

THE GROWTH TESSERACT

A SCIENTIFIC VIEW OF FIRMS' GROWTH OPPORTUNITIES

By Staffan Canback

Growth is an important topic for most firms. Yet they often lack a framework for organizing their thoughts on growth. This may lead to an inability to identify, quantify, and capture growth opportunities.

Shareholder value has three components: profitability, growth, and risk. Scientifically, for profitability there is the Dupont identity. For risk there is the discount rate. For growth, there is...nothing.

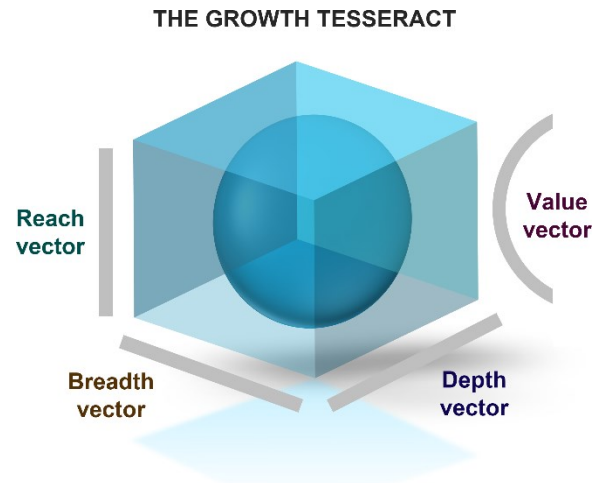
The Growth Tesseract framework seeks to rectify this. It was derived from *Bureaucratic Limits of Firm Size*, the author's doctoral dissertation.¹

The framework is mutually exclusive and completely exhaustive. That is, it covers all possible growth opportunities and there is no overlap between the four dimensions.

The following focuses on consumer goods but applies to any industry.

Introduction

A tesseract is a cube in four dimensions.² It is a fitting metaphor because there are four ways for a firm to grow. Not three, not eight: four and four only. Further, the dimensions are orthogonal.



A firm can:

1. Expand its reach geographically
2. Develop its breadth product-wise
3. Increase its depth by vertical integration
4. Maximize the value it delivers

Any growth initiative one can think of fits in one of these four dimensions. If it fits in more than one, the initiative can be unbundled into the individual dimensions.

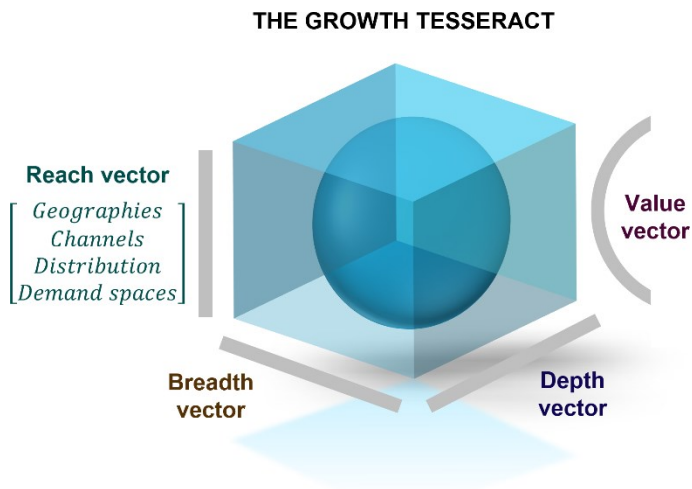
In the following, each dimension is discussed, ending with a few ways to apply the framework.

¹ Canback, S. 2002: Bureaucratic Limits of Firm Size—Empirical Analysis Using Transaction Cost Economics. Brunel University. <https://bura.brunel.ac.uk/handle/2438/9030>

² The cube-sphere shown is not a proper tesseract, but it illustrates four dimensions well.

1. Reach Vector

Expanding reach is a crucial lever for growth. There are several means by which this can be accomplished.



The four most important levers to increase reach are:

- **Geographic reach.** It can be achieved by entering new countries or new regions of an already-served country. It is one of the most important levers for growth, especially if scale economies are important.

Participating in only a few markets becomes more and more difficult as globalization spreads, so expanding reach is a necessity for many.

- **Channel reach.** This comes from seeking out new distribution channels, and by extension new outlets. For example, a firm may be strong in modern trade, but not in traditional trade or e-commerce. Expanding into new channels in existing markets

is often a quick way to increase sales, but channel conflicts may impede progress.

- **Distribution reach.** Having strong distribution coverage is paramount for any company. Often, there are major opportunities to expand coverage.

An example is a company that noted that it was strong in traditional trade but lagged in modern trade. It set out to build its modern trade capabilities over several years.

- **Demand space reach.** Growth into new demand spaces (primarily consumer or occasion) is often the quickest way to grow. An example is a firm strong in school lunch snacks that expands into the after-school meal occasion.

2. Breadth Vector

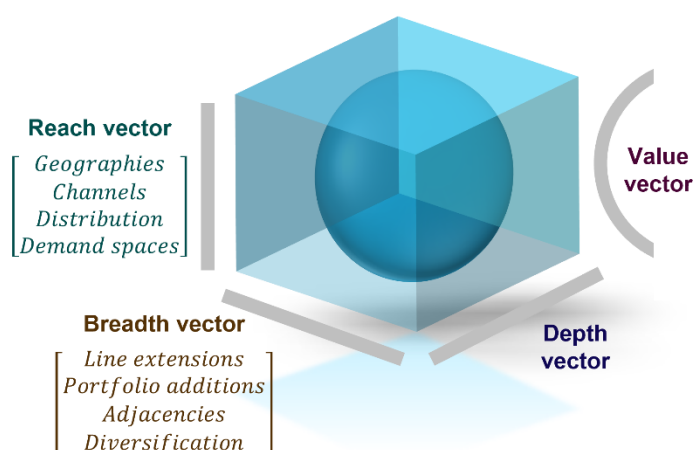
Firms that fail to add to their product or service offerings tend to disappear.³ There are exceptions, but most successful firms expand their breadth dramatically over decades.

Firms can move incrementally with current brands or take major steps by entering new product or service markets.

³ Hannah, L. 1996. *Marshall's 'Trees' and the Global 'Forest': Were 'Giant Redwoods'*

Different? Paper read at NBER Conference, 19 October, at Cambridge, Mass.

THE GROWTH TESSERACT



The four most important levers to increase breadth are:

- **Line extensions.** This means adding variants to an existing product. An example is Fanta Grape as an extension to the original orange Fanta. Line extensions can be tricky because they sometimes clutter the brand, but done correctly, they are a major lever for growth.

Portfolio additions. Firms may play up or down the price ladder. For example, Canada Goose introduced Black Label to premiumize from an already high price point, while Nordstrom introduced Nordstrom Rack to play in the value segment.

- **Adjacencies.** Firms may also introduce related, but entirely new, products. An example is Nike, which started as a sneaker company but expanded into sports apparel and is now a street fashion company.
- **Diversification.** Sometimes diversification is an excellent way to grow. Diversification is much maligned but there are

circumstances when it makes sense, such as when cash flow is strong, but the current business is slowly fading.

McKinsey & Company's diversification from management consulting to general project management ranging from information technology to capital projects services is an example, although its success is still to be seen.

The breadth vector is usually the easiest route to grow profitably, as shown in Dr. Canback's dissertation.

3. Depth Vector

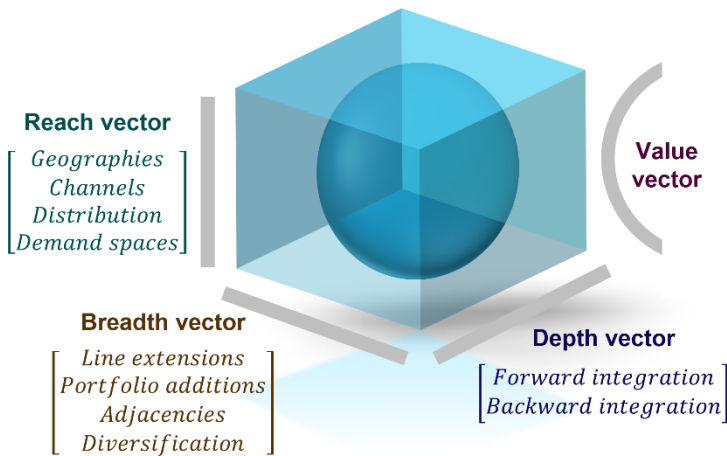
Growing revenue is easy. A firm sells a pen for one-trillion-and-one dollars, to another firm, which immediately sells it back for one-trillion dollars. Suddenly the two largest firms in the world have been created.

However, firms should not maximize revenue: value added is what counts. In this case, the value added is one dollar—hardly a record-breaking sum.

Value added equals revenue minus external purchases, or equivalently, the sum of labor and capital costs. Beyond increasing reach and breadth, a firm can increase depth.

That is, a firm can grow by increasing value added through depth even if revenue does not necessarily grow. Instead, (vertical) depth increases.

THE GROWTH TESSERACT



There are two levers to increase depth:

- **Integrate forward** by, for example, buying a distributor or building the firm's own retail outlets.
- **Integrate backward** by, for example, buying a supplier that makes inputs for the firm's product.

It has been shown that increasing depth is generally a bad idea. Executives sometimes erroneously think that they absorb more margin but fail to see that they also increase capital employed.

There are, however, notable exceptions. Here are two examples:

- Luxury goods makers increasingly integrate forward into distribution. This pays off in many markets because the increased control over deliveries and visibility into outlets generates profit opportunities beyond a third-party distribution arrangement.
- A ball-bearing manufacturer owned a steel mill. The reason was that ownership

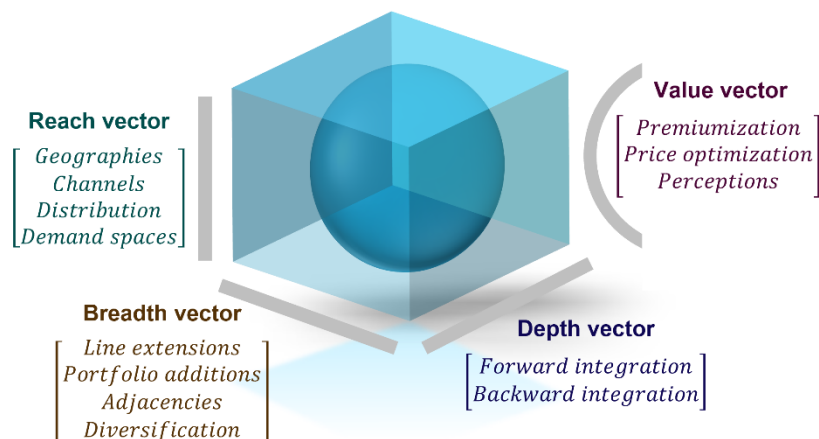
increased delivery precision and when steel markets were tight, the price of steel suitable for ball-bearings skyrocketed without an internal source.

In general, decreasing depth is the better way to go, but in certain highly specific situations, increasing depth makes sense. It is therefore included in the framework.

4. Value Vector

Finally, a firm can grow without increasing reach, breadth, or depth. Instead, it can work to improve its value proposition.

THE GROWTH TESSERACT



The key levers are:

- **Premiumization.** A product's or service's benefit is the bundle of tangible (functional) and intangible (emotional) attributes that goes along with it. Premiumizing by building benefits is the most common way to increase value.

A simple example is sea salt. The functional attribute is NaCl, which the body needs. The emotional attribute is salt from the sea, which to some people

sounds more appealing than salt from a mine. In addition, there may be a convenient-to-pour package attribute, or an iodine attribute.

- **Price.** This is what the customer pays. A firm must continuously monitor its prices against the competition, against substitutes, and against the grey market (if it exists). Fundamental analytical tools to assess price position are a) elasticity models and b) attribute price component analyses.
- **Perceptions.** Both benefits and price can be influenced by perceptions. That is, customers perceive a benefit or price differently than reality. Shaping customers' perceptions occurs through marketing.

An example is Microsoft's and Adobe's move from selling software products to selling software for rent: suddenly the up-front price declines, but the life cycle price increases dramatically.

Applications

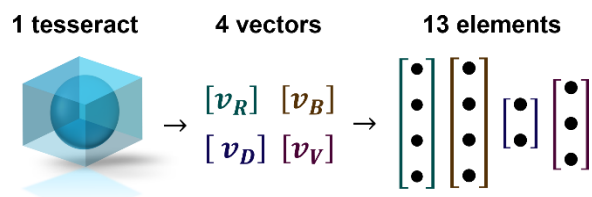
Understanding the Growth Tesseract framework is easy—that is the point of it. But what are the applications? Here are three examples:

- **As a diagnostic tool.** A firm may wonder why it has not been able to grow as quickly as plans dictated. To understand why, each past growth initiative is assigned to one or more of the dimensions and divided into two groups: successes and failures. From this emerges a pattern of the firm's strengths and weaknesses.

- **To set future strategy.** A strategic component will inevitably be "Sources of Growth". That is, firms identify growth opportunities that have been overlooked and that go above and beyond existing plans. By applying this rigorous and rigid framework systematically, one can be sure to cover all opportunities.
- **To evaluate acquisitions.** What aspects of a potential acquisition leads to growth over and beyond the growth of the individual firms?

The Growth Tesseract brings science to growth initiatives. It is an important framework for management teams because it structures the internal discussions, and because it ensures completeness in strategies.

A starting point may be to use the growth vectors described above in a Vectors of Growth Analysis (VGA) within the Growth Tesseract logic.



About the author

Staffan Canback is executive chairman of [Tellusant, Inc.](http://www.tellusant.com), a Boston-based firm focused on improving strategic decision making by applying scientific, quantitative methods to management problems.

He is reached at: scanback@tellusant.com.