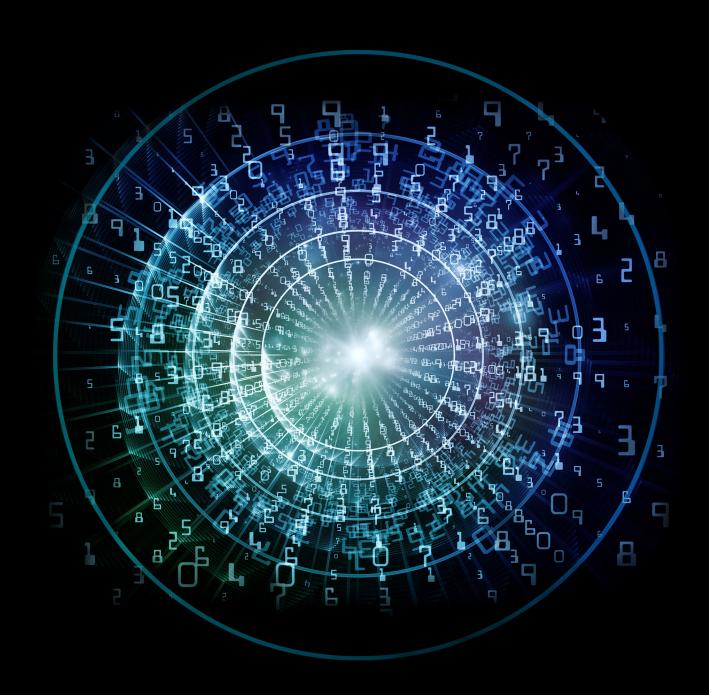
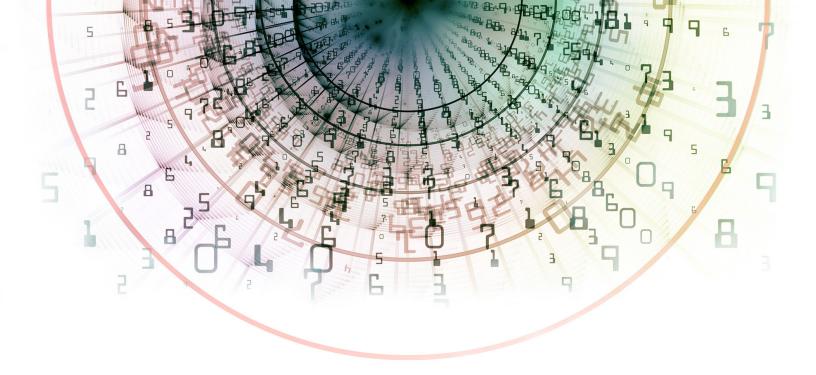
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Private equity value creation through product engineering

A value creation strategy for TMT portfolio companies



The competition for private equity (PE) deals is intensifying, and many PE portfolio companies in the telecommunications, media, and technology (TMT) industry are implementing cost-reduction measures to stay competitive. Private equity firms, which are increasingly investing in software and other technology companies, need to find novel ways to create value beyond standard operational and financial improvements. Product engineering provides a meaningful opportunity area for both portfolio companies and PE firms to grow revenue and reduce costs.

Why product engineering for value creation in private equity?

Private equity firms have excelled at creating value for portfolio companies through operational improvement, financial engineering, and bolt-on acquisitions. However, organic product development is often neglected among the many available value creation levers due to its perceived complexities and longer-time value horizon. As decreased valuations entice new buyers into the market and competition intensifies, there are several reasons why PE firms should reconsider their value creation levers:

- No low-hanging fruit: PE firms have historically leaned on cost cutting and multiple expansions to create value in their portfolio companies. The threat of slow growth and a potential recession poses a risk in multiple expansions. Moreover, standard cost-cutting methods are often already implemented by previous management. As such, there is no more low-hanging fruit for portfolio companies, and PE firms need to explore new cost levers.
- Shift from cost cutting to profitable growth: Investors are increasingly looking for growth, and product development and expansion are essential to driving top-line growth. However, many companies, especially smaller ones, don't have a formal process to manage portfolios and new product development efforts. In some cases, pipelines are clogged with low-value projects. Furthermore, undeveloped engineering processes and systems, especially in the software engineering space, often increase development cost and delay time to market. By focusing on software engineering, firms can prioritize resources to build the right products (e.g., profitable, high-value ones) cost efficiently and with faster time to market. Both aspects can help boost product innovation at scale and accelerate growth.
- **Synergy across the portfolio:** PE firms can establish an engineering Center of Excellence (CoE) to share best practices across portfolio companies and drive engineering efficiency. Leveraging best practices via a CoE is even more impactful in the software engineering space: A CoE can aid PE firms in deal negotiations, as it can create synergies that corporate buyers often bring to the seller.

What are the opportunity levers to drive revenue growth and cost reduction in product engineering?

Five areas comprise product engineering: product strategy, portfolio management, product development, engineering tools, and engineering talent. Within each exist significant opportunity levers for value creation. Table 1 summarizes some of the critical opportunity levers on which companies may focus their efforts:

Table 1. Product engineering opportunity levers

Product engineering	Revenue growth levers	Cost reduction levers
Product strategy	New product opportunity Identification	Investment planning and prioritization
	Existing product enhancements	
	Pricing and packaging optimization	
	Strategic product roadmap development	
Portfolio management	Product modernization (e.g., cloud	SKU rationalization
	native, microservices)	Roadmap and pipeline alignment
	• Product to flexible consumption/XaaS	
	Data monetization	
Product development	Effective product development process	Efficient product development process
	Agile software development	• Lean software development
	DevOps/Continuous integration and continuous delivery (CICD) for rapid release	Product testing automation
Engineering tools	 Engineering tool modernization (e.g., higher scalability) 	Engineering tool modernization (e.g., lower maintenance cost)
		Tool consolidation
Engineering talent	Engineering outsourcing—access to skilled workforce globally and scale faster	Offshore/nearshore in-house engineering talent
		Engage outsourced engineering firms to fill skill set gaps and offload non-core activities
		Optimize org structure to enable sharing and lower overhead

How can TMT companies enable engineering value capture along the deal cycle?

Making product engineering an integral part of a deal's due diligence and post-close phases can create tremendous value for PE firms and portfolio companies. Organizations can level up by tapping product engineering early in the deal cycle and focusing on the following key activities (Table 2):

Table 2. Value creation activities

	Due dilligence activities	Post-close activities
Product strategy	 Conduct outside-in research to understand customer needs and competitor positioning, and identify "white space" opportunities 	 Position strategic case for investment, including rationale, risks of inaction, and go-forward plan
	 Define differentiated use cases and verticals to target to address white space opportunities Frame conceptual opportunity, including value proposition, key components, and desired customer outcomes 	 Align on build/buy/partner decisions and estimate level of effort for new offering components Define strategic roadmap, including high- level milestones and dependencies
Portfolio management	Access product portfolio and pipeline health	Rationalize portfolio and SKUs
	 Conduct product due diligence (e.g., scalability, maintainability, security, and data) 	 Implement product modernization (e.g., move to cloud, XaaS, data monetization)
	Analyze the process for prioritizing R&D investments	 Reposition R&D investment to align with the growth plan
Product development	 Evaluate product development process maturity (e.g., agile product development team roles) 	Establish formal/modern product development process
	Access current development automation	• Implement DevOps/CICD
	activities and assets	Automate product testing
Engineering tools	 Conduct technology due diligence to identify technical debt 	Consolidate engineering tools by removing redundancy and low- to no-usage tools
	Map engineering tool functionality and usage	 Modernize engineering tools (e.g., cloud, low-code/no-code)
Engineering talent	Evaluate talent needs and skill gaps across locations	Engineering outsourcing— offcharing (pages baring)
	 Assess engineering resource allocation (e.g., new versus maintenance products, design versus testing) 	offshoring/nearshoringProduct org optimization
	Assess organizational structure	. Todace org optimization

In addition to these activities, PE firms can leverage the CoE to drive best practices across portfolio companies. During the due diligence phase, PE firms can identify the target company's gaps relative to best practices and, during post-close phases, implement best practices and utilize standard KPIs to track performance.

Using product engineering as a value creation strategy requires private equity firms to work closely with portfolio companies' business and engineering leaders during the deal life cycle. The focus should be on increasing engineering efficiency to achieve both business growth and cost reduction. Since the product is at the core of many portfolio companies, these activities must be carefully executed to avoid product development disruption and customer confusion. Working with an experienced partner—one with industry, M&A, and software product engineering experience—to help navigate the product engineering improvement journey can be a significant value-add and vastly increase the potential to capture desired value.



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