Risk and compliance in global IT product management strategy

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Executive summary

Risk and compliance is no longer an after-thought but is instead a significant input variable and a differentiator for global IT Product Management (PM) strategy.

The first two decades of the 21st century highlighted how truly global and far-reaching technology can be. Globalization allowed countries and geographies to overcome several capacity constraints in order to adopt newer technologies. In recent past, however, we witness that local regulations limit adoption of modern technology, and products require more tailoring to meet regulatory demands.

In this article, we have explored two such regulatory challenges and have recommended a revision to the IT strategy framework, especially applicable for product managers and CIOs who manage global IT portfolios.

Two regulatory challenges for CIOs

Managing Intellectual Property (IP) is a monumental challenge for global CIOs where every infringement needs local adjudication.

Managing Data Residency and Protection has led to significant financial and engineering overheads for designing and implementing global products.

Revised IT product management strategy framework

The early IT strategy frameworks for product management assumed linear progression of capabilities. With the advent of agile methodologies, the prevailing IT strategy frameworks allow for iterative advancements of capabilities from run to grow to transform and then onto the run stage of the next "s-curve". We now have a fourth dimension: risk and compliance.

While risk and compliance has always been understood to be a requirement, it now shapes the direction of the global IT portfolio. Some key themes include budgetary allocation for risk and compliance, decentralization of technology standards, developing strategic alliances with vendors, defining more meaningful KPIs, revising offshoring strategy, etc.

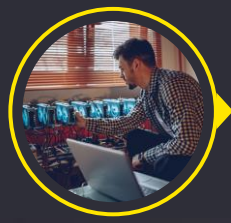
Technology will continue to play a much greater role in global business strategy. However, the shift in regulatory oversight will now drive a more complex and diverse portfolio of solutions, making IT even more complicated than ever. And technology companies with a balance of global and local aspirations will thrive.

Understanding the new dynamics of regulations, product management, and business and IT strategy

It was yesterday when technology was agnostic of industry, domain and geography. Today technology products exhibit a strong sense of alignment to local, national, and regional policies. Or put another way, technology adoption is limited by the regulations surrounding it. Just like corporations, technologies are more and more bound by where they live. Over the last decade, regulations have had a greater influence on the design and capabilities of technology products, which creates unique challenges and opportunities for product owners and IT strategists.

Setting aside the inherent moral or philosophical arguments this might create (such as: are these regulations necessary or are they a hindrance? Are these regulations effectively meeting their objectives?) we simply focus on the present, nearly universal challenges and the ways CIOs and product managers have been addressing them. In this article, we have explored two such challenges and have recommended a revision to the IT strategy framework, especially applicable for product managers and CIOs who manage a global IT portfolio.

Problem 1
Managing Intellectual Property (IP)



Under the World Trade Organization (WTO), the world harmonized patent protection to roughly 20 years[1] which, interestingly, is longer protection than the actual shelf life of almost all technology products. In a world where adoption, speed, and collaboration are the success measures, IP protection is not a concern of the consumer.

But, to the creator of the IP, navigating a global market in which it is so easy to steal a good idea, IP protection is a monumental challenge where every infringement needs local adjudication.

While R&D budgets are high in the developed countries, companies often turn to low-cost regions such as Asia and South America for development, manufacturing and services. However, regulations can often be costly and tedious.

Hence, depending on the product, speed to market, and type of technology, many international technology companies choose to forgo their IP protection in order to gain the first mover advantage in an unexplored market.

On the other hand, some countries mandate international companies to share a substantial ownership stake with a local enterprise or mandate working with a state-owned enterprise (such as telecommunications providers). For example, up until September 2020, foreign ownership in defense sector in India was capped at 49% (which is now 74%)[2]. So, to operate in these countries, IP is simply surrendered.

Add in the proliferation and success of open source, there is a whole new sense of what is and is not owned by any one group. While the world of technology has been dominated by large multinationals in the last two decades, decentralized protocols and technologies have disrupted all.

Also, while these large corporations have thrived by creating broad ecosystems with open platforms, they are increasingly less free to implement on demand.

So, what has to be balanced?

1. Finding solutions that are free of IP protection that meet business demand
2. Finding solutions that meet business demand but have local restrictions

In other words, emerging, innovative and creative solutions should be balanced with the tried and true, all while managing risk and adhering to the principles of compliance to applicable laws.

Problem 2
Managing Data Residency and Protection

Product innovation came from the rapid development of the next new idea, but data has turned out to be more or less the opposite. When data was crowned as "the new oil", it was only a matter of time before data got weaponized and its owners, territorial.

According to United Nations Conference on Trade and Development (UNCTAD), 128 out of 194 countries have put in place legislation for data protection and privacy (as of 2 May 2021)[3]. Legislative bodies and technology companies worked together to create rules that balanced privacy concerns with access to transformative technology as well as technology that showed great commercial promise. As well intentioned as this was, no one knew how complex adopting the rules would become in real world deployments.

Local regulations on data privacy, for example, reduces Total Addressable Market (TAM) for many products, and the level of product tailoring required to meet these laws reduces scalability and consistency. This naturally adds to financial overheads for global product rollouts and engineering overheads for global product design.

So, what has happened? There has been a shift from global implementations of global technologies to regional adoption of locally tailored solutions. For example, Microsoft Azure recently released a white paper[4] to highlight how they are enabling data residency and data protection for their cloud services. It is crucial to note some of the engineering challenges such as delineating regions, creating availability zones, architecting for BCDR, managing encryption standards, data retention and disposal, etc.

Not to mention, global CIOs have an array of environments to manage. This includes multi-cloud models and multi-vendor sourcing. And typically, two distinct vendors don't necessarily have the same regional delineations, encryption standards, failover mechanisms, etc. Hence, there is no one size fits all solution especially when considering updates which are rolled out asynchronously, which creates further challenges for CIOs from a risk and compliance and user adoption standpoint.

Data protection and privacy may sound universal, and there certainly is a great degree of urgency in protecting individual rights, there is less clarity about local implications and regulations, especially in a rapidly evolving domain such as IT. One must be aware that even exactly the same clauses such as "... the company must store data locally..." can have vastly different interpretations and eventualities in different jurisdictions.

So, what has to be balanced?

1

Realizing that the underlying motivation for data privacy laws is not about making it economically feasible for the solution

2

Realizing that profitability and ROI may come with a risk of reduced functionality or a breach of individual data privacy

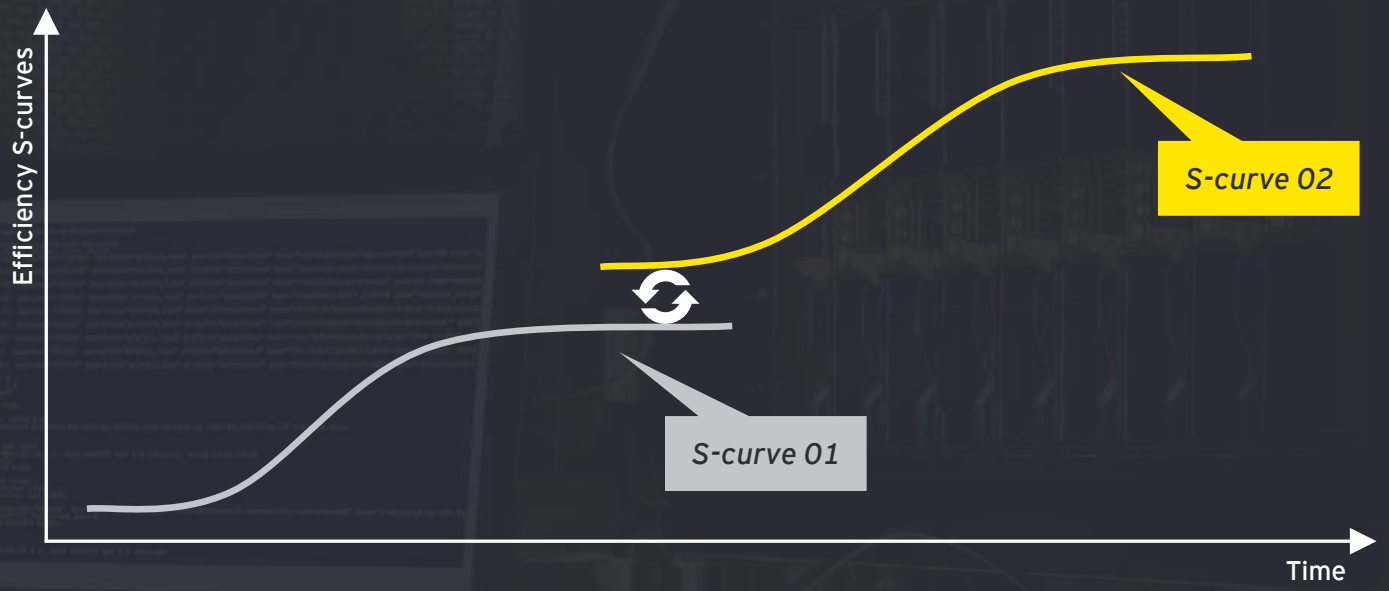
In other words, data management, innovative engineering and economics may not necessarily be equal partners, depending on where the solution is deployed.

Prevailing IT Product Management Strategy Framework

The ***early*** IT PM strategy frameworks assumed linear progression of capabilities and hence were very modular. With the advent of agile methodologies, the ***prevailing*** IT PM strategy frameworks allow for iterative advancements of capabilities from run to grow to transform and then onto the run stage of the next "s-curve".

With innovation at its core, this framework is inward facing. It does not take into account positive or negative externalities such as regulations. In the real world, we witness that technology products often branch into multiple distinct S-curves, with risk and compliance being the key reason for these distinct trajectories. Global CIOs and product managers often face situations where they manage products and solutions which are contemporaneously on different S-curves. This is not the same as "emerging country A" is on S-curve 01 and "developed country B" is on S-curve 02. Two countries with comparable technology infrastructures and foundational capabilities may mandate vastly different requirements for data privacy and IP protection.

The limitations of the prevailing IT PM strategy frameworks are evident. The last few decades have seen a boom in globalization and global IT strategy needs to address the impact of local protections. It is no longer just a strategy to address the "run, grow, and transform" framework. Now we have a fourth dimension: risk and compliance.



Revised IT Product Management Strategy Framework

"Run" → "Grow" → "Transform"

"Risk and Compliance"

While risk and compliance has always been understood to be a requirement, it now shapes the direction of your global portfolio. Given the variety of possible outcomes, it is difficult to develop a playbook or a plug and play strategy. Global CIOs and product managers have to recognize the importance of incorporating the following themes into their longer-term strategies:

- Invest in improving trust with key stakeholders such as end users, regulators and vendors
- Select regional partners who can drive best-in-class solutions for local needs
- Balance and govern the central technology benefit vs the localized technology capability
- Create and follow global, regional and local exceptions for company policies for IP and data
- Determine effective ways to allocate IT innovation resources globally
- Assess practices for technology procurement, offshoring and vendor management
- Develop meaningful metrics to compare performance across regions and S-curves
- Manage IT finance for the upfront and ongoing costs for localized compliance

Conclusion

Risk and compliance is no longer an after-thought but is instead a significant input variable and a differentiator in global IT product management strategy. Given the steep penalties associated with non-compliance and the potential damage to reputation, CIOs are increasingly favoring partners and service providers who have traversed further along in the maturity curve for managing risk and compliance.

Technology has played and will continue to play a much greater role in business strategy. And technology companies with a balance of global and local aspirations will thrive. The shift in regulatory oversight will now drive a more complex and diverse portfolio of solutions, making IT even more complicated than ever, and ushering in new ways of managing and delivering value for the company. CIOs and product managers who incorporate this shift into their thinking will have a distinctive edge when seeking competitive advantage.

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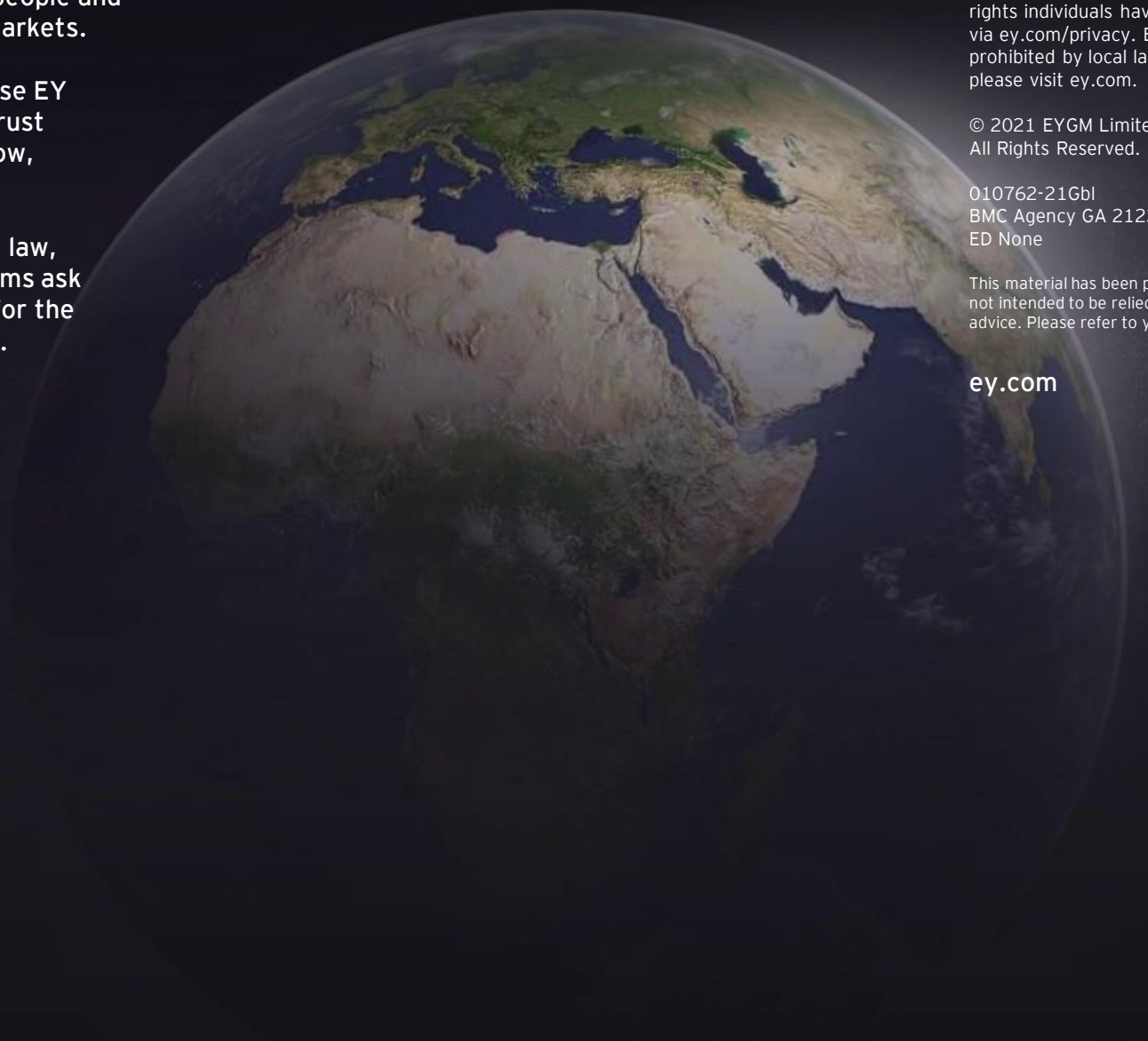

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