

The Loom and the Compiler

On software becoming fashion — abundance, taste, and what we lose when making becomes free.

BY ANSHU GOVIL · IN CONVERSATION WITH DHIRAJ

IN BRIEF. Software, like cloth before it, is shifting from capital to wardrobe — produced cheaply, worn briefly, replaced rather than maintained. The middle of the industry will hollow out the way the middle of the textile industry did, leaving a luxury tier and a subsistence tier with very little in between. Customisation will follow the economics of dry-cleaning: more expensive than replacement, and therefore avoided. Survivors will keep their customers but not their pricing power. And somewhere in the middle of all this, a child in the crowd is going to point at the emperor.

The history of the power loom is the most useful lens I have found for understanding what is happening to software in 2026.

The central idea is not original to me. It emerged from an extended conversation with my friend Dhiraj, who occupies an unusually instructive vantage point on this question. He runs a software services firm and, separately, an online fashion business. He stands with one foot in each industry — selling code on one side, selling clothes on the other — and the structural similarities between the two have become difficult for him to ignore. When he first articulated the analogy aloud, it reframed something I had been struggling to put into words. This essay is, in honesty, half his.

THE WORLD BEFORE ABUNDANCE

For most of human history, cloth was a form of wealth. A single shirt required somewhere between forty and a hundred hours of labour — spinning, weaving, cutting, sewing — typically performed by women whose names were not recorded. Households accordingly owned two or three garments. Clothes were named in wills. They were turned inside out when the outer surface wore through, then cut down for children, then again for rags, and finally for paper. Nothing was discarded, because nothing could afford to be discarded.

Then, over a span of roughly fifty years between the late eighteenth and early nineteenth centuries, the spinning jenny, the water frame, the power loom, and the cotton gin arrived in succession. The marginal cost of cloth fell by something on the order of ninety-five percent. When the cost of a thing changes by an order of magnitude, the nature of the thing changes with it.

Cloth ceased to be a store of value and became a medium of expression. Fashion, in the modern sense — clothing as identity, as signal, as mood — is a downstream consequence of the power loom. The aristocracy had always engaged in something resembling fashion, but its emergence as a mass phenomenon required a world in which working people could own thirty garments rather than three. We now live in a world in which many people own three hundred and discard a hundred each year.

WHAT IS HAPPENING NOW

Software is undergoing its own equivalent transition.

Five years ago, building a working web application — with a backend, a database, an external API integration, and a deployed front-end — was a meaningful undertaking. It demanded either a skilled developer or a small team. Software was therefore treated as capital. Internal tools were assets. A startup's codebase was its principal store of value, version-controlled and maintained across years and engineering generations.

Recently, an acquaintance — not a professional developer — described building a working Telegram bot in a single afternoon. The bot ingests articles forwarded to a channel and produces an explanation and a quiz. He did not survey existing libraries. He did not read documentation. He described the desired behaviour to a language model, and the system materialised.

The activation energy required to produce a functioning piece of software has not merely been reduced; it has collapsed in the physics sense — undergone a phase transition. When activation energy collapses in this manner, the resulting world is not a faster version of the previous one. It is a categorically different one.

WHAT CHANGES WHEN PRODUCTION IS FREE

Software ceases to be capital and becomes wardrobe. It is not maintained. It is worn for a season and replaced. The tool one builds this month to organise a reading list will not be the tool one uses next month; it will be regenerated, slightly differently, because the cost of regeneration is lower than the cost of

recalling how the previous version worked. Dhiraj observes both ends of this directly. On the fashion side, his customers buy ten kurtas a year where their mothers bought two — higher volume, shorter individual lifespan, lower attachment to any specific item. On the software side, his clients commission tools the same way. The traditional enterprise contract resembled a wedding suit. The emerging contract resembles seasonal apparel.

Personal software emerges as a genuine category. Not software for individuals to use, which has existed for decades, but software an individual *constructs* for their own life — idiosyncratic, unshared, comparable to a meal prepared for oneself rather than a dish served to others. The Telegram bot is not attempting to be a product.

Taste becomes the binding constraint. When production is free, knowing what to produce is decisive. The constraint relocates from execution to imagination. This is precisely what occurred in textiles: when cloth was scarce, the relevant skill was weaving; when cloth became abundant, the relevant skill became choosing. Designers displaced weavers as the high-status profession. The emerging craft in software consists of specifying clearly, prompting effectively, and recognising quality.

The arrival of cheap cloth produced significant downstream costs — labour displacement, environmental damage, a culture of disposability — that took roughly a century to fully manifest. Software's equivalents are likely to follow a similar pattern, on a faster clock. They are not the focus of this essay. Of more immediate interest is what happens to the structure of the industry itself.

The handloom story, told honestly, is not "craft survived." It is "a small fraction of craft survived, at the top, and the rest was destroyed."

THE MIDDLE HOLLOWS OUT

The handloom did not vanish. This is the part most people forget. It was crushed in absolute terms — the vast majority of weavers were impoverished, displaced, and ultimately replaced — but the craft survived in two specific places. It survived at the very top of the market, where it became a luxury good. A Banarasi saree, a Harris Tweed jacket, a hand-loomed Persian rug — these are not merely textiles. They are signals. They cost ten or a hundred times what their power-loomed equivalents cost, precisely because the inefficiency of their production is now legible as authenticity. And it survived at the very bottom, in subsistence and household weaving in regions the industrial supply chain never fully reached.

What disappeared was the middle. The competent commercial weaver producing serviceable everyday cloth at a reasonable price — the figure who had been the backbone of the textile economy for centuries — was eliminated within two generations.

The same hollowing is the actual shape of what is coming for software and SaaS. Bespoke high-end engineering — security-critical infrastructure, foundational systems, true craft software — will survive and may even command higher premiums than today, because the inefficiency of producing it carefully will become legible as quality. Subsistence software — personal tools, weekend bots, idiosyncratic scripts — will flourish in the new abundance. What will be hollowed out is the middle: the competent commercial SaaS firm producing serviceable everyday tools at a reasonable price. The form-builders, the dashboard companies, the workflow automation vendors, the long tail of vertical SaaS solving problems that an afternoon of prompting can now solve directly.

Anyone telling themselves they will be in the surviving fraction should be honest about the base rate.

THE DRY-CLEANING ECONOMY

There is a specific mechanism by which the middle is being hollowed, and it operates beneath the abstractions.

A serviceable new shirt now costs five or eight dollars on a fast-fashion marketplace. Dry-cleaning the shirt one already owns costs roughly the same. The customer is not weighing a slow accumulation of maintenance costs against eventual replacement. The customer is being asked, on the very first cleaning, to pay as much as a new shirt would cost in order to preserve an old one. The rational response is to discard it, and to keep discarding the next one. This is not a moral failure of the customer. It is the predictable outcome of two cost curves that have diverged so violently that the alteration service costs more than the asset it is altering.

The SaaS industry is encountering a structurally identical problem. A mid-tier enterprise SaaS subscription might cost fifty thousand dollars a year. A moderate customisation — a custom report, a workflow modification, a non-standard integration — typically requires a statement of work in the low-to-mid six figures, ten days of negotiation, five months of implementation, three rounds of change orders, and a partner ecosystem whose incentives are not always aligned with the customer's. The fixed costs of the SaaS services organisation — solution architects, project managers, enterprise sales overlay, partner certification programmes — have not scaled down with the underlying technology. Getting a SaaS firm to fix or customise something, as Dhiraj puts it, is now a nightmare you have to sell a kidney to afford.

Meanwhile, the cost of building a parallel layer outside the SaaS — reading from it as a system of record, performing the analysis or transformation in code generated in an afternoon — has collapsed. The customer is now in the dry-cleaning position, with the same arithmetic and the same inevitable answer. The cost of the alteration is not merely larger than the cost of building outside; it is many multiples of it, on the very first transaction. There is no break-even calculation to perform. The numbers do not survive contact with each other.

There is a further compression that the dry-cleaning frame on its own does not capture. The customer is not only choosing between maintenance and replacement at historical price points — the historical price points themselves have been undercut. A customer who has internalised that a serviceable shirt can now be purchased for eight dollars on a Shein-like marketplace will not return, easily or ever, to paying forty dollars for the equivalent garment. The arrival of a low-cost producer does not merely compete on a single sale. It permanently resets the customer's sense of what the category is worth.

The same compression is reaching SaaS, and it operates on the survivors as much as on the casualties. The mid-market SaaS firm that comes through the hollowing intact — protected by data gravity, by compliance inertia, by genuine system-of-record value — does not emerge with its old margin structure intact. It emerges into a world in which its premium analytics module, historically priced at fifteen thousand dollars a year, must compete against an analytics layer the customer's analyst can construct in an afternoon using the SaaS itself as a data source. The premium reporting tier, the advanced workflow add-on, the enterprise integration package — all of these were upsells whose pricing power depended on the customer believing that the alternative was prohibitively expensive to build. That belief no longer survives contact with reality.

The SaaS firm has historically depended on three revenue streams: the base subscription, the services and customisation business, and the productised premium upsell. The dry-cleaning calculation routes around the second. The Shein effect undercuts the third. What is left is the base subscription, priced as a utility, with thin margins, defended primarily by switching costs that themselves erode as middleware and migration tooling matures. The surviving SaaS firm is not the well-fed luxury brand of the textile analogy. It is closer to the regional commodity producer that endured globalisation — alive, profitable in absolute

terms, but operating on a fraction of the margin and with none of the pricing power it previously enjoyed.

The narrative that “system-of-record companies will be fine” is true in a narrow technical sense and significantly misleading in an economic one. They will exist. They will not be priced as they were.

A SHORT ANDERSEN INTERLUDE

There is a Hans Christian Andersen joke buried in this whole arrangement that I have been resisting and will now stop resisting. In the original tale, two weavers convince a vain emperor that they are producing a magnificent cloth so fine that only the wise and worthy can see it. The cloth is, of course, nothing. The emperor parades naked through the city, the entire court applauds the splendour of garments that do not exist, and a child standing in the crowd points out the obvious.

It is a near-perfect parable for a particular kind of enterprise software engagement. The weavers are the SaaS firm and its implementation partners. The magnificent cloth is the digital transformation programme, the AI-powered enterprise platform, the intelligent workflow suite — visible, naturally, only to those sufficiently strategic and forward-looking to perceive its value. The vain emperor is the executive sponsor whose reputation is staked on the platform succeeding. The applauding court is the consultancy ecosystem, whose continued employment depends on continuing to applaud. And the child, in 2026, is the intern with a Claude subscription who, asked over lunch whether the new platform is really worth what it costs, builds a working equivalent of the flagship module on a laptop before dessert arrives.

The spell breaks the same way it always has. Someone young, with nothing at stake socially, says the obvious thing aloud.

THE HARDER THING TO HOLD

The Luddites — the actual Luddites, not the modern caricature — were skilled craftspeople. They understood that the loom was coming. They understood, specifically, that they would lose, while some abstract future humanity would benefit. They were not mistaken on either count. They lost. Humanity, in aggregate, gained. Both statements are true.

I think of this often when speaking with working software engineers in the present moment. There is a real and identifiable group whose craft is being commodified in real time. Their unease is reasonable. The aggregate narrative is one of liberation — a curious person in a small town can now build what required a funded startup a decade ago — and that narrative is genuinely meaningful. But the aggregate narrative is told from a high altitude. From inside any particular life, the picture is more complicated.

The loom did not only displace; it also gave ordinary people something monarchs in 1700 did not possess — warmth, choice, and the dignity of self-presentation. The Sunday dress of a coal miner's wife in 1900 could not have been commissioned by Marie Antoinette, because the supply chain to produce it did not yet exist. We are about to give every curious person on Earth something Bell Labs could not have commissioned in 1970 — not because we are more capable than Bell Labs, but because the loom has improved.

THE QUESTION THAT REMAINS

If software is becoming fashion, the question for each of us is what we wish to wear, and, more pressingly, what we wish to make for ourselves now that making is free. The harder question — the one most engineers and SaaS founders will spend the next decade answering, whether they intend to or not — is whether they sit at the top, the bottom, or the middle of the loom's work. The first two will endure in different forms. The middle will not.

The handloom weavers were not wrong to grieve. But their grandchildren wore colour. ■