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Yale SCHOOL OF MANAGEMENT

On the Nature of Price Increases

Entrepreneurs should use bespoke pricing strategies to increase profitability and equity value

If you've got the power to raise prices without losing business to a competitor, you've got a very good business. And if you have to have a prayer session before raising the price by a tenth of a cent, then you've got a terrible business. I've been in both, and I know the difference.

Warren Buffett

***John Palfreyman*[1]**
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Entrepreneurs have many tools available when building a business and attempting to grow EBITDA.[*] Growing volume by selling more goods and services to either new or existing customers is often a strategy that entices entrepreneurs. It has the allure of being action-driven and feels like playing offense. A defensive approach to boost EBITDA is cutting costs, eliminating all extraneous expenses, and allowing the reductions to drop to the bottom line. A more glamorous approach to amplifying EBITDA is to engage in acquisitions, growing the business in large inorganic chunks instead of small organic bites.

An often-underexplored tactic to grow EBITDA,[†] and one that frequently foments fear in entrepreneurs, is raising prices for existing customers. This note will explore price increases *for a current customer portfolio* as an attractive way to positively impact EBITDA. While determining the original revenue-maximizing price is a critical decision, we do no address it in this note. We assume the business has already found an appropriate market-determined price, which the entrepreneur can begin to raise annually. We will examine why entrepreneurs should raise price and how to go about engaging in the strategy we call bespoke pricing—*the process of perfecting and implementing a unique price at the individual customer level*.

We keenly believe in bespoke pricing and price optimization as tools to grow EBITDA when the context and circumstances allow for them. We are not asserting that volume growth, cost reductions, and acquisitions are an undesirable mechanism to impact EBITDA. In fact, we think that all of these approaches should be embraced at different times and with varying levels of enthusiasm to build a successful and valuable business. But the thought of increasing prices at times strikes entrepreneurs as anathema, an impossibility with dire consequences. We hope to persuade entrepreneurs to at least fully understand the power of bespoke price increases and the tenability of such an approach. Of course, we are not advocating this for all entrepreneurs. Instead, we introduce it as an instrument for entrepreneurs to consider and decide whether or not it works for them.

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[*] Earnings Before Interest Taxes Depreciation and Amortization

[†] According to Simon Kucher's 2019 Global Pricing Study of 1,643 companies, only 12% of respondents chose price as the biggest driver of future profit growth. 63% selected sales, 22% cost reductions, and 3% other.

Our experience and guidance regarding increasing price is focused on a modest and serial approach. We embrace the idea of making consistent, annual, small, 2–5% price increases for a current customer portfolio. We are not in favor of lumpy, episodic approaches and do not advocate catch-up price increases when an entrepreneur resets prices after a ten-year hiatus. However, if an entrepreneur acquires a business, they might choose to make a mark-to-market price increase if rates are materially discounted. Our thoughts in this note focus on *current* customers in the company rather than new customers. Pricing dynamics might be very different for seasoned customers and fresh customers.

When we think about bespoke price increases for current customers, our prototypical company is a small to medium-sized enterprise in the sub-$100 million revenue range. The company is profitable, with 10 to 25% EBITDA margins, and possesses a broad portfolio of repeat customers and geographic markets. The key thoughts here are that the company is too small to have headline risk (uninvited media attention), that there are many customers, and that those customers are not one-time customers but repeat in some degree of frequency.

The Why

Why Raise Price?

There are several reasons to consider a bespoke price for current customers.

- Price increases do not require incremental capital and tend to be fully additional to EBITDA. Furthermore, they are not operationally intensive and are lower-risk than alternative growth pathways.

- Raising price is a highly accretive lever for entrepreneurs to pull. If an entrepreneur does employ price increases, EBITDA and equity value will be demonstrably higher than if no price increases were implemented.

- When entrepreneurs raise price, margins and free cash flow go up and can be used for additional growth, investment in the business, compensation for employees, and customer service programs. By using price increases, entrepreneurs can develop better and faster-growing companies.

- If an entrepreneur does not raise price, their company is likely engaged in deflationary customer relationships as costs tend to go up by 2–3% per year. The value of the company's cash flows goes down due to rising costs. This is highly corrosive and, over long periods, can greatly diminish the value of a business.

The Math

Three Approaches for Improving a Business's EBITDA

When considering the power of increasing price, let's start with the math. We acknowledge that there might be reasons not to increase price, but before we examine the fears and risks, let's contemplate the economic rewards and why entrepreneurs should be willing to take some risk in this area.

Assume there is an entrepreneur running a small, debt-free business with $5 million in revenue and $1 million in EBITDA. Our entrepreneur enjoys 20% EBITDA margins. This is the type of company we tend to study, invest in, and encourage our students to acquire and run as search fund entrepreneurs.

Our entrepreneur wants to increase EBITDA and enjoy the rewards of greater current earnings as well as increasing equity value. As we are defining EBITDA as simply revenues (price × volume) less costs, there are three ways* to improve EBITDA: price increases for current customers, growing volume, and cutting costs. The math for the price increase option is shown in **Figure 1**.

Figure 1: Improving EBITDA by raising price 5%

	Base	5% Price Increase
Revenue	$5,000,000	$5,000,000
Price Increase	$0	$250,000
Volume Growth	$0	$0
New Revenue	**$5,000,000**	**$5,250,000**
Revenue Growth (%)	0%	5%
Costs	$4,000,000	$4,000,000
Cost Reductions	$0	$0
New Cost	**$4,000,000**	**$4,000,000**
Cost Reduction (%)	0.0%	0.0%
EBITDA	**$1,000,000**	**$1,250,000**
EBITDA margin (%)	20.0%	23.8%
EBITDA growth (%)	0.0%	25.0%
EBITDA multiple	6.0x	6.0x
Equity Value	**$6,000,000**	**$7,500,000**
Equity Value Growth (%)	0.0%	25.0%

Source: Created by the case writers

If our entrepreneur can successfully implement a 5% price increase to current customers, no costs go up, and revenue moves from $5 million to $5.25 million (a 5% increase). Since costs did not change in any way, the price increase is fully accretive and drops to the EBITDA line. EBITDA then rises from $1 million to $1.25 million (a 25% increase and a 24% margin). This is a wonderful outcome.

What is even more exciting than the change in EBITDA is the change in *equity value*. If we assume our sample business is worth 6x EBITDA before the price increase, the equity value (we assume no debt) is $6 million. Since EBITDA increased by $250,000 after the price increase, equity value goes up by a nominal $1.5 million.† This represents an extraordinary 25% increase in equity value from a modest 5% increase in price for current customers.

* M&A is a fourth way to increase EBITDA, but we do not consider it in this section because the size, complexity, and profitability of acquisitions vary so greatly.

† $250,000 x 6 = $1.5 million

If our entrepreneur wanted to achieve the identical EBITDA of a one-year 5% price increase through an organic growth initiative focused on volume increases (assuming EBITDA margins are constant at 20%)[*], revenue would need to grow by a herculean 25%.[†] Revenue growth needs to be significantly higher than in the price increase approach because there would be incremental (variable) costs to revenue grown organically through volume. While there is certainly no guarantee that our entrepreneur could drive a 5% price increase, growing volume by 25% in a single year often tests even the most competent entrepreneurs. Expanding a sales team, identifying prospects, onboarding new customers, and managing those operational challenges are risky and fraught with pitfalls. See **Figure 2** for the math in an EBITDA-equivalent organic growth program based on volume increases.

Figure 2: Growing EBITDA via organic growth through volume increases

	Base	25% Volume Increase
Revenue	$5,000,000	$5,000,000
Price Increase	$0	$0
Volume Growth	$0	$1,250,000
New Revenue	**$5,000,000**	**$6,250,000**
Revenue Growth (%)	0%	25%
Costs	$4,000,000	$5,000,000
Cost Reductions	$0	$0
New Cost	**$4,000,000**	**$5,000,000**
Cost Reduction (%)	0.0%	0.0%
EBITDA	**$1,000,000**	**$1,250,000**
EBITDA margin (%)	20.0%	20.0%
EBITDA growth (%)	0.0%	25.0%
EBITDA multiple	6.0x	6.0x
Equity Value	**$6,000,000**	**$7,500,000**
Equity Value Growth (%)	0.0%	25.0%

Source: Created by the case writers

Finally, we consider cost reductions as a path to EBITDA amplification (**Figure *3***). If our entrepreneur wants to land at $1.25 million of EBITDA solely through cost reductions, that would mean that costs need to fall from $4 million ($5 million in revenue less $1 million in EBITDA) to $3.75 million. This represents a 6.3% decrease in expenses.[‡] The notion of reducing $250,000 in expenses over an expense base of $4 million certainly seems tenable; all businesses have some excess costs, even the very best ones. Like a price increase, a cost reduction falls directly to EBITDA. However, unlike an annual, modest price increase, we have found that it is much harder to repeatedly reduce costs by 6.3%.

[*] EBITDA margins vary significantly by industry. Entrepreneurs should consider the context of their own industries when deciding how to balance growth strategies. For example, a software company with high incremental EBTIDA margins would benefit more from organic growth through increased volume than a manufacturer with low margins.

[†] If EBITDA needs to be $1.25 million, EBITDA needs to grow by $250,000. If EBITDA margins are constant at 20%, revenue needs to increase by $1.25 million ($250,000 ÷ 20%). Revenue growth is 25% ($6.25 million ÷ $5.00 million - 1).

[‡] $3.75 million ÷ $4 million – 1 = 6.3%

Figure 3: Growing EBITDA by reducing costs

	Base	6.3% Cost Reduction
Revenue	$5,000,000	$5,000,000
Price Increase	$0	$0
Volume Growth	$0	$0
New Revenue	**$5,000,000**	**$5,000,000**
Revenue Growth (%)	0%	0%
Costs	$4,000,000	$4,000,000
Cost Reductions	$0	($250,000)
New Cost	**$4,000,000**	**$3,750,000**
Cost Reduction (%)	0.0%	6.3%
EBITDA	**$1,000,000**	**$1,250,000**
EBITDA margin (%)	20.0%	25.0%
EBITDA growth (%)	0.0%	25.0%
EBITDA multiple	6.0x	6.0x
Equity Value	**$6,000,000**	**$7,500,000**
Equity Value Growth (%)	0.0%	25.0%

Source: Created by the case writers

Again, we are not against growing organically through volume or reducing costs to amplify EBITDA and build equity value. It is unrealistic to think that you can build a business exclusively through price increases. We think these ternary growth strategies should coexist, but ignoring the mathematical and financial implications of price increases would unequivocally sub-optimize a business's profit potential. Deloitte Principals Richard Hayes and Ranjit Singh estimate that a 1% improvement in pricing has "3-4 times the effect on profitability as other improvements," including variable cost reduction, unit volume improvement, and fixed cost reduction.[4] See **Figure 4** for a mathematical comparison of the three strategies we considered above in 5% increments.

Figure 4: Comparison of three EBITDA-improving strategies

	Base	5% Price Increase	5% Volume Increase	5% Cost Reduction
Revenue	$5,000,000	$5,000,000	$5,000,000	$5,000,000
Price Increase	$0	$250,000	$0	$0
Volume Growth	$0	$0	$250,000	$0
New Revenue	**$5,000,000**	**$5,250,000**	**$5,250,000**	**$5,000,000**
Revenue Growth (%)	0%	5%	5%	0%
Costs	$4,000,000	$4,000,000	$4,200,000	$4,000,000
Cost Reductions	$0	$0	$0	($200,000)
New Cost	**$4,000,000**	**$4,000,000**	**$4,200,000**	**$3,800,000**
Cost Reduction (%)	0.0%	0.0%	0.0%	5.0%
EBITDA	**$1,000,000**	**$1,250,000**	**$1,050,000**	**$1,200,000**
EBITDA margin (%)	20.0%	23.8%	20.0%	24.0%
EBITDA growth (%)	0.0%	25.0%	5.0%	20.0%
EBITDA multiple	6.0x	6.0x	6.0x	6.0x
Equity Value	**$6,000,000**	**$7,500,000**	**$6,300,000**	**$7,200,000**
Equity Value Growth (%)	0.0%	25.0%	5.0%	20.0%

Source: Created by the case writers

Global consulting firm McKinsey advocates working on price by advancing one percentage point at a time. "Pricing right is the fastest and most effective way for managers to increase profits. Consider the average income statement of an S&P 1500 company: a price rise of 1 percent, if volumes remained stable, would generate an 8 percent increase in operating profits—an impact nearly 50 percent greater than that of a 1 percent fall in variable costs such as materials and direct labor and more than three times greater than the impact of a 1 percent increase in volume."[5]

Before we move on, let's quickly examine the potent impact of deploying all three approaches (raising price, growing organically through volume, and reducing costs) concurrently. We will make a small adjustment in our presentation, and, rather than assume a 25% increase in sales volume, we will present a more modest 10% increase.

Figure *5* illustrates the striking impact of using a three-pronged approach to work on revenue, costs, and equity value. Price increases do not stand alone as a tool to grow a business and increase equity value, but they can be part of a trifecta that can dramatically augment EBITDA and equity value.

Figure 5: Improving EBITDA with a three-pronged approach

	Base	Three-Pronged
Revenue	$5,000,000	$5,000,000
Price Increase	$0	$250,000
Volume Growth	$0	$500,000
New Revenue	**$5,000,000**	**$5,750,000**
Revenue Growth (%)	0%	15%
Costs	$4,000,000	$4,400,000
Cost Reductions	$0	($250,000)
New Cost	**$4,000,000**	**$4,150,000**
Cost Reduction (%)	0.0%	6.3%
EBITDA	**$1,000,000**	**$1,600,000**
EBITDA margin (%)	20.0%	27.8%
EBITDA growth (%)	0.0%	60.0%
EBITDA multiple	6.0x	6.0x
Equity Value	**$6,000,000**	**$9,600,000**
Equity Value Growth (%)	0.0%	60.0%

Source: Created by the case writers

The Power of Price Increases Over Time

Hopefully, the math presented above can convince entrepreneurs that raising price is an attractive strategy to improve EBITDA and is worth taking some risks to achieve. But we believe it gets better. EBITDA and equity value can grow even more through a modest, *consistent*, annual price increase, rather than the one-time increase demonstrated above.

Let's assume that our entrepreneur is able to raise price 5% *per year for five years*. The business does not grow in volume at all, but a 5% price increase is implemented and sticks annually. The future value of $5 million of revenue growth at 5% over five years is $6.38 million.[*] If no costs change, all the incremental revenue ($6.38 - $5.00 = $1.38 million) falls to EBITDA. EBITDA is now the original $1 million of EBITDA plus the incremental EBITDA of $1.38, or $2.38 million. EBITDA margins have swelled to 37%, and using a 6x multiple on $2.38 million of EBITDA, equity value is now $14.28 million (up $8.3 million from $6.0 million before the price increase program). Equity value has compounded at 19% per year as a result of a 5% annual price increase. See **Figure 6** for the impact of a five-year price increase program.

[*] $FV = PV (1 + r)^n$. $6.38 million = $5 million $(1 + 5\%)^5$.

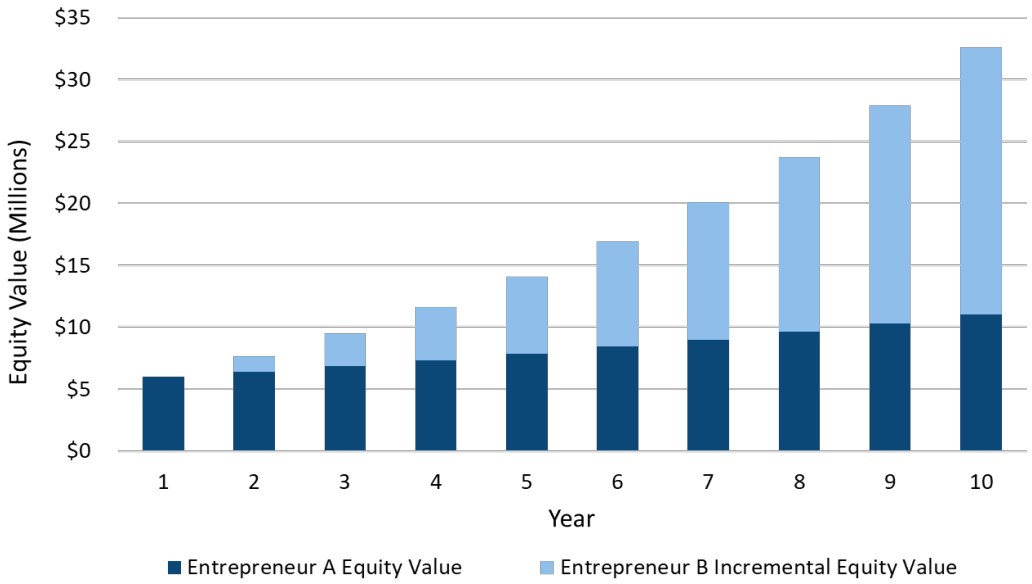
Figure 6: Effect of compounding price (5% per year for five years)

	Base	5% Price Increase
Revenue	$5,000,000	$5,000,000
Price Increase	$0	$1,381,408
Volume Growth	$0	$0
New Revenue	**$5,000,000**	**$6,381,408**
Revenue Growth	0%	28%
Costs	$4,000,000	$4,000,000
Cost Reductions	$0	$0
New Cost	**$4,000,000**	**$4,000,000**
Cost Reduction (%)	0.0%	0.0%
EBITDA	**$1,000,000**	**$2,381,408**
EBITDA margin (%)	20.0%	37.3%
EBITDA growth (%)	0.0%	138%
EBITDA multiple	6.0x	6.0x
Equity Value	**$6,000,000**	**$14,288,447**
Equity Value Growth (%)	0.0%	138%
Equity Value CAGR (%)		19.0%

Source: Created by the case writers

We will present one more example of the power of price increases *over time*. Let's consider two entrepreneurs who run identical companies. Both have $5 million in revenue, $4 million in costs, and $1 million in EBITDA. Entrepreneur A chooses to pursue a volume-centric, organic growth-only strategy and grows the business at 7% per year for ten years. Entrepreneur B engages in the same strategy but additionally layers in a 4% per year price increase. We assume neither company has any debt, and we further assume that Entrepreneur B has an identical cost structure to Entrepreneur A and that the incremental value of the price increase is fully accretive to EBITDA. Running these assumptions over a 10-year period, we find that Entrepreneur A has grown EBITDA to $1.8 million in year 10, while Entrepreneur B has achieved $5.4 million. Through a 4% price increase, Entrepreneur B has tripled Entrepreneur A's EBITDA. When we think about equity values, we assume a constant 6x EBITDA multiple for each scenario. Entrepreneur A's equity value is $11.0 million, while Entrepreneur B's equity value is a full $32.6 million. Entrepreneur B created $21.6 million more in equity value through an annual 4% price increase. Price increases are indeed worth contemplating and understanding. See **Figure 7** for EBITDA and Equity Value trajectories of entrepreneurs A and B and **Exhibit 1** for the detailed math behind the equity value growth as a result of the price increase.

Figure 7: Equity value growth of entrepreneurs A and B over 10 years



Source: Created by the case writers

The Cost of Not Raising Price

If an entrepreneur chooses not to raise prices, the entrepreneur might be setting themselves up for deflationary cash flows in their business. This means that the cash flows in the business lose value and abate over time. For example, labor is a substantial cost for most businesses, and employees typically expect a 2-3% raise on an annual basis. Healthcare costs also tend to rise annually at high rates. Additionally, other operating costs, like rent, tend to go up. If a $5-million revenue business with $4 million of costs and $1 million of EBITDA maintains constant revenues for ten years and costs inflate by 3% per year, EBITDA margins would be less than 2% by year eight and negative thereafter. See **Figure 8** for the detailed math. It is imperative for entrepreneurs to raise prices at least enough to stem the deleterious effects of their own escalating costs.

Figure 8: Impact of rising costs on EBITDA without any price increase

Year	1	2	3	4	5	6	7	8	9	10
Revenue	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000
Cost Inflation	$0	$120,000	$123,600	$127,308	$131,127	$135,061	$139,113	$143,286	$147,585	$152,012
Cost	$4,000,000	$4,120,000	$4,243,600	$4,370,908	$4,502,035	$4,637,096	$4,776,209	$4,919,495	$5,067,080	$5,219,093
EBITDA	$1,000,000	$880,000	$756,400	$629,092	$497,965	$362,904	$223,791	$80,505	($67,080)	($219,093)
EBITDA (%)	20.0%	17.6%	15.1%	12.6%	10.0%	7.3%	4.5%	1.6%	-1.3%	-4.4%

Source: Created by the case writers

Price Increases as a Strategic Choice Compared to Other EBITDA-Enhancing Alternatives

When considering various growth arcs and pathways to drive equity value, entrepreneurs must not only consider the result but also contemplate the risk involved, the ease in execution, the capital required, the potential return, the replicability of the strategy, and how material the strategy can be. In aggregate, this is the risk-adjusted and effort-adjusted return opportunity. Let's now explore each dimension more fully before drawing conclusions. We summarize our assessment of these various growth opportunities in **Figure 9**.

Figure 9: Relative strengths and weaknesses of growth strategies

	Price Increase	Volume Growth	Cost Reductions	Acquisitions
Low Risk	H	M	H	L
High Ease of Execution	H	L	H	L
Low CapEx	I	M	I	L
High Return	I	M	I	M
High Replicability	H	H	L	M
High Materiality	H	M	L	H

L Low M Medium H High I Infinite

Source: Created by the case writers

Risk

There is a different risk embedded in each approach to growth and equity creation. This must be considered when evaluating which strategy to embrace. Acquisitions are indeed risky, especially the first few. These are big bets and complex integration projects. If one goes awry, it can be financially ruinous for a small business. In comparison, attempting to lower costs is likely a low-risk proposition. The worst thing that can happen is that it does not work, and costs remain at the legacy levels. Engaging in a high sales growth approach has moderate risk. If the approach is a material amplification, it will require capital investments (in people, systems, and processes) and, if unsuccessful, will result in negative financial implications. Raising price on customers is a relatively low-risk event. If an entrepreneur has a customer portfolio of 10,000 customers, there is unlikely to be a systemic reaction to the increase. Some customers might push back, and some customers might defect, but a price increase is unlikely to catalyze a wholesale revolt. We will further explore the right conditions, and the context for customer price increases shortly.

Ease of Execution

When attempting to grow a business, entrepreneurs must recognize that not every approach is equally challenging to execute. Some initiatives entail much more operational complexity than others. For example, making an acquisition is a highly complex endeavor, even for the most experienced practitioners. Diligence, negotiations, and integrations are all puzzles with many moving pieces. Growing organically through volume involves identifying, evaluating, selecting, training, and managing additional

sales professionals. This is a tenable strategy, but one with lots of daily friction and intense management. Selecting and onboarding new customers is laborious and tedious, a ballet with infinite steps. Reducing costs might be a simple proposition—just ask vendors for lower rates. And raising price for customers likely involves some form of communication coupled with changing rates in a computer system.

CapEx

To fully understand the return opportunity of any initiative, entrepreneurs must first understand how much CapEx (capital expenditure) is required to initiate a project before they can evaluate the return on investment. Programs that require less capital might be more appealing because they present less risk and potentially higher returns on capital invested. An acquisition typically requires significant capital investment for growth (the compensation paid to the selling firm). Reducing costs might involve some capital investment (e.g., a new software solution that will lead to lower future expenses) or might not require any capital at all (e.g., negotiating for lower prices with a certain vendor). Raising customer pricing would likely not require any capital investment at all.

Return on Invested Capital

Any EBITDA growth initiative should be at least partially evaluated on its return on invested capital. Price increases have infinite returns on invested capital because they require no capital investment. Cost reductions fall into the same bucket (if no capital is invested in initiating the expense compression). Acquisitions are capital intensive and will likely have moderate to attractive returns. Volume growth programs additionally deliver moderate to attractive returns because of the investment required. Price increases are compelling because they generate incremental cash flows and require no invested capital. It is hard to beat infinite returns.

Replicability

When thinking about these various approaches, entrepreneurs should also examine the replicability of each approach. Ideally, entrepreneurs should develop proficiency in whichever avenue they choose to excel in. Additionally, some strategies can be consistently deployed, and some cannot. If an industry does not have a structure that could accommodate a serial acquisition approach, making episodic acquisitions might not be replicable or scalable. A volume-based organic growth program is definitely replicable and can be engaged annually (if the addressable market is ample). Reducing costs might be a one-time event; it is difficult to reduce costs 6% per year in perpetuity. Instead, it is likely that a large cost reduction program can be implemented, and then an entrepreneur can work diligently to prevent costs from mushrooming. A price increase program, when deployed intelligently, can be replicated on an annual basis, and we encourage entrepreneurs to think along the lines of increasing prices annually, not as a one-time event.

Materiality

Materiality must be considered too. If an initiative only has a small impact on EBITDA and equity value, it might not be worth the effort. While we are in favor of any cost reductions that do not negatively impact a firm, spending an inordinate amount of time to reduce costs by 0.25% might not be worth the time and effort. A large acquisition with baked-in multiple arbitrage might very well be worth a year of time and effort to close. Building a high-functioning customer-gathering process can be very lucrative and impactful. Price increases can have a material impact on sales and equity value.

While we advocate using all levers available to drive growth and equity value, we are particularly enthusiastic about bespoke price increases. This strategy hits all of the desirable checkmarks. It does not

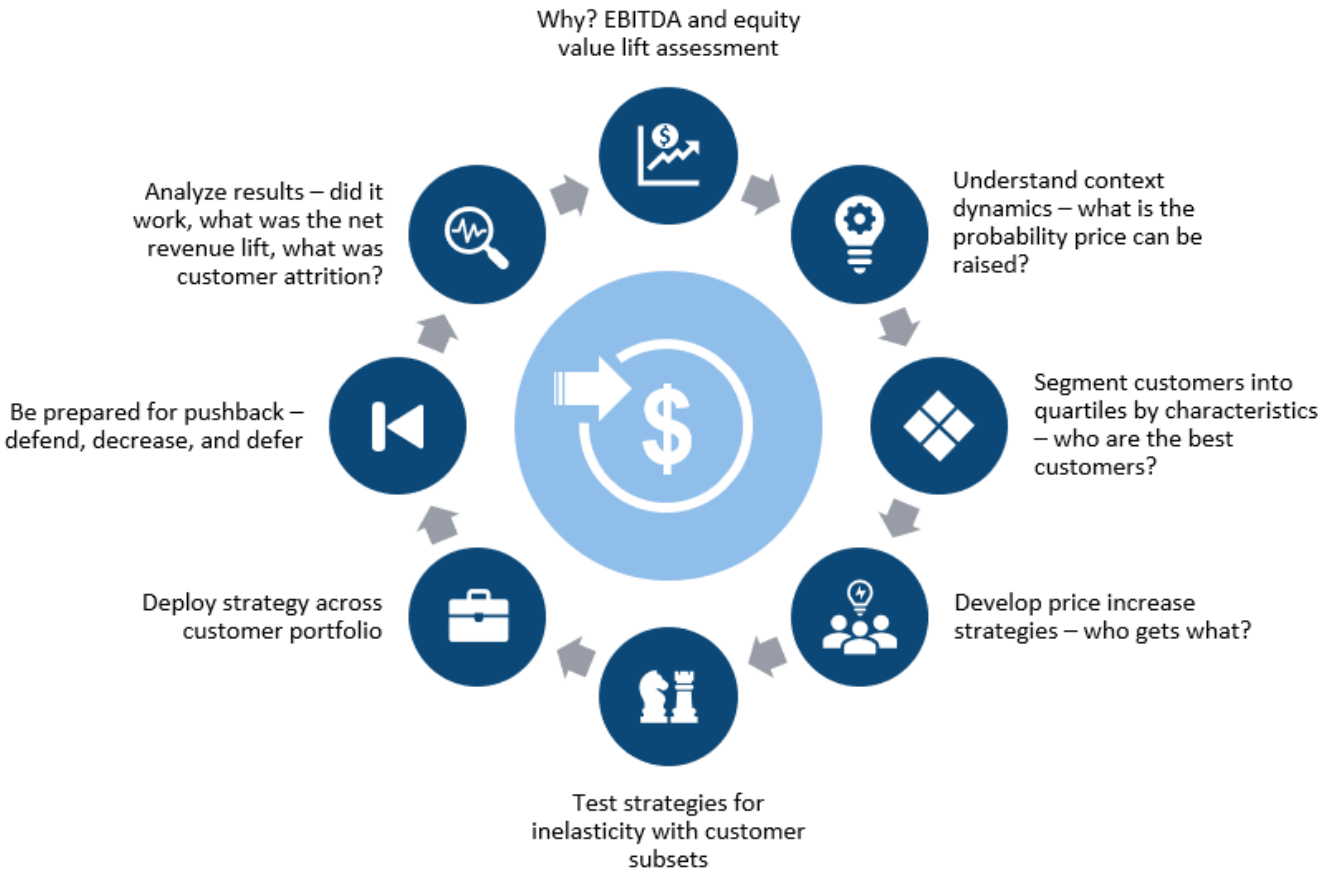
require capital investment, it is not operationally challenging, it can be material, it is replicable on an annual basis, and it is low-risk if done under the right conditions and in the right way. While a price increase for current customers is clearly not a singular approach to building a business, it is indeed a compelling pathway we encourage entrepreneurs to embrace.

The How

Once an entrepreneur reflects on their context and whether they are in a situation to consider raising price, there are certain steps that can be taken (see **Figure 10**) to move forward with the strategy. We encourage entrepreneurs to think about pricing as a CEO function. This is a high-leverage opportunity that can drive material EBITDA, and equity value increases over time. It should be approached with deliberate thought and intention, not half-heartedly. According to McKinsey consultants in an article in the *Harvard Business Review*, "getting the price right is one of the most fundamental and important management functions; it should be one of a manager's first responsibilities, a nuts and bolts kind of job that determines the dollar and cents performance of the company."[6]

Overall, we want to stress that the incumbent provider of a good or service has an advantage over competitors when increasing price on current customers. This is primarily because of the status quo bias and switching costs. The buyer risks that a new vendor, while perhaps cheaper, may not deliver on time or may fail in some other way. This downside risk could lead to a corporate buyer getting fired, whereas accepting a single-digit price increase likely would not. Regarding switching costs, it is always easier for a customer to stay with the vendor they are currently using than to shop around for an alternative solution, but there are even greater switching costs than overcoming inertia, which will be discussed below. The time, effort, and risk involved in replacing a vendor often do not warrant making the switch.

Figure 10: Bespoke price increase framework



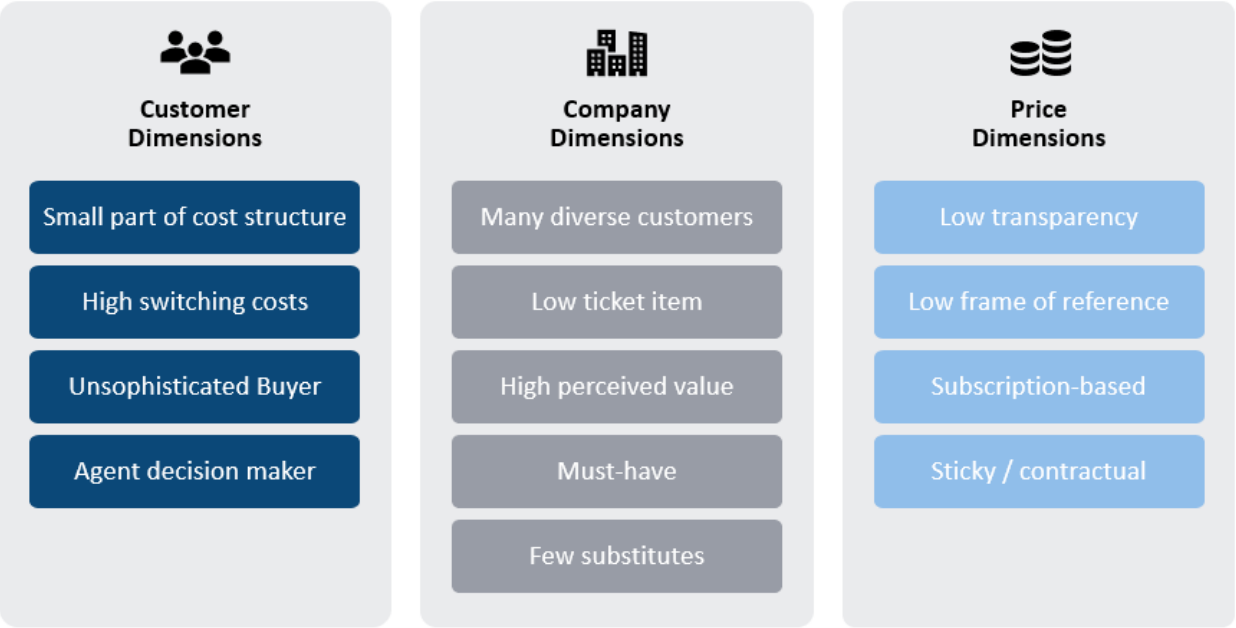
Source: Created by the case writers

Consider the Context: What are the best circumstances to raise price?

The first step in how to drive a bespoke price increase program is to consider the business context and whether or not price is likely to be inelastic.* We recognize that not every business presents the ideal context to boost the current customer price. Good businesses with desirable economic models tilt in the direction of being able to amplify price. We believe 13 characteristics increase the probability of successfully raising current customer pricing. If an entrepreneur has these 13 factors in their favor, customers will tend to respond to price increases with inelasticity—they will accept the increase and be willing to pay more—and the entrepreneur can likely raise price with minimal negative consequences. We present these 13 characteristics as the Pillars of Pricing Power (see **Figure 11**).

* Inelastic is an economic term used to describe a situation when customers accept, rather than reject, price increases. See Appendix B for more on this topic.

Figure 11: The Pillars of Pricing Power



Source: Created by the case writers

Customer Dimensions

A small part of the customer cost structure

We like businesses that are small parts of the customers' costs. Large line items in customer costs tend to get the most scrutiny, while smaller parts of costs tend to be ignored; they just do not matter that much to the customer. The example we always use for this is that we would not want to sell steel to the Ford Motor Company. We suspect that the CEO of Ford tracks or even knows the price of steel, an important part of cost of goods sold (COGS). Such a large part of COGS would represent more challenges in a price-raising initiative. A more innocuous part of Ford's costs, say, carpet cleaning services, would attract less attention when attempting to increase price. Note that this is different than low-ticket items. Steel very well may be an inexpensive commodity on a per-unit basis, but because of the enormous volume of steel Ford must buy, it becomes a significant and scrutinized expense.

High switching costs

When there are high contractual or behavioral switching costs, it is easier to raise price. When a firm multi-period contract is in place, it is harder for a customer to leave and easier to implement a price increase. When there are behavioral encumbrances for a customer to switch, it is also easier to raise price. For example, if a company uses a software solution for its payroll service and its accounting team knows how to use the software well, which easily integrates into its accounting software system, the company will likely accept a modest price increase on the payroll software solution because it is difficult to relearn a new system and build a new integration process.

Unsophisticated buyers

It stands to reason that when the customer is not trained in buying or procurement, it's easier for the vendor to raise price. An unsophisticated buyer will likely be uncomfortable with negotiating, unaware of the competition's prices, and uncompensated for any price reductions achieved. Or the buyer might be

responsible for a myriad of functions and purchasing responsibilities without expertise in any one specific vendor specialty. On the other hand, it will be harder for a vendor to raise price when a procurement manager with training and expertise needs to sign off on the new price. These procurement employees typically have a one-track mind when it comes to getting the lowest price possible, even at the expense of quality and customer service.

Agent decision maker

As is common in most business-to-business sales, when the buyer is an agent working on behalf of the employer, it is typically easier to raise price. If the agent agrees to pay an extra 5% for a vendor's offerings, the money does not come out of the agent's pocket, but the company's. For example, a businessperson will likely go to a more expensive restaurant when the meal can be expensed to the company than when they have to pay for the meal themselves. Conversely, if the buyer is not acting in an agent capacity and is a principal, they might scrutinize a price increase more carefully.

Company (Vendor) Dimensions

Many diverse customers

When a business has a broad and highly diversified customer portfolio, it is easier to raise prices. If an entrepreneur runs a business with 25,000 customers, a price increase is a diversified risk spread among a large population. If a company has fewer customers, perhaps ten, it is a greater risk to raise price, and one of the ten customers being antagonized and potentially defecting could be a material blow. In a larger portfolio, if a handful of customers bolt, the consequences will be more tolerable (and the entrepreneur will likely still be in a net win position).

Low ticket item

If a product or service is a low-ticket item, it does not cost very much, a greater opportunity to raise price exists. For example, a business that typically charges customers $50 per month for a service, perhaps for the inspection and certification of a sprinkler system in a commercial building, has the opportunity to raise price with an immaterial, nominal dollar increase. A one-dollar increase on a $50 base price is insignificant to the buyer, but represents a 2% increase to the vendor. A two-dollar increase, equally insignificant, is a 4% increase. When nominal dollar increases are not large, customers are more willing to accept the increase without pushback.

High perceived value

When a business provides a product or service with a high perceived value, meaning it is easy to use and consistently fulfills its value proposition, it is easier to raise price. This does not mean the product or service is important; it just works, is simple to use, and solves a customer challenge. Perceived value can be partially contingent on the value of the problem being solved for a customer. If a vendor is curing a big problem (high value) it will be easier to increase price.

Must-have

If a vendor supplies a product or service that is a must-have, as opposed to a nice-to-have, the buyer will be willing to pay more for it. For example, imagine a law firm that uses two separate vendors for phone conferencing—one for internal communication among employees and one for external communication with clients. The firm would likely be willing to accept a price increase from the vendor providing a great phone conferencing experience for clients calling into the law firm, but it would be hesitant to spend an

equal amount to keep its employees 100% satisfied. One option risks frustrating the customer and tarnishing the firm's brand externally and is, therefore, a must-have. The other is a nice-to-have.

Few substitutes

When a product or service is unique and has few or no substitutes, it is easier to raise price. An acute example is a drug that is used chronically by patients to stay alive. If no other drug is available, patients will likely be willing to pay more for the drug. For example, Martin Shkreli, the former pharmaceutical entrepreneur, outraged patients, and U.S. lawmakers by raising the price of anti-parasitic drug Daraprim. Shkreli raised the price to $750 a pill, from $13.50, in 2015, when he was chief executive of Turing Pharmaceuticals.[7] We use this as an extreme illustrative example and do not think this is ethical, nor do we support this type of behavior.

Price Dimensions

Low price transparency

When there is low pricing transparency, it is easier to raise price. Not every product or service has liquid pricing information. This is especially true in business-to-business services. For example, if a large industrial facility uses a pest control service on a monthly basis, that price is somewhat tailored based on the size and location of the building. The customer cannot easily assess a similar service with an internet search. Of course, the customer can solicit fresh proposals, but the pricing information is not generally available.

Low frame of reference

If a potential customer has no frame of reference for what something should cost, the vendor can set the price higher and more favorably. For example, a customer may have never purchased an enterprise software solution before and likely has no idea what it costs the vendor to develop and provide such a service. The vendor benefits from this information asymmetry.

Subscription-based

When a business is based on a monthly or annual subscription, a form of recurring or repeating revenue, it is easier to increase price. The customer is set up to use the product or service by default. Subscription-based revenue models create a habitual pattern of consumption and facilitate a price increase.

Sticky contractual revenue

When a customer is engaged in a multi-period contract that specifically provides for price increases or is even silent on price increases, it is easier to raise price. Having a contract that allows for price increase is the very best way to employ a price increase. A multi-period contract locks a customer in and sets the stage for augmenting price.

It is unlikely that any single company possesses all of the dynamics highlighted above in the Pillars of Pricing Power, but if a company did, they could likely raise prices with ease. There are certainly some companies that do not possess any of the dynamics above, and they are *not* candidates to raise the current customer price. Most companies likely have a handful of features and could consider judiciously implementing a price increase program for current customers.

Pricing Power Examples

Figure 12 shows several examples of companies and brands with varying abilities to raise prices (more dots implies a more likely ability to raise price). Based on the chart, one would not be surprised to learn that Yale, Amazon Prime, Cintas, and ADP have all been able to successfully raise their prices. Yale, for example, increases its tuition for its MBA program at the School of Management every year.[*] Consider MBA students coming back from their amazing summer internships who cannot wait to see their friends and professors and finish up their second and final year before graduating. Are they really going to transfer to another school? It is much harder to leave than stay, and we have never heard of anyone making that decision over a modest tuition hike. Alternatively, Amazon Prime takes advantage of the fact that their customers are on auto-renew. When they raise prices, customers' credit cards automatically begin getting billed for the increased price. To prevent it, a customer would have to get online and figure out how to cancel their accounts. On the other hand, Starbucks and American Airlines are much less likely to be able to raise prices as their business models are not conducive to it. They may only get to raise prices with inflation, especially that of key inputs (e.g., coffee beans or jet fuel).[8]

Figure 12: Major American companies' fit into contexts beneficial for raising price

	Customer Dimensions				Company Dimensions					Price Dimensions			
	Small part of customer cost structure	High switching costs	Unsophisticated buyer	Agent decision maker	Many diverse customers	Low ticket	High perceived value	Must-have	Few substitutes	Low transparency	Low frame of reference	Subscription-based	Sticky / contractual
ADP	●	●	●	●	●	●	●			●	●	●	●
American Airlines	●		●		●	●							
CINTAS READY FOR THE WORKDAY	●	●	●	●	●	●	●			●	●	●	●
prime	●	●	●		●	●	●		●		●	●	
	●		●		●	●	●						
Yale		●	●		●		●		●		●	●	

Source: Created by the case writers

How to Implement a Price Increase Program

We believe that implementing a price increase program is a relatively straightforward process involving a few easy-to-follow steps. When entrepreneurs embrace this procedure, they will increase the probability

[*] Yale School of Management made an exception for the 2020–2021 academic year so as to avoid putting an additional financial hardship on students dealing with COVID-19. Tuition costs will remain at 2019–2020 levels.

of desirable results. The steps we propose are to segment customers, test the increase, deploy it, and analyze the results.

Segment Customers

When thinking about a price increase, not all current customers need to receive an identical price increase. We believe the entrepreneur's goal should be to drive a roughly 2–5% net weighted average increase over the entire current customer portfolio. There are infinite combinations of individual increases (and even decreases if absolutely necessary) that can achieve this. We call this *bespoke pricing*. Consulting juggernaut Bain & Company advocates for "employing truly tailored pricing at the individual customer and product level."[9]

The first step in creating bespoke pricing is to think about segmenting current customers. Not all customers are equally profitable, and a thoughtful way to approach price is to first understand who a company's most desirable and least desirable customers are. We encourage entrepreneurs to define what characteristics are most important in the customer relationship. Pertinent characteristics often include volume, price, ease of service, payment patterns, and growth, but entrepreneurs should adjust these characteristics based on their company's needs. Customers that have material volumes and high prices, are easy to serve, pay promptly, and are growing rapidly are very desirable customers and point towards high profitability. Small customers with low pricing that are difficult to serve and pay slowly while not growing are less desirable customers. Entrepreneurs can assign weights to each dimension and develop a ranking system for all customers in a portfolio. The portfolio can be stacked and segmented into quartiles representing A, B, C, and D customer segments. Once this is done, an entrepreneur might implement a 10% price increase on the bottom quartile in an attempt to turn D customers into C customers. Perhaps the A quartile only receives a 2% price increase since those customers are highly valuable and attractive. If done well, the rare customer attrition that does occur should be concentrated within the least desirable D customers.

Larry Seldon, author of *Angel Customers and Demon Customers* and a professor at Columbia Business School, asserts that any business is just the sum of its customer selection decisions. If a company has wisely accumulated a group of profitable and growing customers, the business will be quite valuable. A business composed of unattractive and unprofitable customers might not be valuable at all. Seldon proposes that companies discover who their profitable customers are in a segmentation exercise similar to the one we describe above. We build off of Seldon's work and thesis and propose that entrepreneurs not accept D customers but instead convert them to C customers by significantly amplifying price—turning a demon into something more angelic.

Another dimension of customer segmentation can and should be based on customer feedback. CEOs should be surveying their customers to understand how satisfied they are with the company's offerings and service. If a customer absolutely loves everything about a company, they are less likely to reject a price increase. If a customer is fed up with poor customer service and low-quality products, they are more likely to push back against a price increase. Entrepreneurs should know whether their customers are advocates for or detractors of their company. While surveys are typically anonymous, some customers opt-in to identifying themselves. The salesforce and customer service team should also be tapped for their wealth of information regarding customer-specific satisfaction.

Test

When implementing a price increase strategy, we encourage entrepreneurs to engage in testing. Select a representative sample of customers and raise the price in various amounts to test and understand the customer's reaction and willingness to pay. Many business-to-business companies have a subset (1/12 or

8%) of customers whose annual contracts renew each month. A test can be performed on the contracts that renew in the present month and, based on those results, can continue to be implemented over each of the next 11 months. We do not recommend a universal price increase in a constant amount. We do recommend strategically exploring willingness to pay by customer segment and individual customer. Entrepreneurs need to understand what kinds of customers react most favorably and most hostilely to a price increase. They should determine whether that reaction is based on the magnitude of the price increase or just the fact that prices were raised at all. The organization should begin to develop a good understanding of the price inelasticity of its product or service.

Deploy

Now that customers have been segmented and tested, it is time to deploy a bespoke (customer-specific or at least segment-specific) price increase across the entire portfolio of customers. The testing phase should inform the deployment both quantitatively and qualitatively. Prices should be increased by the optimal level for each customer and segment (along with other considerations), and the customer service team and salesforce team should be prepared to respond based on customer reactions from testing.

As part of any price increase program, an entrepreneur should coach and train their staff and customer service team on the three Ds of what to say and do if a customer does push back on the price increase: Defend, Decrease, and Defer. The entrepreneur should provide talking points on how to defend the price increase. Common and generally acceptable justifications include inflation, increased costs, market pricing, enhanced features, customer service, and increased health care benefits. The staff can be trained to refer the inquiry up to a manager who can help more delicately address the price increase. If the price increase risks the customer's business or would significantly hurt the relationship, the staff can be instructed to decrease the increase and negotiate with the customer on the magnitude of the price increase. If 5% is unacceptable, is 3.5% OK? And, finally, if no price increase is tolerable, the staff could be empowered to defer the price increase to the following year or even indefinitely. While many customers will accept a price increase, savvy entrepreneurs will be prepared for those who do not and will have action plans in place to negotiate the price increase and play for a save.

Analyze Results

Good entrepreneurs will raise prices, but great entrepreneurs treat each year's price increase as a test for the subsequent years. A lot can be learned about customer stickiness and inelasticity from the thousands of price increases that are negotiated each year. At a minimum, the net revenue lift and customer attrition should be quantified. The results should be analyzed by customer segment, both the A through D rankings discussed above and more traditional segments the company uses (geography, business line, etc.) to pick up on any useful patterns. Entrepreneurs should also consider what messaging the customers were most receptive to and whether or not price was raised enough.

In addition to these analyses, qualitative feedback should be gathered from the staff on the content of customer feedback. We heard from several of the entrepreneurs we surveyed that price negotiations were often the catalysts for valuable customer feedback on product or service enhancement ideas. Great entrepreneurs take these and improve their offerings, so customers remain satisfied at higher price levels.

Other Ways to Raise Price

Sometimes the entrepreneur's best bet is to raise price in a different way. Customers often pay an array of fees in services in their relationship. Examples might include delivery fees, pick-up fees, base service fees, and other miscellaneous fees. When thinking about price, work on each service price, and understand the frequency of consumption. The goal is to drive an aggregate increase. It does not matter how it is achieved. A modest increase in the core service might be palatable with more aggressive raises

on the ancillary services. For example, in 2018, telecommunications giant AT&T raised price on an obscure administrative fee on customer invoices. The price moved from 76 cents to $1.99 and resulted in an incremental $800 million in revenue for AT&T.[10] The 160% price increase was not on a core service line item; it was on a low ticket fee rarely examined by customers.

Another way to drive price enhancements is to implement new fees and charges. The airline industry has done this with some degree of success. Baggage fees and food for purchase are examples of charges that previously were included in the base airline ticket. We are not evaluating whether these fees are fair or not; we are just highlighting the fact that entrepreneurs are capable of introducing new fees, which are a form of a price increase. Another example of this is shifting a certain cost increase to the customer. We have witnessed many companies assess fuel surcharges to customers when gasoline prices are high. Implementing a fuel surcharge is a price increase. We know of one entrepreneur who previously charged customers a rate inclusive of tax and then held the rate constant but presented the fee as exclusive of tax, a material price increase. Yet another example is companies who previously accepted credit cards and now charge a credit card convenience fee to customers who pay by credit card.

Still, another way to affect a price increase is by providing less product or service to the customer. Consumer packaged goods companies often do this by reducing the size of their product. The candy bar that used to be six ounces is reduced to four ounces but still sells for the same price. The commercial waste removal service shifts from weekly service to every other week service with no reduction in price. These are examples of raising price by doing less. As an example, in 2015, spice purveyor McCormick started shipping 25% less pepper in the same packaging at about the same price, engaging in an age-old means of getting frugal consumers to pay more for less.[11]

A final way to impact price relates to the timing of customer payments. Shifting a customer that pays monthly in arrears to one that pays annually in advance is a reduction in working capital needs and is effectively a price increase. Moving a customer who pays monthly by check at 45 days to one who agrees to pay by automatic debit on the day the invoice is due is another form of payment terms enhancement and is akin to a price increase.

If You're Convinced of the Why, but Still Scared of the How

While we outline general steps in conducting a price increase that we believe will greatly improve the probability of successfully growing a company's EBITDA, we recognize that each company has its own needs and considerations. We recommend speaking with mentors who think about this topic and other entrepreneurs who have successfully implemented a price increase program to learn from their experience. Additionally, there are consultants who can help optimize a pricing program for nearly any situation, including revamping a company's pricing strategy or determing a go-to-market price. For the simpler annual price increases we recommend in this note, one first-time entrepreneur we interviewed still found it useful to have consultants confirm to a skeptical board much of his own thinking around raising price. Relevant consultants include the pricing experts at the large consultancies, such as McKinsey & Company and The Boston Consulting Group, or specialist firms like Simon Kucher & Partners. Per Sjofors, who conferred with us on this note, has helped implement successful pricing programs with over 600 clients, including some of the entrepreneurs we interviewed for this article, earning himself the moniker, the "Price Whisperer." The cost of these consultants is generally vastly outweighed by the benefit of a pricing program, especially if it enables an entrepreneur to get on the path of consistent, annual price raises, which compound a company's EBITDA and enterprise value over the long term.

Fear Entrepreneurs Have About Raising Price

Attrition

The number one fear of raising prices is customer attrition. Entrepreneurs think customers always shop around until they find the cheapest product or service that meets their needs. They think competitors will poach customers if prices are increased, and customers will seek alternatives. In our experience, this is much rarer than CEOs think. Andreas Hinterhuber, an Innsbruck-based consultant and expert in pricing, asserts in his article, "The Six Pricing Myths that Kill Profits," that customers are frequently unaware of prices being paid and are much more focused on the total cost of ownership. The behavior of the majority of customers does not suggest that pricing awareness or price importance is high.[12]

In our personal experience as entrepreneurs, as well as from dozens of conversations with other CEOs about raising prices, we have found that most have been too scared of increasing prices and regret that they did not use the price lever more and earlier. Several CEOs interviewed told us that they had *never* lost a customer due to price increases, even when they were significant. Customers, especially in business-to-business settings, tend to factor in the total cost of ownership and switching costs in their procurement decisions, which tends to overwhelmingly favor the incumbent vendor. As an example, it is just not worth re-training employees on a new information technology system to save 2–5%.

While many CEOs mentioned receiving zero pushback on price increases, one brought up an enlightening example of a customer threatening to switch to another vendor. The incumbent CEO encouraged the disgruntled customer to do a demo with a competing vendor. The customer did just that. They not only recognized the value they were getting from the current vendor but also contemplated all the re-configuring and adjustments they would need to make if they switched systems. This resulted in the customer sheepishly calling back the incumbent CEO to remain a customer and accept the price increase.

Attrition Math is Favorable to Price Increases

We believe that fear of attrition and pushback is dramatically exaggerated and should be evaluated not anecdotally, but analytically. This is especially true in businesses with multiple geographic markets. Local market leaders will likely have more resistance to price increases than corporate leaders because they directly interact with customers daily and fear and exacerbate price resistance. A single vociferous customer who pushes back on price increases is not a reason to jettison a corporate-wide price increase strategy. While we hope to convince entrepreneurs that the fear of attrition is mostly unwarranted, attrition does occur. When implementing a price increase program, the goal is to drive a net increase in EBITDA. The goal is *not* to retain every single customer. Tom Bird, a successful former entrepreneur, espouses that "when implementing price increases, if some customers did not leave, the entrepreneur did not raise price enough."

The math of a price increase can be quite compelling even with some attrition. Let's imagine a business with 25,000 customers who each pay the business $250 per year for a service. The business has $1.5 million of fixed costs and variable costs of $140 per customer per year. The entrepreneur who runs the business reads our note or takes one of our classes, and after thoughtful deliberation, testing, and customer segmentation analysis, implements a 5% price increase ($250.00 moves to $263.50).

Let's examine the results below in **Figure 13**. We see that if all customers accept the price increase and there is no attrition, EBITDA amplifies to $1.56 million, and EBITDA margin expands to 24% —this would be an ideal outcome. What is more likely is that at least some customers do not accept the price increase and terminate their relationship with the business. This is frustrating, but it is a likely outcome when raising price. It is not until a full 10% of customers (which would be an enormous number) defect that the business winds up in a net neutral position. In other words, in this simple example, until the business loses

greater than 10% of its customers after the price increase, it is still in a better position than implementing no price increase. The likely outcome is not 5% or 10%. If an entrepreneur does careful testing, they will discover that many customers accept price increases for the reasons mentioned above, and the cancelation rate is low (perhaps in the 1% range or lower). See **Exhibit 2** for a graphical depiction of **Figure 13**. Again, we assume no debt and a 6x EBITDA multiple for the equity value.

Figure 13: EBITDA impact of a 5% price increase with varying levels of attrition

Attrition	Base	0%	5%	10%
Customers	25,000	25,000	23,750	22,500
Selling Price per Year	$250	$263	$263	$263
Revenue	$6,250,000	$6,562,500	$6,234,375	$5,906,250
Fixed Costs	$1,500,000	$1,500,000	$1,500,000	$1,500,000
Variable Cost per Customer	$140	$140	$140	$140
Variable Costs	$3,500,000	$3,500,000	$3,325,000	$3,150,000
Total Expenses	$5,000,000	$5,000,000	$4,825,000	$4,650,000
EBITDA	$1,250,000	$1,562,500	$1,409,375	$1,256,250
EBITDA margin	20%	24%	23%	21%
Equity Value	$7,500,000	$9,375,000	$8,456,250	$7,537,500

Source: Created by the case writers

For a real-world example, consider Disney, the global entertainment business. Regarding pricing and attrition in its theme park division, there does not appear to be any diminution in demand after modest and serial price increases. Internal projections at Disney show that even after raising prices at roughly double the rate of inflation over the past five years, it could charge much more than it currently does without driving away too many customers, a person familiar with the company's parks operations said.[13]

The Ethics of Price Increases and Price Segmenting

Some entrepreneurs bristle at the notion of raising price. They feel it is unethical, especially if different customers have different prices or different customers receive different price increases. We are not ethicists, but we are ethical capitalists. We believe that if customers think the price is too high or is unfair in some way, they have the choice to end the relationship and find an alternative solution elsewhere. This is true whether the customer is getting the same price as all other customers or a bespoke price based on its characteristics and needs. Without coercion by any party, we find it difficult to contend that a vendor setting (or raising) a price that the customer willingly accepts should be considered unethical.

Entrepreneurs should consider an adaptation of the golden rule for price increases. If they feel the price increase their company is proposing would be egregious if implemented by one of their vendors on them, they should lower or cancel the proposed increase. If an entrepreneur is uncomfortable with price increases as a strategy, they should not use it.

Generally, customers understand that a vendor must raise prices to keep up with its own rising costs and to be able to reinvest in its own business and expand services. When entrepreneurs increase price, part of the increase covers rising costs, and part of the increase can be used for improved business operations. We do not think it is unethical to raise prices to cover inflationary costs and invest for improved customer experiences.

While we do not believe pointing to others who engage in a practice means that the practice is just or ethical, we think it is helpful to understand just how common raising price and price segmenting is in sophisticated companies. For example, cable television operators, universities, and drug companies all use various forms of price segmentation and price increases. Cable television operators bundle services and channels to target different customer segments with premium prices. This is a form of bespoke pricing. Universities charge students various prices based on their ability to pay. This is a form of bespoke pricing. Drug companies regularly charge higher prices while a product is protected by a patent. This is a form of bespoke pricing. Many companies raise prices or use some form of bespoke pricing, and entrepreneurs should not feel it is unethical or nefarious in any way.

Finally, it should be noted that while we do not believe raising price or implementing bespoke pricing to be inherently unethical, it can be done unethically (and we are absolutely against price gouging and price abuse and we support laws that prevent this behavior). When certain free-market conditions are not met, (e.g., customers may not have the ability to find a substitute supplier of a needed good or service), an unreasonably high price may be unethical. For example, predatory fees for low-income populations who cannot use traditional banks and instead use pay day lending services as their de facto bank or exorbitant price increases on life-saving pharmaceuticals[14] cross the line. In general, we believe that increasing prices a few points above inflation is fair when agreed upon by the buyer and seller in a free market.

Conclusion

We share our thoughts on price increase not to dictate to students and entrepreneurs that they should engage in this strategy (although the math does dictate that prices must, at least, pace cost inflation). Instead, we view our role as expounding as many tools as possible to aspiring entrepreneurs and allowing them to decide which tool to use, in what amount, and when.

We hope that we have demonstrated why bespoke price increases are a compelling approach to increasing EBITDA and equity value. We urge entrepreneurs to consider the risk-adjusted and effort-adjusted returns to bespoke price increases relative to other traditional growth strategies (i.e., M&A, volume increases, and cost-cutting). As stated above, the number one regret the entrepreneurs we interviewed had with respect to pricing was not raising prices more and sooner.

We encourage entrepreneurs to consider our 13 characteristics (Pillars of Pricing Power) to assess whether or not they have a favorable context for implementing price increases. We believe that when entrepreneurs embrace our methodology for how to implement a bespoke price increase program (segment, test, deploy, and analyze), they can establish regular and modest price increases that will benefit their companies, their customers, and their employees in an ethical way.

Appendix A: Case Studies in Raising Price

So far, in this note, we have explored the why and how of price increases and have done so with theoretical examples. Let's turn to the real world and examine two situations, one big and one small, where companies used price increases to drastically increase equity value

Small Business Price Increase: Document Storage Solutions

Alan Waterstone is the founder and CEO of Document Storage Solutions (DSS), a business he started in 2011 after completing his MBA. DSS, based in Waterbury, Connecticut, provides hard-copy records management storage services. DSS has several thousand customers located in multiple markets throughout New England that generate $50 million in annual revenue and approximately $15 million in annual EBITDA. DSS's customers are in a variety of industries with strong representation from legal firms, medical services firms, and financial institutions. No customer represents more than 3% of revenue, and the top 10 customers represent 8% of annual revenue.

Waterstone has been engaged in a price increase program for several years. He is personally involved in the process and targets a weighted average net revenue increase of 4% to 5% per year. He comments on this function:

> When I first started thinking about price increases, I was filled with trepidation. I was scared all our customers would push back and revolt. The only reason why I even contemplated this was a board member pushed me to consider it. Before we jumped into a full price increase program, we did a bunch of thinking and planning—how we were going to do this, who was going to get an increase, what would happen if it did not work, and what would happen if it did work.
>
> We rolled out a test program, and there was absolutely no customer reaction. Not a single customer we raised price for said anything at all. We have an installed customer base, and we are a small part of the customers' cost structure, and it would be somewhat difficult for a customer to leave. We have been doing price increases for a few a decade now, and our customer attrition, due to price increases, is less than half a percent per year. Initially, I thought our goal was to not lose any customers. Now, I know that our goal is to get a net EBITDA lift, not 100% retention.

DSS has compounded revenue through volume-based organic growth, a serial acquisition program, and price increases. DSS has a relatively narrow scope of service offerings and has not implemented an expansion of product and service offerings. DSS has acquired businesses from Florida to Vermont and plans to continue to make more acquisitions.

> We are not exclusively focused on price increases as a growth channel—that would be silly. We have a three-pronged approach to growing our business. We grow volume through our sales program, and we are engaged in a programmatic acquisition strategy. Finally, we use price increases. It is a combination, but price increases matter a lot. For effort expended and reward achieved, it is highly accretive with relatively little time invested and no capital deployed. At $50 million in revenue, our price program gives us $2.5 million of growth and incremental EBITDA and cash flow. That is far more attractive than trying to do that through a sales volume increase. Additionally, that incremental $2.5 million adds about $25 million to enterprise value. This is a very potent arrow in my quiver.

Waterstone wishes he had started a price increase strategy earlier in his company's journey and perhaps even been more aggressive. He understands why entrepreneurs might be fearful, but it has worked well for DSS.

> We focus on individualized price increases at the customer level. We study our customer portfolio closely and segment customers in many ways—geography, size, industry, and other dimensions. We are trying to discover the perfect price increase for every single customer, so different customers get different price increases. We think price increases are a win-win for us and our customers. When we raise price, we are actually becoming a better business. We do three things when we raise price: first, we are matching our increases in costs on rent, people, and healthcare; second, we invest in customer service, infrastructure, more people, and systems—all to be a best-in-class service provider; third, part of the price increase is accretive to the equity value in the business. We treat our customers the way we would like to be treated. We would want great service, and we would be willing to pay a bit more every year to get that—and that is exactly what we do with our customers.

Figure 14: Pillars of Pricing Power for Document Storage Solutions

	Customer Dimensions				Company Dimensions					Price Dimensions			
	Small part of customer cost structure	High switching costs	Unsophisticated buyer	Agent decision maker	Many diverse customers	Low ticket	High perceived value	Must-have	Few substitutes	Low transparency	Low frame of reference	Subscription-based	Sticky / contractual
DSS	●	●	●	●	●	●			●	●	●	●	●

Source: Created by the case writers

Big Business Price Increases: Netflix

The popular web-based video purveyor Netflix (NASDAQ: NFLX) has raised its prices four times in its history.[15] The announcement of the two most recent increases in October 2017 and January 2019 caused the company's stock price to jump by more than 5% on the day of the announcement. In the October 2017 example, Netflix increased the price of its standard service from $10 to $11 per month and its premium offering from $12 to $14 per month (10% and 17% increases, respectively). The basic service remained at $8 per month. The stock price rose 5.4% that day on the news, while the Nasdaq composite gained only 0.78%. Again, in January 2019, the company announced that the basic service would increase from $8 to $9, standard from $11 to $13, and premium from $14 to $16 (13–18% increases). Netflix's share price jumped 6.5%, while the Nasdaq gained 1.7% on the day. Based on the number of shares outstanding during these time periods, the price increases created $4.3 billion (October 2017) and $9.5 billion (January 2019) of value. Wall Street certainly believed in Netflix's ability to raise prices and rewarded them for doing so. See **Figure 15** for a summary of Netflix's price increases.

Figure 15: Details and effects of Netflix's price increases

	Oct 2017	Jan 2019
Old Standard Subscription Price ($/month)	$10	$11
New Stand Subscription Price ($/month)	$11	$13
Standard Subscription Price Increase (%)	10%	18%
Share Price Increase (%)	5.39%	6.52%
Nasdaq Price Increase (%)	0.78%	1.71%
Market Capitalization Increase ($ billion)	$4.3	$9.5
Standard Subscription Price CAGR (2010-2020)	5.0%	
Standard Subscription Price CAGR (2007-2020)	3.8%	

Source: Created by the case writers

Netflix has customers on automatic monthly payments. The company simply emails customers that it's raising prices and begins billing them more. From the customer's perspective, in order to avoid the price increase, they must see the email in what is likely an overcrowded inbox, read it, determine Netflix's value to them, go to Netflix's website, and figure out how to cancel the subscription. They likely wonder whether or not navigating their inbox and Netflix's website and potentially making a customer service call are worth an extra dollar. To the customer, this low-ticket expense (and increase) does not warrant the effort required to reject it. Additionally, the customer may very well feel they are getting a lot of value for the service and understand Netflix's ever-expanding catalog of proprietary content is expensive to produce. To Netflix, it's a 10% or greater increase to their revenues with no additional CapEx or operational complexity. See **Figure 16** to see how Netflix's business model fits within the pricing pillars framework discussed above.

Figure 16: Pillars of Pricing Power for Netflix

	Customer Dimensions				Company Dimensions					Price Dimensions			
	Small part of customer cost structure	High switching costs	Unsophisticated buyer	Agent decision maker	Many diverse customers	Low ticket	High perceived value	Must-have	Few substitutes	Low transparency	Low frame of reference	Subscription-based	Sticky / contractual
NETFLIX	●		●		●	●	●					●	

Source: Created by the case writers

Appendix B: The Economic Theory Behind Price Increases

Although we are practitioners (entrepreneurs and investors) by background, we want to link our thoughts on price increases to the economic theory underpinning this topic. As with any underpinning theory, simplifying assumptions are made that do not account for every situation while operating a business, and therefore, the theory cannot perfectly predict reality. That said, the theory is still a useful framework to consider and better anticipate market dynamics and customer reactions.

Price increases are fundamentally about price elasticity and inelasticity. If demand for a product decreases by *less* than the price was increased, it is inelastic. If the demand decreases *more* than the price increased, it is elastic. Mathematically, the price elasticity formula is:

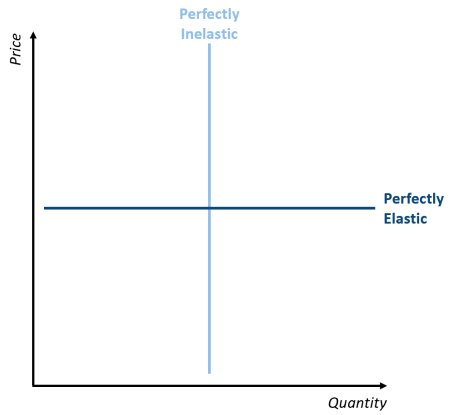
$$Price\ Elasticity\ of\ Demand = \frac{Percent\ change\ in\ quantity\ demanded}{Percent\ change\ in\ price}$$

Accordingly, if the quantity demanded decreases by less than the price increased (on a percentage basis), the demand is inelastic, and prices should be raised to maximize revenues. For example, if the price of a ticket to a Los Angeles Dodgers baseball game increases by 10% and the demand decreases by 5%, demand is inelastic (in this price range) because the price increased more than the demand decreased. To calculate the price inelasticity of demand for our baseball fans, we divide 5% by 10%, and the result is 0.5. Price elasticities of demand with values below 1.0 are inelastic.

To put real numbers on it, let's say the ticket price was $50, and the quantity demanded was 50,000 for revenues of $2.5 million. Raising the price 10% to $55 per ticket brings revenue to $2.6 million despite a decrease in the demand for the tickets by 5% to a quantity of 47,500. By raising prices by 10%, revenues increased 4.5%.

Figure 17 graphically displays elasticity as demand curves. A vertical demand curve (light blue) represents a perfectly inelastic demand, where, no matter what the price is, consumers' demand will not change. The polar opposite would be a horizontal line (dark blue) representing perfectly elastic demand, where if a supplier were to increase price by even 1%, they would lose all quantity demanded.

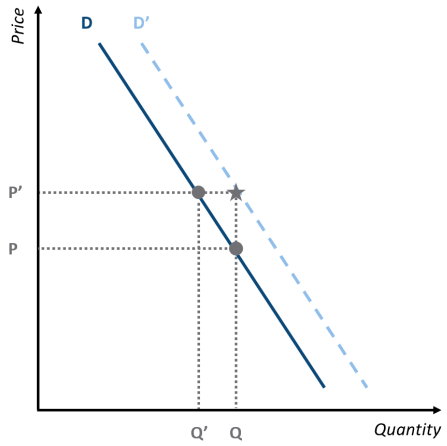
Figure 17: Perfectly inelastic and elastic demand curves



Source: Created by the case writers

When the price of a good that has elastic demand is raised from P to P', it is expected that the equilibrium demand would decrease from Q to Q' (the intersection of P' and Q'), as seen in **Figure 18** below. But if the demand is perfectly inelastic, that is, if all customers accept the price increase (no attrition), the demand curve is shifted up (from D to D' in **Figure 18**). Since the quantity demanded stays the same, and the price has increased, the new equilibrium point (the intersection of P' and Q on D' denoted by the star in **Figure 18**) does not fall on the original demand curve, D. The demand curve shifts up to the new equilibrium, D'. At each quantity demanded, the equilibrium price is higher than the previous price.

Figure 18: With price inelasticity, the demand curve shifts up



Source: Created by the case writers

While many factors affect the quantity demand of a product or service, four determinants are the primary drivers of price inelasticity[16]: (1) lack of substitutes, (2) the product or service is a necessity (compared to a "nice-to-have"), (3) short time frame (in the long run consumers can change behavior to lower-cost alternatives), and (4) use of the product or service is habitual (e.g., cigarette prices are highly inelastic). These drivers dovetail and overlap with many of the factors included in the "Consider the Context: What are the best circumstances to raise price?" section of this note.

Exhibits

Exhibit 1: Impact of a price increase versus no price increase over 10 years for Entrepreneurs A and B

	Entrepreneur A										
		1	2	3	4	5	6	7	8	9	10
	BOP Revenue	$5,000,000	$5,000,000	$5,350,000	$5,724,500	$6,125,215	$6,553,980	$7,012,759	$7,503,652	$8,028,907	$8,590,931
0%	Price Increase	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
7%	Organic Growth	$0	$350,000	$374,500	$400,715	$428,765	$458,779	$490,893	$525,256	$562,024	$601,365
	EOP Revenue	$5,000,000	$5,350,000	$5,724,500	$6,125,215	$6,553,980	$7,012,759	$7,503,652	$8,028,907	$8,590,931	$9,192,296
	Expenses	$4,000,000	$4,280,000	$4,579,600	$4,900,172	$5,243,184	$5,610,207	$6,002,921	$6,423,126	$6,872,745	$7,353,837
	EBITDA	$1,000,000	$1,070,000	$1,144,900	$1,225,043	$1,310,796	$1,402,552	$1,500,730	$1,605,781	$1,718,186	$1,838,459
	EBITDA (%)	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
	Equity Value	$6,000,000	$6,420,000	$6,869,400	$7,350,258	$7,864,776	$8,415,310	$9,004,382	$9,634,689	$10,309,117	$11,030,755
	Entrepreneur B										
		1	2	3	4	5	6	7	8	9	10
	BOP Revenue	$5,000,000	$5,000,000	$5,550,000	$6,160,500	$6,838,155	$7,590,352	$8,425,291	$9,352,073	$10,380,801	$11,522,689
4%	Price Increase	$0	$200,000	$222,000	$246,420	$273,526	$303,614	$337,012	$374,083	$415,232	$460,908
7%	Organic Growth	$0	$350,000	$388,500	$431,235	$478,671	$531,325	$589,770	$654,645	$726,656	$806,588
	EOP Revenue	$5,000,000	$5,550,000	$6,160,500	$6,838,155	$7,590,352	$8,425,291	$9,352,073	$10,380,801	$11,522,689	$12,790,185
	Expenses	$4,000,000	$4,280,000	$4,579,600	$4,900,172	$5,243,184	$5,610,207	$6,002,921	$6,423,126	$6,872,745	$7,353,837
	EBITDA	$1,000,000	$1,270,000	$1,580,900	$1,937,983	$2,347,168	$2,815,084	$3,349,151	$3,957,675	$4,649,944	$5,436,348
	EBITDA (%)	20%	23%	26%	28%	31%	33%	36%	38%	40%	43%
	Equity Value	$6,000,000	$7,620,000	$9,485,400	$11,627,898	$14,083,008	$16,890,503	$20,094,908	$23,746,049	$27,899,665	$32,618,087
	Incremental Equity Value	$0	$1,200,000	$2,616,000	$4,277,640	$6,218,232	$8,475,193	$11,090,526	$14,111,360	$17,590,548	$21,587,331

Source: Created by the case writers

Exhibit 2: Retention rate analysis for net EBITDA impact

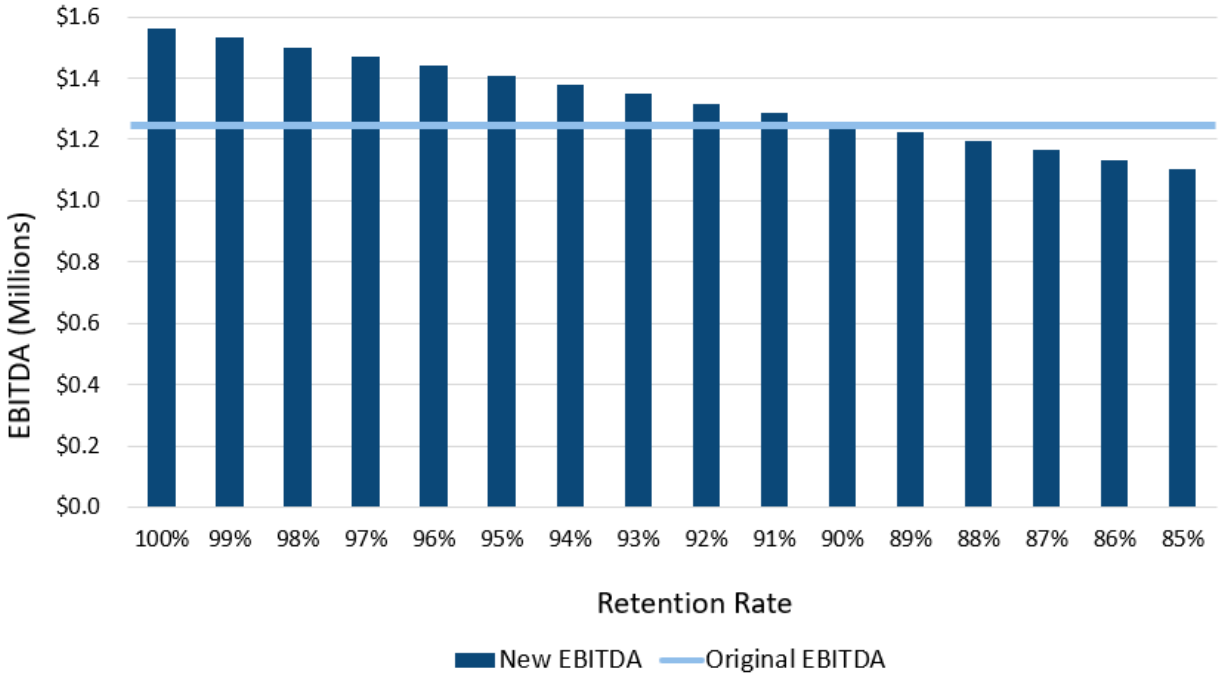


Exhibit 3: Additional Resources

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