

# Valuing Brands in the Tech Sector Using an Apportionment Framework

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In 2017, a Villanova University business professor posited that there would be only 30 technology companies in 2030, 10 in 2050—and then none.<sup>1</sup> In a sector defined by consolidation, the tech companies that have survived in competitive markets have become household names, with brand assets that contribute to their financial performance and valuation. These companies often have two types of valuable brands—their corporate brand name and their product brands—both contributing to performance and value in different ways at different times in the company’s evolution.

Tech leaders do not want to spend a dollar less than they should—or more than they have to—on marketing. Not only can brand valuation inform the allocation of these precious financial resources, it can also provide insight into the financial contribution of each brand asset.

To develop an accurate and meaningful brand valuation for a tech company, valuation analysts need to consider earnings-based valuation approaches, understand the interconnection of technology and brand assets, and deploy various analytical tools to uncover important information that is not always obvious. In this article, we present a case study to illustrate the use of a profit apportionment analysis to quantify the financial contributions of the subject company’s brands.

## Case Study: Identifying Brand Value for a Growing Tech Company

Nevium performed a brand and patent valuation for a growing company ahead of the launch of several new products. The company name was its brand—all of its products referenced the company name, but also had “sub-brands” similar to

Apple and iPhone, Illumina and MiniSeq, or Qualcomm and Snapdragon. The company’s customers, stakeholders, and business partners all recognized the company name, but not necessarily the sub-brands, because they change and evolve over time. The company brand and several of the well-known sub-brands contribute to recognition and financial performance, but if the company were to be acquired, all the brands would likely be consumed. How then is it possible to determine their value?

There are three approaches to brand valuation: cost, market, and income.<sup>2</sup> The cost approach measures the cost to replace previous investments and resulting brand awareness, but does not address more strategic questions. The market approach reviews valuation indications from transactions involving similar assets, but best serves as a benchmark rather than an indication of the financial contribution made by a company’s own brands. The income approach, which we chose for this client, quantifies the present value of future economic benefits received from ownership of a brand/business, addressing the key questions asked by many entrepreneurs, managers, and investors. The income approach is usually the best approach for brand valuations in the tech product space, because product life cycles are key to predicting product performance.

In fact, the product life cycle is just one of several timing factors unique to brand valuation in the tech space. Intangible assets and the products that use them have lifespans, and while a company can expect perpetual growth, it cannot expect the same of its brand assets. Brands often contribute to financial performance differently throughout the product lifecycle and many brands will be phased out over time. The

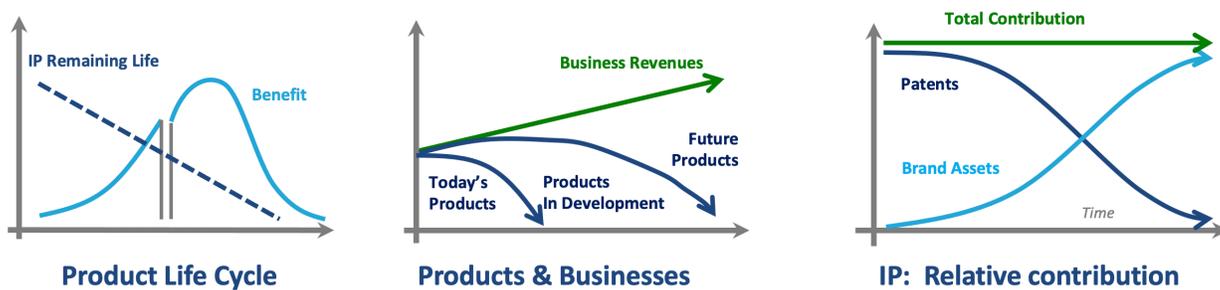
1 Steve Andriole, “There Will be 30 Technology Companies in 2030, 10 in 2050, and Then There Will be None,” *Forbes*, May 25, 2017, <https://www.forbes.com/sites/steveandriole/2017/05/25/there-will-be-20-technology-companies-in-2030-10-in-2050-and-then-there-will-be-none/?sh=7cffe4c8132b>.

2 *ISO 10668, Brand Valuation—Requirements for Monetary Brand Valuation*, 1st ed. (Geneva, CH: International Organization for Standardization, 2010).

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corporate brand may outlive product brands and other intangibles, such as patents and other intellectual properties (IP). So, in conducting profit apportionment for tech brand valuation, it is important to consider the relationship between the product and the overall business, and how brand assets interact with other IP and proprietary resources, as well as to understand how product performance will grow, peak, and decline. Developing a reasonable outlook for product lifecycles and the duration of brand use should factor greatly in the apportionment exercise and the valuation calculations.

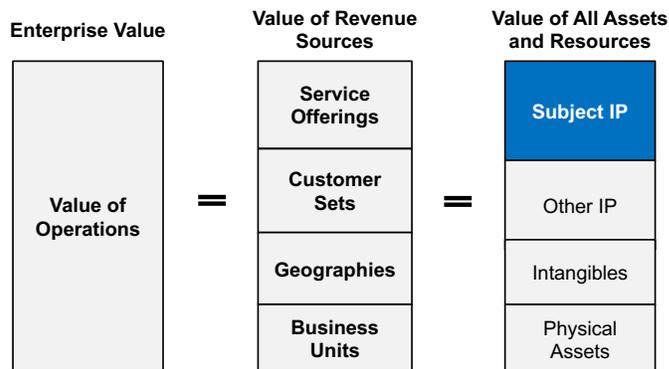
**Figure 1: Contribution of IP Over Time**



For many tech companies, their brands will be a value driver for many years, but brand investments need to complement technology development, innovation, and product creation. Given that many tech companies have limited resources and the unique time constraints of the tech products industry, deciding how to spend marketing dollars can feel at best like a race against the clock and at worst like a game of chicken. A brand valuation study in this sector should help identify the brand assets driving revenue, forecast when value will peak, and uncover red flags that could hamper growth, helping tech managers confidently scale their branding investments and marketing dollars.

Of the many approaches available, we chose to calculate the present value of future benefits contributed by the company's use of its brand assets using a profit apportionment analysis, which quantifies the portion of expected financial performance derived from the use of each brand asset. Unlike other approaches that focus more on the worth of IP in a transactional sense, apportionment looks at value over time, which is appropriate considering that the products using the brand assets follow product life cycles of peak and decline. Keep in mind, IP depends on other assets and resources, so the contribution to total profits must be less than 100 percent of total profits.

**Figure 2: Apportionment Framework**



**Companies should be able to provide records of revenue and profitability of each business activity.**

There is not a lot of guidance on or consistency in developing apportionment analyses. We use a framework of questions that consider demand, product marketing, comparable products, financial performance, and the contribution of other assets:

**What are the subject business’s sources of revenue?** Do they include product sales, service fees, advertising sales, data access fees, license fees, commissions, a combination of these sources, or something else? This information can be gleaned from reviewing a company’s financial reports and accounting records, as well as interviewing management. It is critical to identify 100 percent of the activities generating revenue in this exercise.

**How strong is the performance of each revenue source?** Companies should be able to provide records of revenue and profitability of each business activity. These may take the form of gross profit, operating profit, or net profit after allocation of expenses. In addition to identifying revenue as it is standardly reported by the company, it is also helpful to ask why revenue has increased or declined, whether the company has done activity-based costing analyses—and, if so, if those reports are available—and if the company received any nonoperating income, such as royalties or license payments.

**What are the key assets the business owns and uses?** What are the physical assets, IP, and other intangibles? What makes up the subject, or brand, IP—e.g., patents, trade secrets, brand assets, proprietary software, client/customer relationships? This information will largely come from conversations with management, financial reports, stakeholder communications, and marketing materials, including the company website. When possible, identified assets should be clarified and confirmed by reviewing patent, trademark, and copyright office filings and registrations, using the Whois registry, and consulting with in-house and outside counsel.

**What is the relative importance of the identified assets to each revenue source?** Is the subject IP making a meaningful contribution to any of the key

assets? Is it a primary driver of overall financial performance for the company? We use a set of 17 specific questions to thoroughly address this issue (see Figure 3).<sup>3</sup>

**Figure 3: Asset Contribution Questions**

<i>The Contribution Question Sets</i>	
<b>Demand</b>	Where is the Offering purchased? Level of care, diligence in purchase decision? Thoroughly researched or impulse? How do customers find the Offering. What internet search terms connect customers to the point of sale? Is the Offering sold in conjunction with other products or services?
<b>Marketing</b>	What features are promoted, emphasized, and explained? What price breaks, discounts, rebates, or promotional pricing are used?
<b>Financial</b>	Does the Offering achieve a price premium? Does the Offering achieve greater unit volumes? Does the Offering benefit from cost reductions? Does it cost less to market or produce? Are there differences in cash flows, working capital use, or capital expenditure?
<b>Comparables</b>	What other Offerings do buyers consider? What Offerings provide similar benefits? What Offerings compete for consumer attention and unit sales?
<b>Other Assets</b>	What is the company's competitive advantage? What other IP does the company own or use and what is its IP strategy? How does the company develop new Offerings, does it make acquisitions? Does the company invest in protecting its proprietary assets?

We have also identified five analytical tools to help address this broader set of questions:

**Management interviews.** Management is usually the best source of information about the business, but all information garnered in this activity should be supported by the analyst's research and due diligence to vet management's claims.

**Surveys, reviews, and feedback.** Many businesses regularly conduct third-party surveys as part of marketing and client satisfaction efforts. The analyst should obtain any existing survey feedback and complement them with information from review sites and forums. These sources often help identify

<sup>3</sup> The framework is described in detail in Brian Buss and Doug Bania, "Profit Apportionment in Intellectual Property Infringement Damages Calculations," chap. 31 in *The Comprehensive Guide to Economic Damages*, 5th ed., vol. 1, ed. Nancy Fannon and Jonathan Dunitz (Portland, OR: Business Valuation Resources, 2018).

the relative strength of brand assets, the product features driving consumer demand, and the relative recognition of product brands versus corporate brands.

**Financial analysis.** Reviewing financial reports and benchmarking them against guideline companies can be helpful as the use of IP can influence product pricing, sales volume, procurement costs, and marketing and operations expenses.

**Internet and social media analysis.** Many businesses rely on the internet and social media for sales, marketing, and operations, generating a wealth of information that can address most of the contribution questions. In particular, the Wayback Machine<sup>4</sup> can provide archived versions of websites; these snapshots in time can uncover changes to the information the company publishes about itself, including clues about how the relative contribution of assets may have changed over time.

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### Marketing and communication language analysis.

In addition to their websites, companies publish a lot of information about themselves in annual reports, investor presentations, and marketing materials. Analysts should pay attention to the language used in these materials, particularly changes over time, which can reveal key developments in relative asset contributions.

All information retrieved in these exercises should be cross-checked and supported by additional data. A thorough

analyst will perform all five exercises as part of the due diligence process.

This framework can be used in valuation and litigation support assignments. Apportionment requires a lot of detective work and objective review of facts and evidence. The output will be an expert valuation opinion, supported by sufficient data and analysis.

### Discussion

In the case of our growing tech client, the apportionment exercise sought to assign the subject IP's contribution to the company's three products. It consisted of:

- Identifying the key assets and resources the company used to design, develop, market, sell, and distribute its products, including all tangible and intangible assets, technology assets, trade secrets, and key relationships.
- Forecasting future financial performance for each source of revenue. Most tech companies will develop a portfolio of products and services, each with different growth expectations and levels of financial performance (different margins and investment requirements). As each revenue source may rely on brand assets in different ways, the brand valuation exercise incorporates a forecast of financial performance at the product level. This step can provide a more detailed outlook for the company's future performance than business-level forecasting.
- Assessing and quantifying the contribution of the identified key assets to the performance of each revenue source. For brand valuation, the apportionment process determines the portion of financial performance derived from use of brands, with an emphasis on drivers of product demand, product marketing, comparable offerings, financial performance, and the contribution of other assets. This step involved addressing an additional set of questions to identify the relative contribution made by each asset to each revenue source.
- Calculating the present value of cash flows apportioned to the key assets identified.

Apportionment is not an exact science, so we relied on the five analytical tools discussed above—mostly standard business school analyses—to support the forecasts and develop our apportionment findings. Our examination included website analytics, social media analysis, brand score, brand equity models, company language analysis, profitability/excess profit comparison, surveys, interviews, and focus groups.

<sup>4</sup> <https://archive.org>.

Working through the five analytical tools to assign the subject IP's contributions to the identified key assets, the marketing communication language analysis provided a key insight that heavily influenced the resulting valuation. When we read through the company's documents, they mentioned and featured the importance of its sales team and distribution partners. Over and over again, the company emphasized the importance of people and relationships. If brands or patents were valuable, why did the company constantly highlight its special people and unique relationships?

Next, we forecasted the products' expected IP contribution over time. We found that the product brands were expected to be phased out as the product portfolio evolved and the brands would have shorter life cycles matching the product groups that used them. The corporate brand and relationships with key distributors were expected to outlive the products, contributing to future generations of products as well as the current generation. The relationships were also expected to remain in place as the product and technology portfolios evolved. The relationship assets could be leveraged as new technologies and new product brands replaced older versions. These observations about timing and product evolution had an important impact on the valuation results, and management's strategic reaction to our analysis.

The contribution to financial performance from product brands was lower than the contribution from the company's corporate brand and trademark and its relationships with customers. The lower-than-expected contribution can be seen in the apportionment rates for each of the company's three existing products (see Figure 4).

**Figure 4: Apportionment Valuation**

Value of Business		Value of Assets & Resources			Value of Revenue Sources				
		Asset / Resource	Rate of Return	Valuation	Value Contribution	Rate of Return	Valuation	Value Contribution	
		Working Capital	5%	63	4%	Product A	13%	407	27%
		PP&E	8%	163	11%	Product B	15%	789	53%
		Corporate Brand/TM	12%	272	18%	Product C	18%	301	20%
		Patents	14%	296	20%				
		Product Brands	16%	123	8%				
		Trade Secrets	18%	28	2%				
		Relations with Customers	20%	304	20%				
		Relations with Suppliers	20%	45	3%				
		Workforce	20%	82	6%				
		Unidentified / Synergies	25%	121	8%				
WACC	15%	Weighted Return	15%			Weighted Return	15%		
<b>Business Value</b>	<b>1,497</b>	<b>Total Value</b>		<b>1,497</b>		<b>Total Value</b>		<b>1,497</b>	
<b>Apportionment Rates</b>									
		Asset / Resource	Product A	Product B	Product C				
		Working Capital	1%	1%	1%				
		PP&E	5%	5%	5%				
		Corporate Brand/TM	20%	10%	25%				
		Patents	25%	15%	20%				
		Product Brands	10%	25%	2%				
		Trade Secrets	5%	5%	2%				
		Relations with Customers	20%	25%	30%				
		Relations with Suppliers	3%	5%	2%				
		Workforce	12%	9%	13%				
			<b>100%</b>	<b>100%</b>	<b>100%</b>				

**While a brand valuation in the tech sector can seem daunting, systematic review and rigorous vetting of all available information is half the battle.**

The owners were surprised when our valuations of the product brand names and patent portfolio were lower than they expected. Based on this valuation analysis, management and the majority investor group refocused their marketing strategies on customer relationships. The valuation analysis helped to resolve resource allocation disputes and identify a path forward for the company's future growth. While this approach does pose challenges for the valuation analyst, the multi-level results provide a deeper level of information for the client.

### **Conclusion**

Given the extent to which businesses today rely on the internet and social media, valuation analysts should scrutinize sales, marketing, and operational materials prepared for company websites and other digital channels. These sources can answer most of the questions critical to brand valuation in the tech industry, and even historical changes to their language can provide important clues to the timing aspects of a valuation.

While a brand valuation in the tech sector can seem daunting, systematic review and rigorous vetting of all available information is half the battle. Methodically working through the analytical tools at your disposal, while viewing the results through a temporal lens that takes into account the product lifecycle and the interplay between product and corporate brand marketing, will get you most of the rest of the way. And an eagle eye for discrepancies in the data and evidence will help you finalize a sound valuation that management can draw on for strategy for years to come. **VE**



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