Invent And Simplify

Idea In Short

Amazon's strategy is guided by a handful of core principles. The most well-known among them is customer obsession - the imperative to *focus relentlessly on our customers*. Invent & Simplify is the 3rd Amazon Leadership Principle:

> Leaders expect and require innovation and invention from their teams and always find ways to simplify. They are externally aware, look for new ideas from everywhere, and are not limited by “not invented here”. Because we do new things, we accept that we may be misunderstood for long periods of time.

The *invent* part of this Amazon Leadership Principle is that Amazon frequently does new things, whether new means new scale, new products, new platforms, or something else new. The *simplify* part of this leadership principle is the idea that everyone, no matter what type of job they have, has the opportunity to simplify something, usually a process. Making something simpler is desirable because simpler usually equals greater efficiency i.e. quicker or cheaper.
https://www.youtube.com/watch?v=97h6ECZnf9o&ucbcb=1

Innovation - the new normal

New seismic and disruptive events are upending the pace of innovation. Companies, both large and small, are jumping into the fray, trying to differentiate themselves through emerging business models. In an IBM Institute for Business Value (IBV) survey, almost half of global CEOs surveyed said innovation will be the single most important activity for the success of their organizations in the future. As a result, there has been a proliferation of corporate venture capital funds, innovation labs, incubators, accelerators and co-working environments. These trends have led to a radical shift in the corporate status quo. Today, 7.8 billion people live in our world. Many great minds walked our earth and tried out a lot of things in the bygone centuries. However, most discoveries and inventions we experience today are simple modifications or variations of things that already exist.

Old wine in new bottles

Taking cue from the healthcare sector under the backdrop of COVID-19, diseases are getting more and more complex. Epidemics are becoming more prevalent, unprecedented, frequent and devastating. Scientists around the world are performing ground-breaking research to develop life-saving products to handle such complex scenarios. Due respect is warranted to those professionals that further our human knowledge and understanding of the world we live in. However, without any slight intended, I wish to massively trivialize the complexity involved. The new revolutionary drug might be just another molecule added to an existing formula (the beauty of research is in finding that single molecule and adding it to the right place in the formula).

The death of expertise

In his article, The Death of Expertise, Tom Nichols shared his views on the pursuit of expertise and epistemological debate. Professor Hans Rosling also shares these views on averages in his book, Factfulness.

> Yes, it's true that experts can make mistakes, as disasters from thalidomide to the Challenger explosion tragically remind us. But mostly, experts have a pretty good batting average compared to laymen: doctors, whatever their errors, seem to do better with most illnesses than faith healers or your Aunt Ginny and her special chicken gut poultice.

Furthermore, I also fully subscribe to his idea:

> The death of expertise is a rejection not only of knowledge, but of the ways in which we gain knowledge and learn about things. Fundamentally, it's a rejection of science and rationality, which are the foundations of Western civilization itself.

On expertise

This article also reminds of a parable:

> An engineer retired and a few weeks later a big machine, which was essential to the company's revenue, broke down. The Manager couldn't get the machine to work again, so he called in the engineer as an independent consultant. The engineer walks into the factory, takes a look at the machine, grabs a hammer, and whacks the machine once, whereupon the machine starts right up. The engineer leaves and the company is making money again. The next day Manager receives a bill from the engineer for $5,000. Manager is furious at the price and refuses to pay. The engineer assures him that it's a fair price. Manager retorts that if it's a fair price, the engineer won't mind itemizing the bill. The engineer agrees that this is a fair request and complies. The new, itemized bill reads…. Hammer: $5 Knowing where to hit the machine with hammer: $4995

Innovation & invention

Today, many products that are sold are small modifications to ones already available in the market. These modifications can be a sleeker design or just enough ergonomic enhancements to nudge people to buy it. For example, Apple has been tremendously effective at improving existing products and making them best sellers. The iPod, iPhone or Airpods were not the first to market nor had the most advanced technology. Yet, Apple made them easy to use, built an ecosystem and marketed well. Today, it is one of largest companies in the world with revenues from incremental, impactful modifications.

The innovation imperative

Today, innovation and invention have become imperatives for our societies at large. Consultants are not exempt from this imperative. Peter F. Drucker argues that, instead of a random, occasional, once-in-a-while process, innovation must be purposeful and systematic.

> Because the purpose of business is to create a customer, the business enterprise has two--and only two--basic functions: marketing and innovation. Marketing and innovation produce results; all the rest are costs. Marketing is the distinguishing, unique function of the business.

Hence, innovation and invention are key sources of long-term competitive advantage. Innovation helps companies put competitors at bay, increase entry barriers and better fulfill customers' evolving needs.

Lessons from Jack Welch

Similarly, Jack Welch, one of the most prominent CEOs of the last century, emphasizes boundaryless behavior and constantly searching for better ideas:

> If you've got a company that has a mentality inside that is filled with searching for a better idea every day, not just as a slogan but as a real concept, you will have innovation around you all the time.

He goes on to state that:

> Innovation is not a big breakthrough invention every time. Innovation is a constant thing. But if you don't have an innovative company [team], coming to work every day to find a better way, you don't have a company[team]. You're getting ready to die on the vine. You're always looking for the next innovation, the next niche, the next product improvement, the next service improvement. But always trying to get better.

Importance of context

Innovation and invention often require context. The context defines how an innovation will be used as a product or as part of an ecosystem. Apple did a great job at leveraging technology and its products to create ecosystems; the App store that launched in 2008 is one of those success stories. The App store was neither the first hub for software, nor was it the first hub that let developers monetize and distribute their software. In 1999, NTT DoCoMo launched the developer app store. However, the mobile devices lacked the power and critical mass of adopters to fuel a true app store takeoff. Hence, it's important to realize the dependencies when advocating for innovation and invention.

Becoming the trusted advisor

Since the Industrial Revolution, companies have been forced to think and reinvent the way they create new products and services in order to survive. Innovation is at the top of every single executive's agenda across the globe. The challenge with today's innovation is that the overall context keeps changing. Across the board, executives face pressing issues, such as globalization, changing customer expectations, demographic shifts in purchasing power, trade wars, shifting political landscape, supply chain disruptions, technology-driven obsolescence, market virtualization, etc. As consultants, you should help your clients understand how these evolutions impact their business. Helping your clients tackle challenges these challenges and adopt the appropriate posture for

innovation is obligatory. Sharing best practices, trends and unique insights on innovation becomes highly valuable to advance innovation and fully capture the value from it. In this regard, your role as a trusted advisor is more crucial than ever before

Mastering complexity through simplification

Today, businesses compete in extremely dynamic and complex environments. To derive order and control from these uncertainties, companies introduce new reports, rules, governance, and processes. However, these measures simply transfer the complexity into their internal operations. As a result, cumbersome communication lines, organizational structures, business processes, and control systems proliferate. Internal organizational complexity not only hinders productivity, but also adversely affects an organization's innovation prospects. Furthermore, such measures disengage and demotivate employees. Today, organizations must be highly agile and flexible to repond to the changing marketplace conditions. Furthermore, they also need to foresee the future and launch initiatives to future-proof their business models. They need to re-baseline their internal and external operating models to explore and exploit emergent opportunities. Those companies that can tackle the increasing complexity will emerge with a clear competitive advantage.

> Simplicity is the ultimate sophistication (Leonardo da Vinci)

Complexity is unavoidable. However, embracing complexity too much is a trace of avoidance. It is an excuse to not take action. Complexity should certainly not be a goal in itself. It is just a step in the process of reaching meaningful simplicity.

Inspiration from Richard Feynman

According to a poll of scientists conducted by Physics World in 1999, Richard Feynman was among the top ten highest regarded physicists. Feynman's genius lay in his ability to understand and present complex ideas in an intuitive and natural way. Check out an inspirational video about how fire is stored in sunshine. https://www.youtube.com/watch?v=ITpDrdtGAmo&ucbcb=1 Critically, he's also not shy about admitting when he doesn't understand something. David L. Goodstein, in his book Feynman's Lost Lecture:

> Feynman was a truly great teacher. He prided himself on being able to devise ways to explain even the most profound ideas to beginning students. Once, I said to him, "Dick, explain to me, so that I can understand it, why spin one-half particles obey Fermi-Dirac statistics." Sizing up his audience perfectly, Feynman said, "I'll prepare a freshman lecture on it." But he came back a few days later to say, "I couldn't do it. I couldn't reduce it to the freshman level. That means we don't really understand it."

According to Feynman:

> You can always recognize truth by its beauty and simplicity.

Simple explanations are the norm at Apple as well. At Apple:

> Engineers are expected to be able to explain a complex technology or product in simple, easily-understood terms not because the executive needs it explained simply to understand it, but as proof that the engineer understands it completely.

Challenger shuttle explosion

Feynman was asked to serve on the Rogers Commission in the wake of the Challenger shuttle explosion to discover the reasons behind the catastrophe. Feynman set about asking questions with the people who constructed the rocket. Delving deeper, he uncovered what he believed was the fundamental reason for the explosion on the cold winter morning of 28th January 1986. Feynman discovered that the rubber O-rings that held together sections of the rocket were extremely vulnerable to changes in temperature. He demonstrated this on live television with a glass of ice-water and one of these O-rings. He placed the O-ring in a clamp and in the ice water. When he lifted it out, the ring failed to stretch back to its original shape. A similar situation with the O-rings on the rocket allowed gas to escape from a section and heat the fuel tank, which resulted in the entire rocket exploding. https://www.youtube.com/watch?v=raMmRKGkGD4&ucbcb=1

Simplifying business

Traditionally, companies tackled complexities by crafting solutions on the basis of accumulated experience and judgment. In many cases, this is the right approach; many day-to-day problems are relatively straightforward and do not require extensive scrutiny:

1. The 1st approach involves implementing KPIs or other control mechanisms to ensure transparency or enhance a specific capability.
2. The 2nd approach directly targets employee behaviors to develop capabilities to manage growing complexities.

Famously, the principle of Occam's razor states that, faced with many possible explanations, the simplest is the most likely.

Complexity – the status quo in consulting

In contrast, consultants take the opposite approach. Faced with many possible explanations, they'll favour the most complex. Most clients have been testifying to this for years. Clients, faced with many conflicting priorities, find it hard to prioritize. Most clients agree to a higher price for consulting work than they'd initially estimated. That's not because they are bad at negotiating consultants' fees. Nor are the consultants pulling wool over their clients' eyes. This discrepancy is largely due to the complexity of the world in which clients now operate.

Demand & Supply economics

Furthermore, demand and supply-side economics are also at play here. On the supply side, there are few incentives to keep things simple. Complex projects are expected to drive more revenue than simple ones. Training and development can institutionalize complexity. Complexity creates barriers that keep clients' switching costs high. Complexity also implies a depth of expertise that clients can't emulate. This also prevents clients from challenging what consultants do. The bottom line, and perhaps the main driver, is that complexity is easier than simplicity.

Client disconnect

Eager to spearhead change in a fast-paced environment, leaders often create new projects, adopt new technologies, and form new teams. Consider, for example, a Sales Leader, who, in an effort to increase collaboration, rolls out a mobile chat platform rather than explore the collaboration capabilities of the company's current sales automation software. Or the Chief Marketing Officer (CMO), eager to make team members more accountable for campaign results, who adds new reporting requirements that only slow down decision making and discourage openness. New executives keen to make their mark are prone to creating complexity, by layering new thinking and plans on top of established working arrangements.

Simplicity – a consulting imperative

As consultants, we know people and organizations are far better at starting new projects than killing existing ones - no matter what their value is. We know, from our experience, that many organizations don't have a consistent process for eliminating projects and discontinuing products when they have run their course. Instead, they layer additional ones on top of existing initiatives. This diverts time from focusing on the most valuable work each person should be doing. Again, Jack Welch underlined the need to develop a positive view of simplicity:

> You can't believe how hard it is for people to be simple, how much they fear being simple. They worry that if they're simple, people will think they're simpleminded. In reality, of course, it's just the reverse.

Change catalyst

For simplicity to take shape, organizations must inherently alter the way their people think and behave, and critically change their underlying culture. In this context, consultants should also assume the role of change agents. As a consultant, you should help their client organizations understand why simplicity is better, define their mandate, and set desired outcomes. You should diagnose the scale and nature of the organization's complexity challenge using outside-in data analysis, surveys, interviews, and observations. After identifying required changes to strategy, operating model, culture, or activity, help your client create a simplicity blueprint and road map. Help your client execute the simplicity blueprint by de-cluttering the organization through regular and repeatable simplicity interventions and by coaching leaders in the simplicity concept and philosophy. Jack Welch famously institutionalized the Work-Out program across General Electric. Such initiatives focus on removing live complexity through short sprints, allows scalability, and enterprise-wide diffusion through the power of quick wins. Simplicity can seem easy, but sustaining it requires changes to the organizational culture, so that it becomes a core capability. By helping the Leadership in your client organizations recognize the role they play in driving simplicity (or complexity), you can catalyze the change process. As a change catalyst, you should ensure that simplicity permeates the entire organization, at every level and in every team.

Summary

Consultants deliberately need to keep things simple. Specifically, you need to acquire deep expertise to simplify complex client challenges and provide simple, effective solutions. As the Feynman examples show, only someone with mastery of their subject can reduce complex problems to manageable ones. Someone who knows less will be tempted to add more because they don't know what matters. When you uncover what is most true about your client organization, clear away the clutter, and stand simply in your truth, your clients will notice, understand, and appreciate the value you have to offer them.