

Purchase Price Allocation Benchmarking Information Technology Transactions 2017

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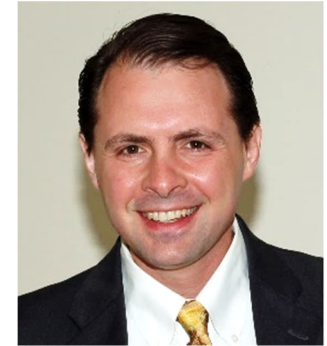
About Sorbus Advisors LLC

Sorbus Advisors LLC is a full-service valuation advisory firm focused on corporate financial reporting, tax reporting, and transaction planning.

Our mission is to help clients navigate ever-growing complexities of the global regulatory and transaction environment. With state-of-the-art valuation tools we help prepare financial statements, increase transparency, improve compliance, quantify economic impact of strategic transactions, and enhance corporate governance.

Volume does not equal quality. When choosing our boutique firm, our clients look for and find:

- ✓ *always-on* direct access to a senior valuation specialist,
- ✓ deep technical knowledge and stellar execution,
- ✓ quick turn-around, and
- ✓ confidence in navigating most rigorous audit review.



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Purpose	We Value	Industries
Financial reporting, including purchase accounting (ASC 805) Tax Transaction Planning	Intangible Assets Businesses Financial Instruments Individual Equity Securities (409A) Debt Derivatives Portfolios	Information Technology Life Sciences Consumer Products Business Products And Services Financial Institutions

Purchase Price Allocation Benchmarking

We are pleased to present the results of our purchase price allocations benchmarking study for Information Technology acquisitions completed in 2017.

While no two acquisitions are the same, common themes in the valuation of intangibles and goodwill can be found along industry lines. Information Technology companies commonly rely on such identifiable intangible assets as developed technology, in-process research and development, customer relationships, and tradenames. However, even within IT, companies pursue wildly different and unique business models. Our analysis aims to identify patterns within narrowly defined industry segments.

Why Benchmarking

The Financial Accounting Standards Board (FASB), the Public Company Accounting Oversight Board (PCAOB) and the Securities and Exchange Commission (SEC) have all consistently emphasized the importance of accurate business combination accounting.

The task of developing consistency among complex and highly subjective PPA valuations is enormous. While ever evolving valuation guidelines aim to standardize the process of building each analysis, little is done to control final results.

In valuations, the market approach is a shortcut, a check on the more fundamentally sound, but highly subjective, income approach. PPA benchmarking is similar to market approach in that it helps check big-picture PPA valuations against similar analyses.

Use Case

PPA Benchmarking will help auditors and other observers to quickly assess the reasonableness of an individual PPA. It will help management and M&A advisors predict and model M&A impact on amortization expense. Finally, valuation professional can use these benchmarks to scrutinize their own work.

Purchase Price Allocation Benchmarking

Screening Criteria

This study was based on the transactions that satisfied the following initial search criteria:

Transactions closed in 2017

Information technology industry

Acquirer was publicly traded company on AMEX, NASDAQ, NYSE and OTC

Transaction value is greater than \$10 million.

The initial sample consisted of 258 transactions. We reviewed public filings for each company in the initial sample to find detailed disclosures regarding purchase consideration, purchase price, contingent consideration, identifiable intangible asset fair values, goodwill, inventory and property, plant and equipment. Sufficient disclosures were provided for 189 transactions (including 2 asset acquisitions), which represented approximately 73% of the initial sample. These transactions formed the basis of the 2017 Purchase Price Allocation Benchmarking.

We classified the Information Technology transactions into the following industry categories:

- eCommerce,
- Software,
- IT Consulting and Outsourcing,
- Electronic Equipment and Other,
- IT Hardware, and
- Semiconductors and Equipment.

Purchase Price Allocation Benchmarking

Transaction Value Defined

There are numerous ways to define acquisition value. We focused on Purchase Consideration, Purchase Price, and Excess Consideration to capture as many reported PPAs as possible. Those definitions are:

Purchase Consideration = Total Assets = All Tangible Assets + Identified Intangible Assets + Goodwill,

Purchase Price = Purchase Consideration – Operating Liabilities = Cash Consideration + Equity Consideration + Assumed Interest-Bearing Debt + Contingent Consideration,

Excess Consideration = Goodwill + Identifiable Intangible Assets.

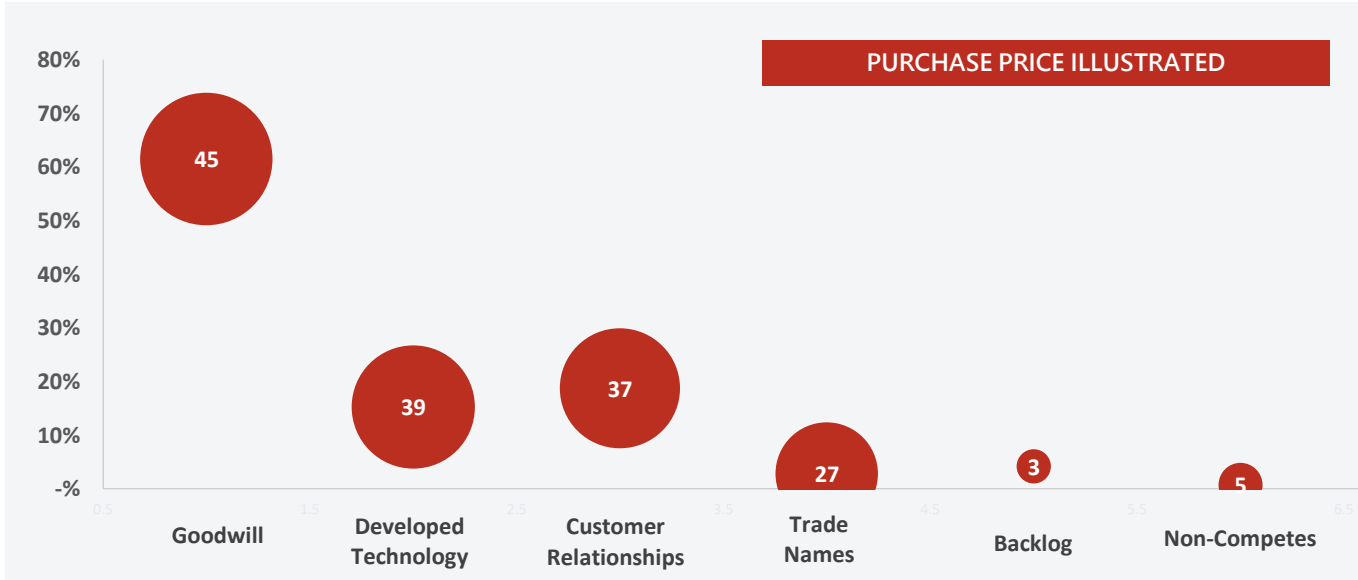
Identifiable Intangible Assets

We classified identified intangible assets in the following categories:

- Developed Technology (including patents, intellectual property, database, and content)
- In-Process R&D
- Customer Relationships (including customer list, subscribers, partner or merchant relationships)
- Trade Name (including domain names)
- Backlog
- Non-Compete Agreement
- Contracts and Others (not shown).

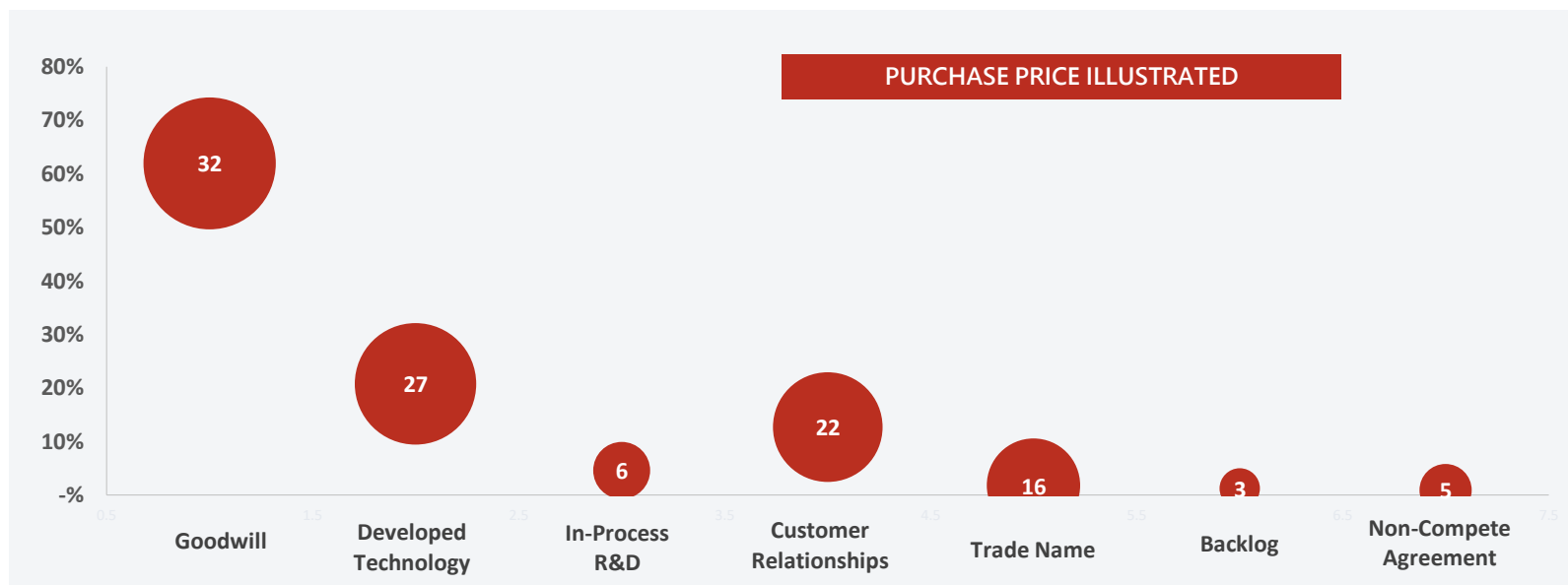
E-COMMERCE

	Measure as Percentage of Median			Useful Lives			Available Observations		
	Purchase Consideration	Purchase Price	Excess Consideration	Median	Observations Finite Life	Indefinite	Purchase Consideration	Purchase Price	Excess Consideration
Inventory	4%	5%	5%		na		1	1	1
Property, Plant and Equipment	2%	2%	2%		na		19	22	22
Goodwill	51%	62%	60%		Indefinite		34	45	47
Developed Technology	9%	15%	15%	5.0	33	na	30	39	41
Customer Relationships	20%	19%	18%	9.0	30	na	29	37	39
Trade Name	2%	3%	2%	5.0	21	1.0	22	27	28
Backlog	6%	4%	4%	2.0	3	na	2	3	3
Non-Compete Agreement	1%	1%	1%	2.0	5	na	3	5	5
Contingent Consideration	4%	6%	10%		na		4	5	6



SOFTWARE

	Measure as Percentage of Median			Useful Lives			Available Observations		
	Purchase Consideration	Purchase Price	Excess Consideration	Median	Observations Finite Life	Indefinite	Purchase Consideration	Purchase Price	Excess Consideration
Inventory	3%	3%	3%		na		3	3	3
Property, Plant and Equipment	1%	1%	1%		na		16	18	18
Goodwill	54%	62%	62%		Indefinite		23	32	33
Developed Technology	18%	21%	19%	5.7	21	na	20	27	27
In-Process R&D	2%	5%	4%	na	na	5	5	6	6
Customer Relationships	13%	13%	12%	9.0	18	na	16	22	23
Trade Name	2%	2%	2%	7.0	11	na	12	16	16
Backlog	1%	1%	1%	1.0	3	na	2	3	3
Non-Compete Agreement	1%	1%	1%	3.0	3	na	2	5	5
Contingent Consideration	14%	8%	7%		na		7	13	13



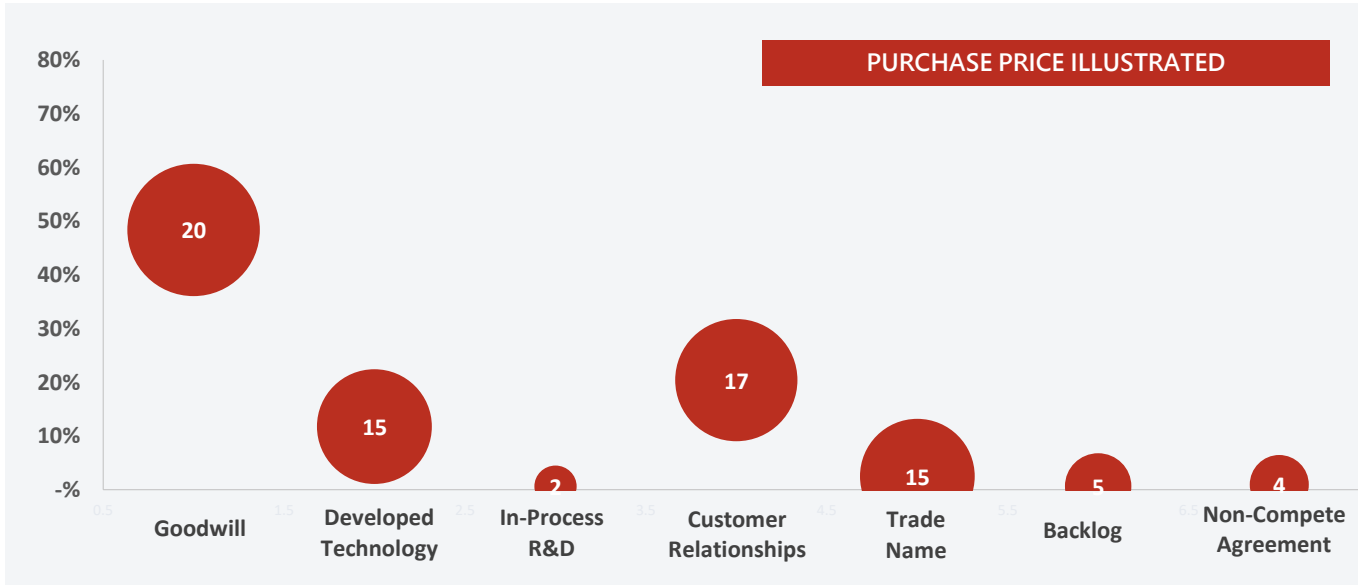
IT CONSULTING, OUTSOURCING, OTHER

	Measure as Percentage of Median			Useful Lives			Available Observations		
	Purchase Consideration	Purchase Price	Excess Consideration	Median	Observations Finite Life	Indefinite	Purchase Consideration	Purchase Price	Excess Consideration
Inventory	na	na	na		na		0	0	0
Property, Plant and Equipment	2%	4%	4%		na		11	13	14
Goodwill	44%	58%	57%		Indefinite		14	21	22
Developed Technology	4%	18%	5%	5.0	5	na	4	6	7
In-Process R&D	na	2%	3%	na	na	2	0	2	2
Customer Relationships	26%	34%	35%	10.0	12	na	13	14	15
Trade Name	2%	3%	1%	5.0	3	1	6	6	7
Backlog	35%	43%	49%	na	na	na	1	1	1
Non-Compete Agreement	2%	2%	2%	5.0	3	na	6	6	6
Contingent Consideration	18%	27%	19%		na		5	8	5



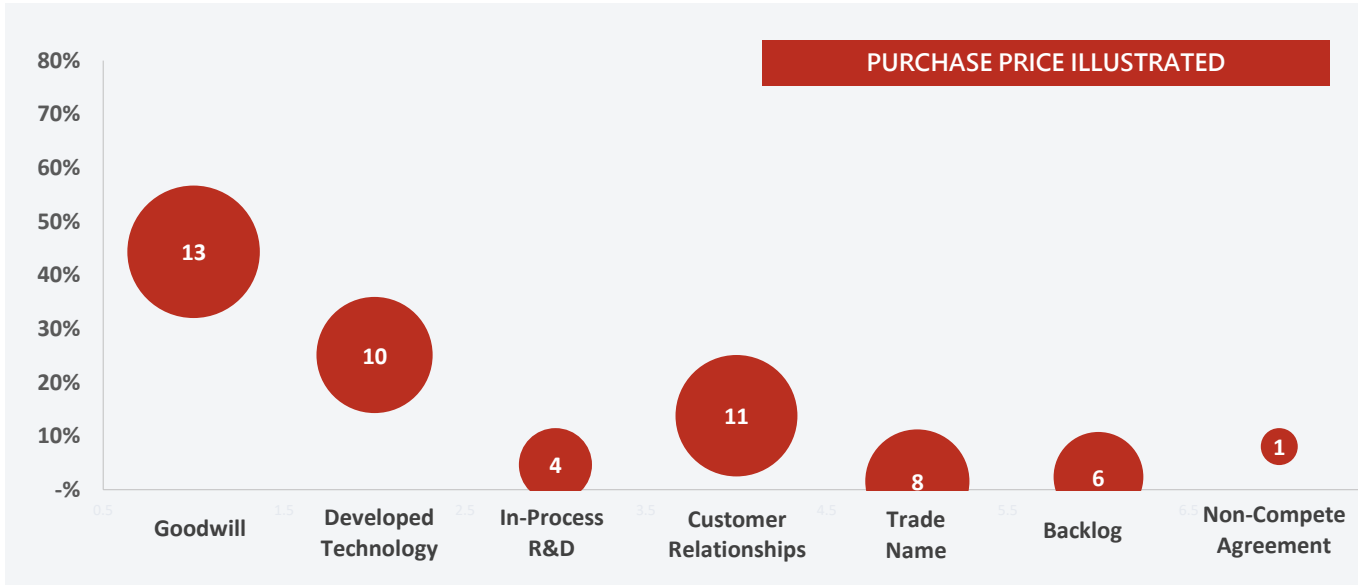
ELECTRONIC EQUIPMENT AND OTHER

	Measure as Percentage of Median			Useful Lives			Available Observations		
	Purchase Consideration	Purchase Price	Excess Consideration	Median	Observations Finite Life	Indefinite	Purchase Consideration	Purchase Price	Excess Consideration
Inventory	6%	7%	8%		na		13	13	14
Property, Plant and Equipment	3%	3%	3%		na		16	16	17
Goodwill	37%	48%	60%		Indefinite		19	20	21
Developed Technology	10%	12%	15%	10.0	14	na	15	15	15
In-Process R&D	1%	1%	1%	na	na	2	2	2	2
Customer Relationships	12%	20%	20%	11.0	16	na	17	17	17
Trade Name	2%	3%	3%	15.0	9	4	15	15	15
Backlog	1%	1%	2%	0.8	5	na	5	5	5
Non-Compete Agreement	1%	1%	1%	3.0	3	na	4	4	4
Contingent Consideration	4%	5%	6%		na		4	4	4



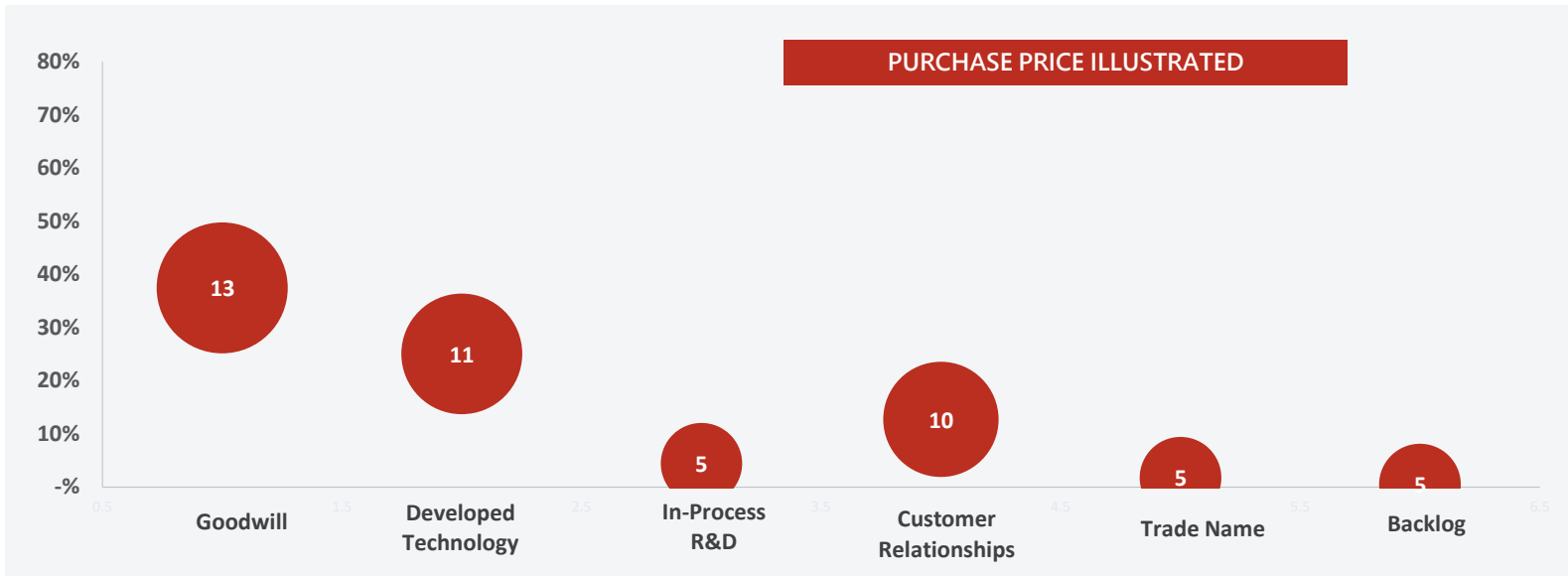
IT HARDWARE

	Measure as Percentage of Median			Useful Lives			Available Observations		
	Purchase Consideration	Purchase Price	Excess Consideration	Median	Observations Finite Life	Indefinite	Purchase Consideration	Purchase Price	Excess Consideration
Inventory	7%	6%	6%		na		10	11	11
Property, Plant and Equipment	2%	3%	3%		na		10	10	10
Goodwill	39%	44%	49%		Indefinite		11	13	13
Developed Technology	19%	25%	25%	6.9	10.0	na	10	10	10
In-Process R&D	4%	5%	4%	na	na	4	3	4	4
Customer Relationships	12%	14%	15%	8.0	11.0	na	10	11	11
Trade Name	1%	2%	2%	9.0	7.0	na	8	8	8
Backlog	2%	2%	3%	0.5	6.0	na	6	6	6
Non-Compete Agreement	8%	8%	10%	4.0	1.0	na	1	1	1
Contingent Consideration	15%	23%	33%		na		2	2	2



SEMICONDUCTORS AND EQUIPMENT

	Measure as Percentage of Median			Useful Lives			Available Observations		
	Purchase Consideration	Purchase Price	Excess Consideration	Median	Observations Finite Life	Indefinite	Purchase Consideration	Purchase Price	Excess Consideration
Inventory	7%	8%	11%		na		10	10	10
Property, Plant and Equipment	3%	3%	3%		na		10	11	11
Goodwill	32%	37%	48%		Indefinite		11	13	13
Developed Technology	17%	25%	29%	7.0	10	na	9	11	11
In-Process R&D	4%	4%	5%	na	na	5	4	5	5
Customer Relationships	13%	13%	18%	5.0	9	na	9	10	10
Trade Name	2%	2%	2%	7.0	4	1	5	5	5
Backlog	0%	0%	1%	0.8	5	na	5	5	5
Non-Compete Agreement	1%	1%	1%	3.0	1	na	1	1	1
Contingent Consideration	3%	26%	25%		na		1	2	2





Business Interests | Intangible Assets | Financial Instruments | Portfolios

Sorbus Advisors LLC is a full-service fair value specialist firm supporting financial reporting, tax and transaction planning. Valuations include intangible assets and earn-outs under ASC 805, business M&A, derivatives, illiquid securities (e.g. 409A), and debt.

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