

5 Operational Patterns That Silently Cap Yield in Mid-Sized Electronics & High-Tech Manufacturing

A diagnostic perspective from JMP Ventures

Jorge Mercado

Founder & CEO

JMP Ventures

Helsinki, Finland

jorge@jmpventures.org



This is not a pitch.

After years working at CERN, in quantum technology, and now alongside industrial leaders across Europe, I keep seeing the same patterns appear in technically sophisticated manufacturing companies.

These are not failing businesses. They are well-run organisations quietly limited by structural friction they can sense — but rarely quantify.

If any of the patterns below resonates, it may be worth a short conversation.

The Five Patterns

1

1. Data exists — but it doesn't speak.

Production, quality, maintenance, and ERP data are all present. But they live in separate systems, separate habits, and separate conversations. Leadership makes decisions from summaries built on spreadsheets built on exports. The full operational picture is never in the same room at the same time.

2

2. The bottleneck is known — but not measured.

Operations leaders usually have a strong instinct about where throughput is lost. But intuition is not measurement. Without a quantified constraint, improvement efforts scatter.

3

3. Expertise lives in heads — not in systems.

Knowledge that lives in heads instead of structured processes is a hidden operational risk. It scales poorly and leaves when people do.

4

4. Quality and yield are managed reactively.

Rework, scrap, and late-stage failures quietly absorb margin. The cost of detecting defects too late is rarely calculated — it is simply absorbed, quarter after quarter.

5

5. Technology has been added — but not integrated.

ERP upgrades, MES deployments, automation tools — each solved a specific problem. But without an operational intelligence layer, companies end up with more systems and the same visibility gaps.

How I Work

"Physics for Business"

I approach operations the way a physicist approaches a complex system:

Identify

the real variables

Map

their interactions

Locate

the constraint

Intervene

where leverage is highest

I do not come to sell AI. I come to listen first. Then — only then — I orchestrate solutions through a trusted ecosystem of European technology partners.

The goal is simple: higher throughput, improved yield, and decisions that rely on systems — not individuals.

Let's have that conversation.

If any of these patterns reflect your reality, I'd welcome a 20-minute conversation.

No pitch. Just one honest conversation about what's quietly limiting your performance.

[Book a 20-Min Systems Stress-Test](#)