

# OUR VISION AT SOLVENTURE **Strategic Benchmarking**

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## EXECUTIVE SUMMARY

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Benchmarking exists as a navigational device for organizations, allowing them to plot where they are relative to competitors and industry peers and identify where they should be. However, traditional benchmarking exercises are laced with fallacies which can easily set a firm on a misguided trajectory.

Solventure has innovated an alternative approach to benchmarking – one which maps to corporate strategy, evaluates tradeoffs across financial and operational levers, delivers actionable insights, and ensures deliberate and meaningful target setting for the organization. When further combined with Solventure’s broader strategy-driven supply chain methodology, this facilitates a more competitive organization aligned to customer drivers and powered by a responsive supply chain to surmount market variability and complexity.

# WHERE TRADITIONAL BENCHMARKING FALLS SHORT

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Benchmarking is the start of a discovery process and should answer the following questions: Where are we? Where do we want to be? How will we get there? However, traditional benchmarking has some significant shortcomings, namely comparing firms within a sector without regard for their respective strategy in the marketplace. This fallacy renders the exercise meaningless when answering two of the three aforementioned questions: Where do we want to be? and How will we get there?

As an example, consider benchmarking an airline against other firms in its sector. It would be negligent for a premium provider such as Emirates and Singapore Airlines to set its course based on metrics associated with a low-cost provider such as Ryanair or Southwest Airlines. Despite sharing the same sector, these airlines have very different value propositions, cultural DNA, and organization designs.

Similarly, one of Solventure's clients, a high-end consumer electronics manufacturer, had previously performed a traditional benchmarking exercise. Their gross margins exceeded their competitors due to the premium nature of their product, but they lagged sector peers in working capital. In particular, they were comparing inventory turns with a low-end private label manufacturer. Of course, the private label manufacturer had a smaller product assortment and minimal service, resulting in faster inventory turns. For its purposes, the premium provider maintained an inventory of specialized, high-specification components, resulting in a higher capital employed, but also enabling manufacture of a superior product with higher pricing in the market. While inventory opportunities may have existed to some extent for the premium provider, a cut too deep here would either result in a futile and disappointing struggle, or worse, negatively impact production of finished goods, resulting in missed revenue opportunities. In such cases, an otherwise well-intentioned benchmarking exercise can set a misdirected course.



# WHAT IS DIFFERENT AT SOLVENTURE?

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At Solventure, we advocate strategic benchmarking in two dimensions simultaneously: one dimension reflects profitability, the other reflects capital employed. Benchmarking in two dimensions connects to our innovative Supply Chain Triangle<sup>®</sup> used as a framework to balance the tradeoffs of service, cost, and cash within an organization in order to maximize financial return.

When benchmarking in two dimensions, tradeoffs and differentiation of firms becomes clearer. Consider again, the example of the premium consumer electronics manufacturer versus the low-end private label manufacturer. Despite these tradeoffs, we can still derive a curve of best performance – one which is indifferent to and normalizes – across strategies. In fact, when competitive positioning is well-executed, we find that it is possible to “reverse engineer” a firm’s strategy from publicly available financials.

Further, we have mapped the tradeoffs between profitability and capital to highly-regarded strategy models, such as that of Treacy and Wiersema (The Discipline of Market Leaders) and Crawford and Matthews (The Myth of Excellence). This approach facilitates setting meaningful strategy-specific targets enabled through specific operational levers, answering those otherwise elusive questions: Where do we want to be? and How will we get there?





# WHERE ARE WE?

Solventure’s approach includes benchmarking in two dimensions simultaneously: one dimension reflects profitability, the other capital. Intuitively, this makes sense as investors seek to maximize their “bang for buck,” and firms seek to maximize the output of profit over their investment. Simply visualizing the relationship of profitability to capital is a powerful tool, especially when compared against other firms.

While multiple ratios exist for such measurement, as a starting point, Solventure favors Return on Capital Employed (ROCE). ROCE is calculated as the Earnings Before Interest and Tax (EBIT) over the Capital Employed (defined as Fixed Assets plus Working Capital). To this extent, ROCE is a broad metric focused on “operations” writ large, but excluding financing and tax optimization.

ROCE serves as an equalizer across sector, scale, and strategy. It doesn’t matter if a firm’s profitability is lower, provided the capital required is also correspondingly lower. Conversely, a higher margin should allow for a higher capital employed. Consider the perspective of an outside investor choosing between two companies. The first company requires \$50M of capital, whereas the second requires \$100M of capital. Both companies each generate \$100M of profit per year. All things equal, in such case the choice should be to make the first investment twice.

Of course, normalization in the form of percentages, turns, etc. should be used to compare firms of different scale, different currencies, etc. Further, it is generally favorable to plot multiple years of history. Increasing the sample size avoids anomalies due to macro-economic, localized, or internal firm challenges, shows consistency (or lack thereof), and reveals potential market and competitor trends.

	Gross Margin %	EBIT %	Capital Employed %	ROCE
Product Leader	50%	20%	100%	20%
Cost Leader	25%	5%	25%	20%

Figure 1 - Different strategies can lead to the same Return on Capital Employed

As an example, we have plotted the trailing five years of operating income percent and inventory turns of several toy manufacturers – Lego, Hasbro, and Tomy (Tomy is a Tokyo-based multi-national producer of children’s toys and merchandise with average revenues above \$1B USD annually). In this example, we’ve chosen inventory turns as a specific operational metric tied to working capital, and therefore capital employed. However, the analysis could use capital employed as a whole, or other more focused metrics such as Fixed Asset Turns, Net Property Plant Equipment Turns, or Cash Conversion Cycle. Similarly, the profitability axis could use EBIT Percent or Gross Margin Percent. These measures are nuanced, each valuable to specific purposes. We must keep in mind that these need not be mutually exclusive as we can easily repeat the analysis across several layouts using different measures to dissect the various dimensions of the business, and to broaden or narrow our aperture for specific elements, as needed.

	Gross Margin %	EBIT %	ROCE
Lego	70%	30%	48%
Hasbro	56%	13%	11%
Tomy	40%	7%	12%

Figure 2 - Select toy manufacturers  
5-year average (2017-2021)

When we review the firms simultaneously on a two-dimensional plot, a pattern is more apparent than if we had reviewed each metric in isolation. Tomy occupies the lower right with operating margins around 7% and inventory turns around 6.5. Hasbro has a higher operating margin at 13%, but slightly lower turns around 5.0. Lego is quite distant in the upper left with operating margins near 30%, but slower turns around 4.5. However, what does this arrangement indicate and how should we take action on this information? We will continue with this example in the subsequent sections.

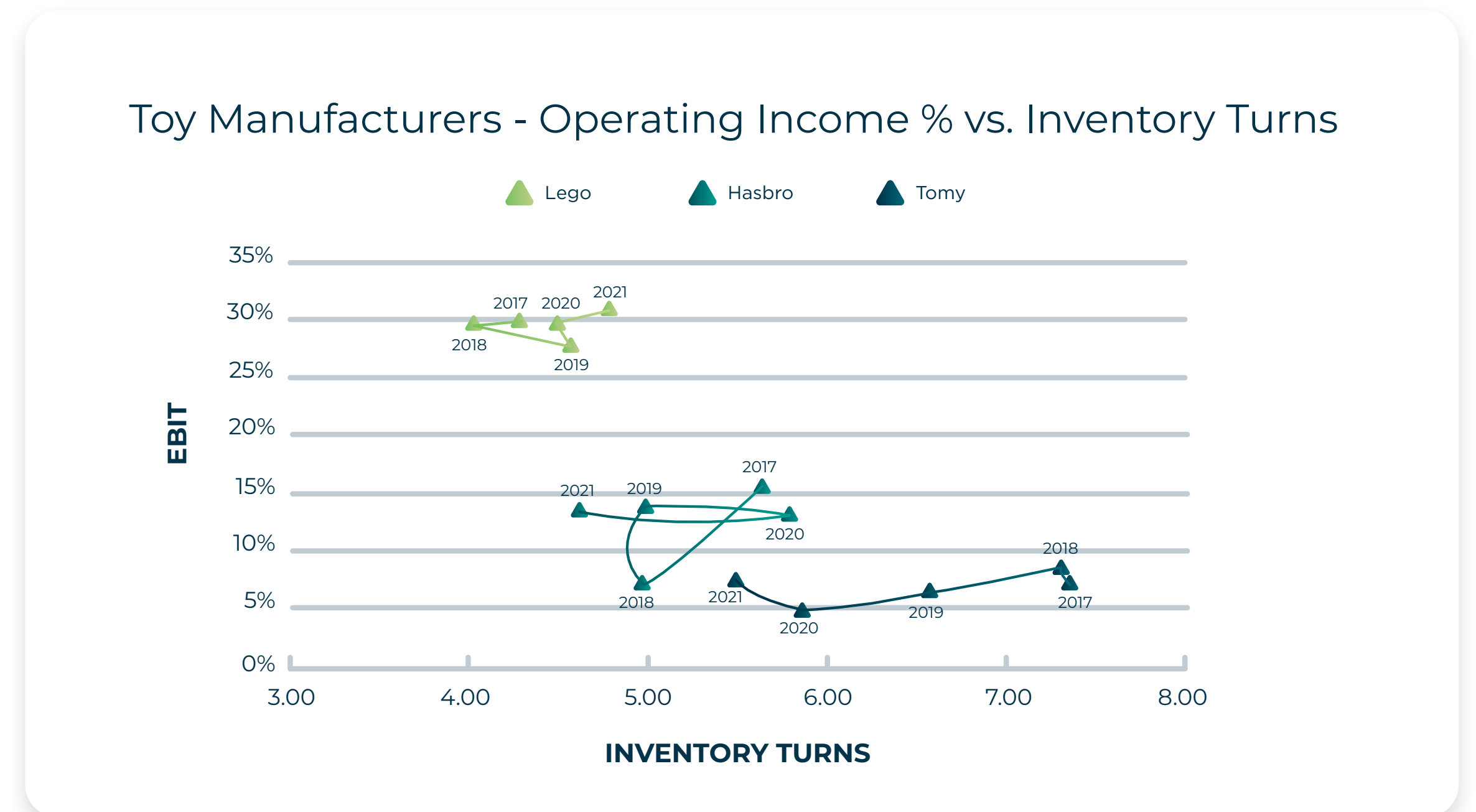


Figure 3 - Select toy manufacturers  
operating income % and inventory turns



## WHERE DO WE WANT TO BE?

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Of course, tradeoffs exist based on differing strategies, as illustrated with the previous airline and electronics manufacturing examples. How then can we find value beyond a visual stratification of firms across the two-dimensions of profitability and capital?

Economics provides us with the concept of an 'indifference curve' – a ratio which preserves a constant output despite varied combinations of inputs. Consider once more ROCE, which is the EBIT over the Capital Employed. From an investor perspective, it is not the numerator or denominator in isolation which matters, rather the ratio as a whole.

When benchmarking in two dimensions, an indifference curve can be calculated based on any single point. It is possible to take the single point of best performance by a leading firm (as well as derive median or weighted average among desired data points). From this, a line can be plotted which traverses all inputs leading to that constant output. The result is a frontier of performance based on the combination of measures, rather than a single measure in isolation.





Ultimately, regardless of strategy, it is desirable to be on the line of best performance. How then, do we take action to move from our current positioning toward the line? Because output is identical or 'indifferent' we could say that where we want to be on the curve is moot; however, the inputs themselves are highly dependent on our broader strategy.

Continuing with our toy manufacturer example, we have selected the single best performing competitor-year combination based on profitability per inventory turns. Simple algebra allows us to derive and plot the same line based on any point or combination of points (e.g. median, weighted average, etc.) or to rescale the ratio up or down, as needed for target setting. Where would Tomy or Hasbro want to intersect the line of best performance?

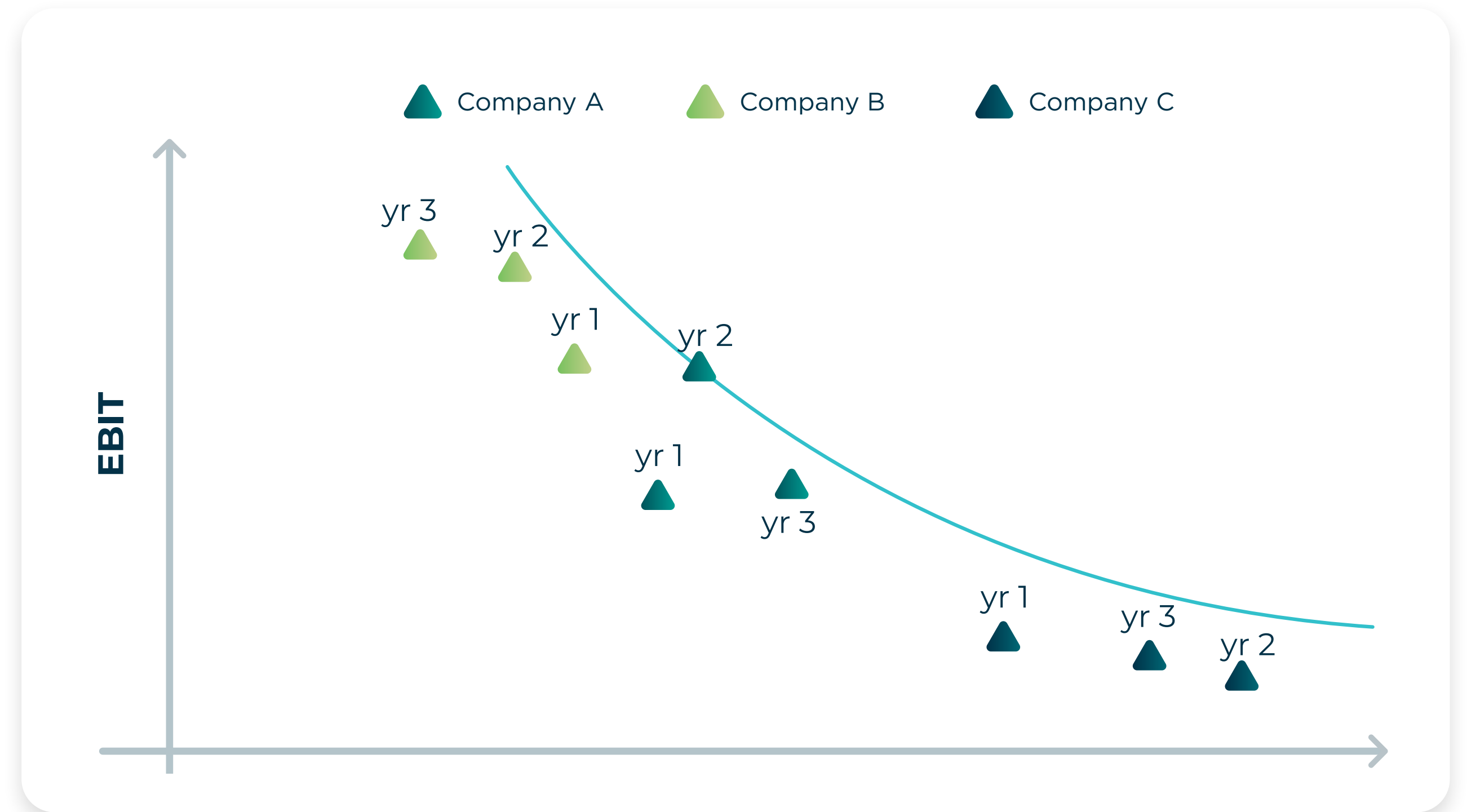


Figure 4 - Select toy manufacturers with indifference curve for best performance

# HOW WILL WE GET THERE?

This exercise provided a simultaneous view of our firm's positioning related to others in terms of both profitability and capital employed. Additionally, we have a line of best performance toward which we should strive. However, a line is not a point, so where on the line should we place our target? The answer to this question is not strategy-agnostic; rather it is strategy-dependent and influences what organizational 'levers' we pull.

What we now need is a compass, telling us what direction to move to reach the line, and therefore which levers - and to what extent for each - we should act reach the desired target. Acknowledging that baseline performance improvements may be able to be made in both profitability and capital, in general, the primary direction of movement toward the line of best performance should be driven by strategy.

To understand where on the line of best performance we should target, we invoke the framework of the Supply Chain Triangle® to maximize Return on Capital Employed, coupled with mappings to contemporary strategy models. Through the Supply Chain Triangle® we already recognize that tradeoffs exist along the axis of higher service, lower cost, and reduced capital. Similarly, Treacy and Wiersema define three strategy models: Product Leadership, Customer Intimacy, and Operational Excellence, the characteristics of which align to the tradeoffs evident in the triangle. In the most basic sense, are you more oriented toward product quality and innovation, customer experience, or lowest cost solutions?

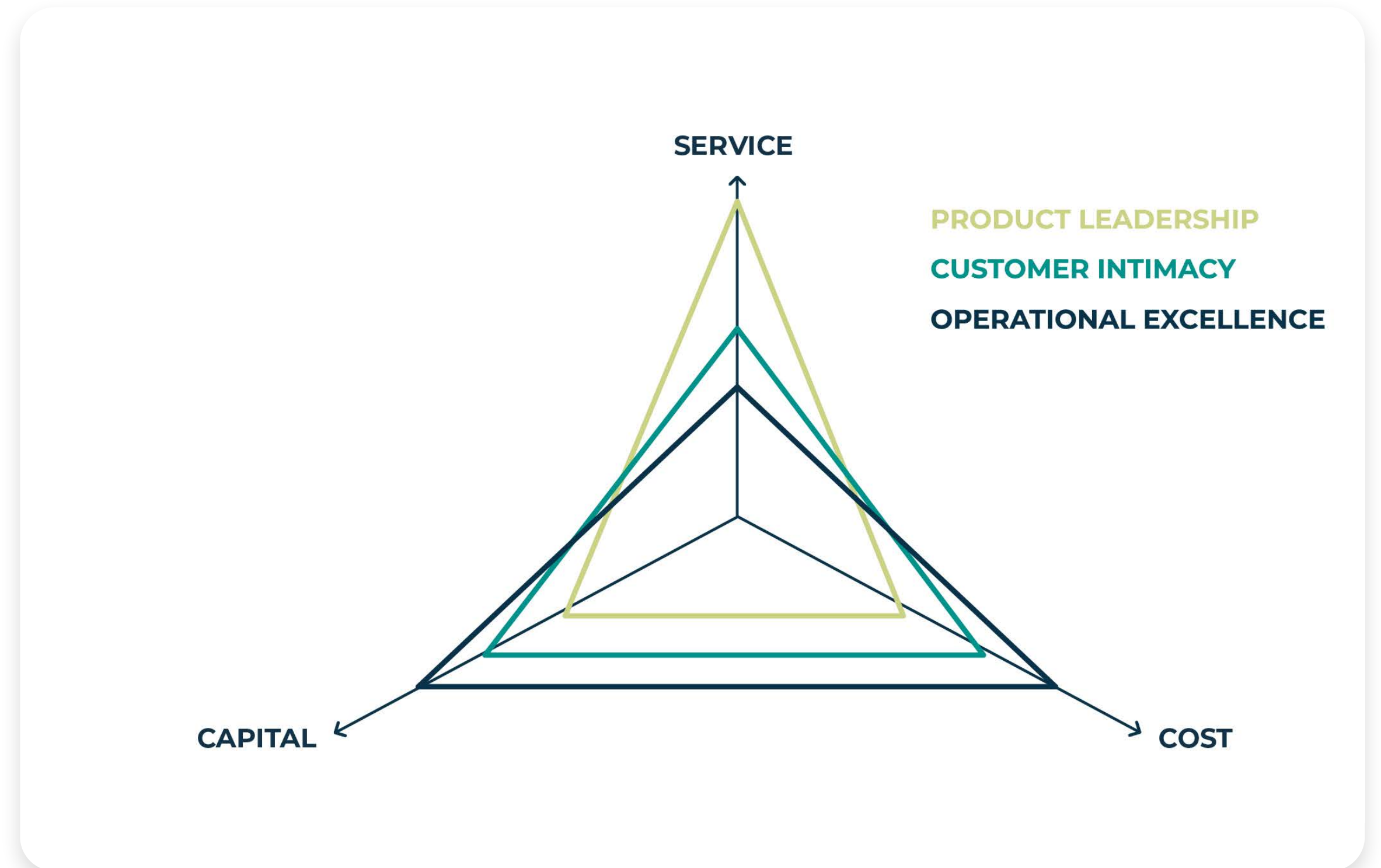


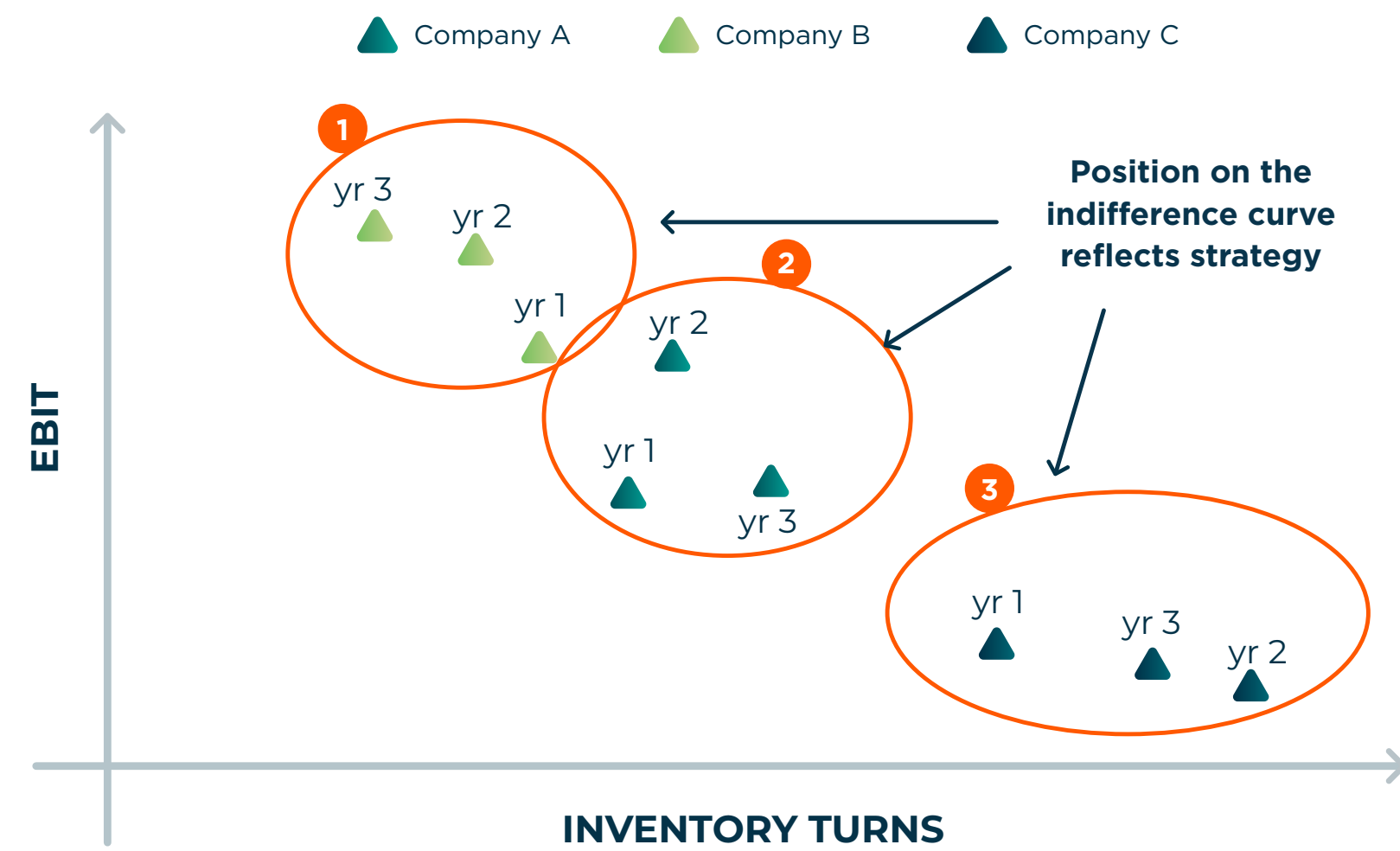
Figure 5 - Overlay of strategy models with the Supply Chain Triangle®



For instance, consider a discount grocer such as an ALDI or a Lidl versus a higher-end grocer such as a Harrod's or a Whole Foods. The discounter will have a favorable working capital due to a tighter assortment resulting in faster inventory turns and also likely fewer fixed assets (e.g. smaller physical footprint for retail), again improving capital efficiency due to higher turns on property, plant, and equipment (PPE). Indeed, simplicity and operational excellence is why the discounter is able offer low prices and operate on smaller margins. Conversely, the higher-end grocer may have the opposite of these conditions, yet should command a higher margin through the convenience of serving as a 'one stop shop' with a broader assortment (packaged goods, variety of produce, meat, seafood, etc.) for the customer. At least from the scope of inventory and physical assets, this example illustrates that different strategies require different supply chains.

Further, we can understand that moving toward the line of best performance, for instance, by increasing inventory turns or PPE turns, or by increasing margin should be a function of our strategy.

Continuing with the example of the toy manufacturers, we find that Hasbro and Tomy have a trailing 5-year ROCE each around 11-12%, whereas Lego's ROCE is nearing 50%. We should consider Lego in a "Product Leadership" position. In fact, Lego has a highly specialized product and brand reverence in the market and are thereby able to command a higher revenue, manifest in their 5-year average gross margins of 70% versus Hasbro and Tomy at 56% and 40%, respectively. However, the diversity of Lego's product portfolio presumably exudes a somewhat longer-tail of slow-moving inventory, hence the lower inventory turns. Still, an investor would value Lego's substantially higher ROCE over that of Hasbro or Tomy.



### 1 PRODUCT LEADER

- > High product complexity → high capital employed
- > Compensated by higher premium → highest gross margin & EBIT

### 2 CUSTOMER INTIMACY

- > 'Controlled' (portfolio) complexity
- > Small premium vs OpEx players

### 3 OPERATIONAL EXCELLENCE

- > Lowest Price → minimal margins, EBIT
- > Simplicity → minimal capital employed

Lego's performance, driven by its substantial 30% EBIT is exceptional and, while there may be opportunities to learn from Lego, it is an unreasonable target for Hasbro or Tomy. Still, we can establish a reasonable ROCE target at 15% and a stretch multi-year target at 20%.

Just as our high-end electronics manufacturer should not attempt to compete with the inventory turns of the private label manufacturer, Hasbro or Tomy would struggle to increase to 30% operating income. While some gross margin and operating margin improvement may be possible, these firms may instead look increase their inventory turns, for example through product portfolio rationalization or more responsive supply chains. Ultimately, these firms will need to identify a point on the line of best performance which corresponds to their respective strategies. Even if the target needs to be recalibrated and lowered to be achievable over a certain timeframe, the relationship between profitability and capital employed should be preserved, as this is the link to strategy. Indeed, improving the ROCE may be a function of both increasing EBIT and decreasing capital employed. With a spreadsheet and some simple algebra, we can build a full matrix to show the possible combinations.

Additionally, while we have first looked exclusively at EBIT % versus inventory turns, there may be other levers we should review under the umbrella of profitability capital employed. The same approach can easily be repeated and extended to simulate the impact of combinations of more specific levers - or combinations thereof - such as decreasing capital employed by reducing fixed assets and extending payables, etc. or profitability increases via reduced cost of goods sold or overhead, price increases, etc.

		Capital Employed (% Delta from Current)								
		10%	5%	0%	-5%	-10%	-15%	-20%	-25%	-30%
EBIT %	10%	7,7%	8,1%	8,5%	8,9%	9,4%	10,0%	10,6%	11,3%	12,1%
	11%	8,5%	8,9%	9,3%	9,8%	10,3%	11,0%	11,6%	12,4%	13,3%
	12%	9,2%	9,7%	10,2%	10,7%	11,3%	12,0%	12,7%	13,5%	14,5%
	13%	10,0%	10,5%	11,0%	11,6%	12,2%	13,0%	13,8%	14,7%	15,7%
	14%	10,8%	11,3%	11,9%	12,5%	13,2%	13,9%	14,8%	15,8%	16,9%
	15%	11,5%	12,1%	12,7%	13,4%	14,1%	14,9%	15,9%	16,9%	18,1%
	16%	12,3%	12,9%	13,5%	14,3%	15,1%	15,9%	16,9%	18,1%	19,4%
	17%	13,1%	13,7%	14,4%	15,2%	16,0%	16,9%	18,0%	19,2%	20,6%
	18%	13,9%	14,5%	15,2%	16,0%	16,9%	17,9%	19,1%	20,3%	21,8%

Figure 5 - Select toy manufacturer ROCE combination matrix



## IN SUMMARY

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The pioneering business strategist Michael Porter states, “Without trade-offs, there would be no need for choice and thus no need for strategy.” Solventure, too, recognizes the presence of tradeoffs and thus incorporates them into its innovating benchmarking approach through two-dimensional benchmarking, indifference curves, and linking to strategy models. All of this is facilitated within a quantitative yet intuitive framework where we can simulate the impact of specific operational levers on a firm’s financial performance. When navigating today’s marketplace complexity and variability, the need for alignment across strategy, finance, and supply chain is critical. Benchmarking – done properly – can be your compass; Solventure can be your guide.

## ABOUT THE AUTHOR

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### **Bram Desmet - CEO | Professor | Author**

As CEO, since 2009 Bram has led the Solventure Group to transform organization's sales & operations planning processes into a competitive advantage using his innovative Supply Chain Triangle® and Strategy-Driven approach.

As an adjunct professor at both Vlerick Business School and Peking University, Bram bridges the gap between academia and industry practice.

As an author, he has encapsulated his experiences into elegant and practical frameworks in his books, Supply Chain Strategy and Financial Metrics and The Strategy-Driven Supply Chain, evangelizing strategic thinking for cohesive alignment of strategy, supply chain, and finance within organizations across all sectors. Bram is also founder of The Strategy-Driven Supply Chain Institute.

## ABOUT SOLVENTURE

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As Solventure we proud ourselves of being experts in designing and implementing Strategy-Driven S&OP. We do that through a unique combination of people, processes, tools and analytics. Solventure is Arkieva's, OMP's and Kinaxis's implementation partner.

Check us at [www.solventuregroup.com](http://www.solventuregroup.com) or contact us at [contact@solventure.eu](mailto:contact@solventure.eu) for more info.