the company faster? More adaptive? More effective at delivering outcomes?* Or put differently: *does the transformation actually transform?*

Leading Through a Changing World

Mr. Frenehard believes AI represents the fourth industrial revolution—except this one will unfold in a single generation, not across centuries. The displacement curve is faster. The adoption curve is steeper. The leadership challenge is different.

This requires organizations capable of pairing stability with reinvention, or what he calls an 'ambidextrous model.'

"You have to change the plane engine in flight," he says. "You have to juggle both dimensions—the dimension of reinvention and the dimension of running the company."

Leadership in this era is not about predicting the future. It's about building the ability to respond to it. It is less about certainty and more about pace. Less about strategic vision and more about unlocking execution.

AI is here, he reminds leaders. Billions are being poured into the ecosystem. The acceleration is not theoretical.

"You can put your hand in front of the sun and not see the sun, but it's still there burning bright," he says.

This is Mr. Frenehard's challenge to the C-suite: adaptation is no longer a strategic choice. It is a condition of relevance.

The Five-Year Horizon

While some executives may envision what success looks like five years out by reciting product pipelines, roadmap milestones, and efficiency targets, Mr. Frenehard talks about capacity.

"Emmanuel's customer-centric mindset applies both to what data and digital can provide to employees and the organization as a whole, as well as to external stakeholders, patients and HCPs in particular. He is a forward-looking executive and does not hesitate to challenge the status quo."

–**Marie-Caroline Chauvet**
Partner, Insigniam

Sanofian Selfie
Set amongst a backdrop of fellow *Sanofians*—the moniker given to the company's employees—Mr. Frenehard is keenly aware that his work also entails enrolling people who bring the company's mission to life every day.

He imagines every employee operating as "one person plus AI"—not augmented by a tool, but extended by a capability. Not automation replacing human judgement, but AI amplifying it. He imagines workflows behaving like conversations—dynamic, fluid, context-aware. He imagines a company that doesn't brace for disruption but absorbs it and accelerates through it. In essence, he imagines abundance.

"If tomorrow, we said let's build a call center that speaks every language in the world, that will call every Alzheimer patient to make sure they get their medication, you'd say it's not possible," he says.

Yet, Mr. Frenehard envisions a future where digital nursing agents support Alzheimer's patients by calling them, speaking in their language, guiding them to medication, and checking adherence.

"Many people would simply say, it's not physically possible," he says. "But in a world of abundance, we can do it overnight."

The Next Frontier
For Mr. Frenehard, AI is not an abstract vision of the future—it is a mechanism for execution in the present. It is the difference between ambition and impact, between promising change and delivering it.

"Everything we build has to start with value," he says. "Not value as a theory—value you can feel in outcomes."

That instinct traces back to earlier chapters of his career, where adoption was earned one interaction at a time.

"There are brand deposits and brand withdrawals," he says. "A deposit is when we deliver something truly new that works at scale. A withdrawal is when a company simply puts its name on something and expects the brand to carry it. We have to stay on the side of deposits."

Execution, for Mr. Frenehard, is measured not only in efficiency or speed, but in the precision of outcomes and the integrity of systems that support them.

He points to moments that sharpen that responsibility—like a father whose child had Crohn's disease asking why a solution didn't exist sooner.

"Those moments remind you why speed matters," he says. "Execution isn't about moving fast just to move fast—it's about getting answers to people who don't have them yet. AI helps us close that distance."

Ultimately, his ambition is not simply to build an AI-enabled biopharma company, but one defined by disciplined follow-through.

"If five years from now we're moving faster, thinking clearer, making better decisions every day—and patients can feel the difference—that's success. That's what execution should look like." **IQ**