

FASTENAL: LOSING ITS FAST GROWTH TO AMAZON BUSINESS?¹

Arpita Agnihotri and Saurabh Bhattacharya wrote this case solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.

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The Fastenal Company (Fastenal), established in 1967 and based in Minnesota, United States, was North America's largest distributor of fasteners; it was also the most efficient single source for a wide variety of industrial and construction products, such as metal cutting tools and blades, abrasives, material handling tools, and gloves.² In 2008, Fastenal pioneered the concept of industrial vending machines, which helped its clients reduce their supplies costs by 40 per cent.³ In 2015, Fastenal was ranked 44th on Forbes' list of the World's Most Innovative Companies,⁴ and in January 2017, it was ranked 10th on Industrial Distribution's Big 50 List.⁵ In Minnesota, Fastenal was one of the 20 largest public companies, with a total employee strength of 19,624 and revenue of US\$3.96 billion⁶ by the end of 2016 (see Exhibits 1 and 2).⁷ Fastenal was also known for providing the best customer service in the industrial supply sector.⁸ Fastenal's employees believed that one of the key drivers of the company's success was their decentralized and empowering organizational culture, in which employees close to customers made decisions.⁹ These features helped Fastenal become one of the rare companies to leap from 100th position on Harvard Business Review's 2014 list of the Best-Performing CEOs in the World to 33rd position on the 2015 list.¹⁰

Although Fastenal enjoyed a high profit margin and different awards, its competitive edge was threatened when Amazon Business entered the industrial supply business in 2012.¹¹ Amazon Business's impact on Fastenal was visible when, within two years of its entry, Fastenal's performance began to decline. The announcement of Amazon Business's inception itself reduced Fastenal's share price by 15.76 per cent.¹² Further, Fastenal had not reported any significant increase in its gross profit or operating income as a percentage of sales since 2014. Growth in earnings per share was also in decline (see Exhibit 2). Competition became even more challenging when in May 2017, Amazon Business pioneered a supply chain innovation and applied for patents for aerial drones.

Did Fastenal have any competitive advantage over Amazon Business or was its survival likely to be threatened by Amazon Business? What strategies should Fastenal take to contend with Amazon Business: should it focus on differentiation to outpace the competitive threat posed by Amazon Business or resort to a price war through a strategy of low costs to save its market? Would Fastenal be able to regain its growth trajectory given the competition from a dominant player like Amazon Business?

BACKGROUND

In 1967, Bob Kierlin, along with four of his friends, pooled \$30,000 to open the first Fastenal store, located in Winona, Minnesota. Initially, Fastenal mainly supplied fasteners such as nuts, bolts, and screws. Their first retail store was 1,000 square feet (93 square metres).

From Fastenal's beginning, Kierlin advocated the motto of "Growth through Customer Service,"¹³ which guided employees in working closely with Fastenal's clients to keep them supplied with what they needed and drive clients' business improvement. The company's website proclaimed, "We don't just make a sale—we align with our customers to make them more successful."¹⁴

Kierlin already had experience working in a hardware store. He had observed that many customers came to Fastenal for simple products, like nuts and bolts, and in 1967, thought of making these simple products available through vending machines.¹⁵ However, Kierlin soon realized that this was an expensive proposition, and much ahead of its time.¹⁶

Nevertheless, the business gradually flourished.¹⁷ In 1987, the company launched its initial public offering, making Fastenal a listed company. In 1994, Fastenal took its first step toward internationalization, opening stores in Canada. By 2001, Fastenal had also expanded to Mexico and Singapore. By 2008, with its continuous growth effort, Fastenal was incorporated in the S&P 500 Index.¹⁸ By the end of 2016, it had 2,503 stores across 21 countries,¹⁹ although most of Fastenal's revenue came from the United States (see Exhibit 3).

During this time, Fastenal also paid special attention to human capital development, and in 1999, launched the Fastenal School of Business for company employees.

PRODUCT LINES AND PERFORMANCE DRIVERS

Fastenal's business had two components: industrial production and maintenance. The industrial production business supplied nuts and bolts, screws, and studs, which were used as components of products manufactured by its industrial clients. Fastenal referred to the industrial production business as original equipment manufacturing (OEM). Fastenal offered a total of 12 product categories under its OEM business (see Exhibit 4).

Fastenal's maintenance business was known as the maintenance, repair, and operations (MRO) business. It focused on different client service-related needs,²⁰ providing after sales services and solutions ranging from simple tool repairs to complex engineering support.²¹ Fastenal attributed its success largely to its wide variety of product lines. The company's 2016 annual report stated, "We believe our success can be attributed to our ability to offer our customers a full line of products and services from convenient locations, as well as to the high quality of our employees."²² In 2016, the MRO business contributed 63 per cent of Fastenal's total revenues.²³

Fastenal's manufacturing plants were placed in nine locations, including Minnesota, California, and Indianapolis, and fulfilled 70,000 orders every year, with each job customized for an individual customer.²⁴ Fastenal had 14 distribution centres, 11 of them in the United States, serving 2,452 stores in North America and an additional 51 stores outside of North America.²⁵ Fastenal also had more than 6,000 fully owned delivery vehicles.²⁶ Its national call centre took care of all customer queries, including hardware and software issues.²⁷ Each of the Fastenal stores provided customized inventory to its clients and had a high rate of same day service. Fastenal sold to industrial customers through multiple channels, including retail stores, onsite vending machines, and its website, Fastenal.com.²⁸ For certain product lines like metal cutting tools and blades, Fastenal was itself dependent on suppliers. However, the maximum inventory that Fastenal purchased from a single supplier was no more than 5 per cent.²⁹

COMPETITION

Fastenal had the highest profit and operating margin among leading competitors in the industry (see Exhibit 5). The company's major competitors included W. W. Grainger Inc., MSC Industrial Direct Co., and HD Supply, Inc. All other companies were fragmented in the industry. Fastenal had four times as many stores as any of its competitors.³⁰ Fastenal also opened more than 60 new stores every year until the end of 2015 (see Exhibit 4).³¹ By the end of 2016, Fastenal had more than 2,500 stores globally, compared to the 598 stores of W. W. Grainger, one of its closest competitors.³² One of the key reasons for Fastenal's higher profitability was the location of its stores, which were always near the distribution centres. Fastenal's broad market coverage, with more stores than competitors and a completely owned distribution network, including trucks and other logistics-related supplies, gave Fastenal a competitive advantage. The capital required for such a distribution network deterred other players from competing (see Exhibit 2).³³

FAST—DISRUPTIVE INNOVATION

In 2008, Fastenal launched its industrial vending system, Fastenal Automated Supply Technology (FAST), with huge success. The Fastenal vending system was an Internet-connected appliance integrated with vending technology, installed at the client's end.

Fastenal provided two versions of the vending machine: FAST 3000 and FAST 5000. These machines had similar functions, but FAST 3000 was physically smaller.³⁴ The vending machine's integrated video management display resembled that of any snack vending machine, although the machine's software was more complicated. The cloud-based software recorded every transaction, allowing a client's employees access to materials depending on their roles and needs.³⁵ Employees needed to swipe their identification card or enter an access code to withdraw an item from the vending machine. The vending machine's software allowed a manager to track all stock outflows and the employees taking the stock, which helped to prevent misuse of supplies. When the vending machine ran low on certain items, Fastenal's local store received an automatic notification so that a Fastenal employee could fill the machine, thereby eliminating the cost of stockouts and paper work.³⁶

Fastenal's industrial vending service was beneficial for both a client's employees and the client itself. Employees were able to retrieve products themselves, which was especially useful for those working night shift; normally they would have to wait for a supervisor on the next day. As a result, employees could ensure timely maintenance work. The client was able to save costs by closely monitoring inventory and having replenishment orders placed automatically.³⁷ The automated vending machines helped Fastenal clients reduce their supply consumption by 40–50 per cent.³⁸

The vending machines were not standardized; they were customized for each company, usually based on the client's industry type. Thus, a vending machine for a client in the plastic industry was different from a machine for a client in the construction industry. Fastenal searched for industry-specific information to select supply items, 50 per cent of which would usually be safety-related, such as safety glasses or gloves. The remaining supplies included MRO items, such as duct tape, batteries, or utility blades.³⁹ For items that were heavy and could not fit in the regular vending machines, such as hard hats, power tools, or aerosol cans, Fastenal provided its clients with FAST Auto Lockers, which gave controlled access to employees for these heavy items.⁴⁰

The entire industrial vending system was supported by a network of employees, including a local sales force, machine re-stockers, and regional sales support, which involved fleets of vans to deliver machines and trained FAST specialists to give hands-on demonstrations to Fastenal's industrial clients. Fastenal also had a national distribution and transportation system.

The industrial vending machines reaped positive results for Fastenal. Their revenues grew significantly, from \$2 billion in 2010 to \$3.96 billion in 2016.⁴¹ Acceptance of the technology was initially low; just 7,000 customers used the company's vending machines by 2011. But by 2014, there were more than 46,000 clients opting for the industrial vending solutions.⁴² Industrial vending then became a core part of Fastenal's business and one of its major growth drivers. In 2017, Fastenal reported that 62,825 vending machines were being used by clients across the United States (see Exhibit 1).⁴³ By the first quarter of 2017, Fastenal's growth rate in sales through the vending machines outpaced the company's total sales growth.⁴⁴

INVESTMENT IN HUMAN CAPITAL

Fastenal took a bottom-up approach to management. The company believed that employees could make good decisions if they were invested with good training and decision-making skills. Fastenal believed that its success was based on recruiting smart candidates, training them well, and working on their competencies.⁴⁵ This was important, according to Fastenal, because the employees worked most closely with clients. Will Oberton, a previous Fastenal chief executive officer (CEO), explained: "The closer to the customer the decision is made, the more successful we will be."⁴⁶ Employees understood not only Fastenal as a brand, but also its mission. The company created an environment that encouraged employees to be authentic and reliable.⁴⁷

In 2005, Fastenal started a sponsorship program as a step to fill demand for skilled computer numeric controlled (CNC) machinists. According to Daryl Bergen, a trainer and recruiter at Fastenal, "Fastenal has a huge demand for skilled CNC machinists, but there are not enough skilled applicants to fill the gap." He further emphasized, "It's not something you can walk off the street and [learn]."⁴⁸ Fastenal offered sponsorship programs for which it selected 10 candidates each year to attend a full-time program in CNC at Southeast Technical Institute in Sioux Falls, South Dakota. If these candidates graduated with a GPA of 3.0 or higher, they were offered a full-time job with Fastenal and were further reimbursed 25 per cent of their tuition fees and book costs.⁴⁹ Fastenal also launched the Fastenal School of Business, focused on imparting industry and company-specific business skills to its employees.⁵⁰ Graduates from this school were in demand among the company's competitors.⁵¹

Trained Fastenal employees were able to map inventory consumption processes at clients' locations and suggest means to reduce operational costs. Cory Jansen, executive vice president of operations at Fastenal commented:

Our inventory management specialists will work with [our client's] personnel to map how product flows through [their] current system and identify areas where operational costs can be reduced or eliminated. We will uncover hidden sources of supply chain waste to provide total cost-savings solutions.⁵²

Fastenal's efforts paid off not only with recruitment, but also with employee retention. Fastenal provided other incentives as well to its employees. As a part of its internal marketing campaign in 2013, Fastenal held a competition for its employees; the winner received a sponsored trip to the NASCAR Sprint Series Race at Charlotte Motor Speedway as a guest of Roush Racing. More than 50 per cent of Fastenal employees participated in this competition.⁵³

Most Fastenal employees also felt that one of the critical elements that helped the business grow from a small fastener shop to a dynamic, innovative company was the corporate culture, which was deeply committed to training employees and empowering them to make decisions. In 2015 alone, Fastenal

employees completed 478,000 hours of training courses, both online and instructor-led. Further, Fastenal followed a policy of promoting employees from within the company; approximately 95 per cent of Fastenal employees had been promoted from within the company. Most senior level positions were filled with employees who had started their careers at very junior positions with Fastenal.⁵⁴

MARKETING AND CUSTOMER SUPPORT

Customers and vendors were equally important to Fastenal, and the company made efforts to bring both together at an annual event that was usually hosted at Fastenal's main distribution centre in Indianapolis, Indiana. Customers across the globe were brought in for the event and were also encouraged to participate and educate themselves with relevant ideas to obtain a clearer picture of the services and products that Fastenal could provide.⁵⁵

The launch of Fastenal's vending machines took place at the annual customer expo in 2008. At that time, industrial vending was a niche technology because both the machine and the labour costs needed to maintain them were high. However, Fastenal was able to provide machines and lockers at a much lower cost as a part of its inventory management solution for its customers.⁵⁶ Fastenal's chief operation officer, Lee Hein, viewed the concept of an industrial vending machine as the perfect solution for Fastenal customers. He noted:

From the beginning, we saw vending as an investment in our customers—a way to solidify relationships and earn opportunities by providing tremendous value in terms of time and cost savings. It's been a perfect fit for our local service model, bringing our store teams and products even closer to our customers.⁵⁷

Fastenal also advertised on social media and had an in-house design team that worked on signs and displays.⁵⁸

Fastenal's programs and products offered several benefits to its customers. First, Fastenal made available a lower cost solution through vendor consolidation and value-added services. Second, Fastenal offered customized product stocking. Third, and most important, its customer management philosophy emphasized a trusted relationship with customers. As one of Fastenal's clients, John Leech from Terex Advance Mixer Inc., declared, "We need trusted suppliers like Fastenal."⁵⁹

Fastenal's inventory management solution offered fast lead times and zero stockouts. The custom manufacturing division of Fastenal ran 24 hours a day, 7 days a week to meet customers' needs at any time. Fastenal also ensured quality, with 100 per cent traceability of materials and in-process testing.⁶⁰ Fastenal automated as many processes as possible for smooth handling of business documents, while also maintaining local, personal relationships with customers as required.⁶¹

Fastenal provided industrial customers with a single source for fasteners and related equipment needs, such as HVAC (heating, ventilation, and air conditioning), plumbing, lighting, and cleaning products.⁶² By virtue of its convenient store and industrial vending system, Fastenal was able to quickly meet the emergency needs of clients, as well as regularly stock inventory through its stocking program.⁶³ To further smooth the customer experience, Fastenal did not rely on a third-party transportation system for distribution as other national industrial suppliers did. This helped Fastenal maintain quick onsite recovery efforts.⁶⁴ All of these practices resulted in the growth of a loyal customer base, with 63 per cent of Fastenal's business coming from repeat customers.⁶⁵

CHALLENGES AND THE ROAD AHEAD

Fastenal had a history of exponential growth, but that growth was challenged as Fastenal saturated many of its markets. Further, competition increased as other well-established players, such as The Home Depot, Inc. and Lowe's Home Improvement, began encroaching on Fastenal's market.⁶⁶

Fastenal also needed to worry about the growth in e-commerce sales. The business to business e-commerce trade in the United States was expected to achieve record sales of \$1.1 trillion by 2019, accounting for about 12 per cent of total business to business sales, which would be twice the business to consumer e-commerce sales of \$480 billion.⁶⁷ The market research firm Forrester Research, Inc. predicted that by the end of 2017, 56 per cent of the business to business buyers in the United States would make more than half of their purchases online, compared to 30 per cent in 2014.⁶⁸

Since 2012, the online space for industrial supply equipment had become more competitive and challenging with the onset of Amazon Business, which targeted industrial companies and offered more than 500,000 industrial products.⁶⁹ At the time of Amazon Business's launch in 2012, Fastenal's share prices declined by 15.76 per cent. Other leading players also reported a decline in share prices; for example, W. W. Grainger's shares declined by 11.21 per cent.⁷⁰ Although Fastenal was an S&P 500 company, there had been a wide gap between its stock market performance and the performance of other S&P 500 companies since 2012.⁷¹ Investors began wondering whether established brick and mortar industrial suppliers like Fastenal were set to lose competition to giant online wholesalers like Amazon Business.

By 2014, Amazon Business surpassed W. W. Grainger with sales of 2.2 million products, compared to W. W. Grainger's 1.2 million.⁷² By 2016, Amazon Business was servicing more than 400,000 U.S. businesses, generating sales of \$1 billion from April 2015 to April 2016. However, traditional industrial suppliers believed that since the industry was fragmented with thousands of small- and medium-sized distributors, big wholesalers could co-exist with online wholesaler giants like Amazon Business.⁷³

As a key player in online commerce, Amazon Business's growth plan was aggressive. It did not want to capture just the U.S. market; it wanted to capture industrial customers globally. By June 2012, it had already started shipping industrial supplies to more than 50 countries.⁷⁴ By then, Amazon Business was operating in countries like Germany, the United Kingdom, and India. As well, Amazon Business also provided a 365-day return policy, free 2-day shipping, corporate credit, and low prices, all of which resulted in superior customer service.⁷⁵

Industrial supply clients felt that Amazon Business could be a major threat for traditional industrial suppliers. The purchasing manager of a global plumbing products manufacturer commented:

If Amazon promoted their site actively and correctly, they could change the industry. I definitely think they are a threat to the traditional online trade sites like Grainger and McMaster. I could definitely see Amazon as a threat to Fastenal, especially on the fastener side.⁷⁶

Previously, experts believed that traditional industrial suppliers could leverage their existing customer relationships, greater product expertise, and deep understanding of customers to successfully compete with Amazon Business. According to Brian Strojny, CEO of Insite Software, Amazon Business was struggling in terms of expertise, product knowledge and assortment, and establishing relationships with clients.⁷⁷ He further explained, "Leveraging each of these advantages will set the independent wholesaler and distributor head and shoulders above the low prices of [Amazon Business]."⁷⁸ However, Acquity Group, an e-commerce and digital marketing company, disagreed. According to a study the company conducted in 2013,

industrial customers would opt for the supplier that offered the lowest prices, rather than remaining loyal to their old suppliers.⁷⁹

In 2014, Amazon Business began investing in aerial drones to make delivery possible within a couple of hours of receiving an order.⁸⁰ In May 2017, the company received a patent for its drone delivery system, which involved shipping the material with an inbuilt parachute, allowing the package to be dropped from an aerial vehicle and land at a destination without any damage.⁸¹ Drones would be equipped with a global positioning system, cell phones, and cameras with sensors, which would help in the monitoring and delivery of packages. With aerial delivery, Amazon Business not only challenged traditional retailers with its online purchase model, but also challenged their delivery model. This was a threat to Fastenal's entire logistics set-up because the company fully owned its distribution network and did not rely on a third-party distributor.

Fastenal, however, maintained its focus on industrial vending machines. It believed that the market could sustain approximately 1.7 million industrial vending machines.⁸² Despite competition from Amazon Business since 2012, Fastenal reported constant growth in revenues from the industrial vending system.⁸³ Reflecting its strong reliance on industrial vending machines, the CEO wrote in Fastenal's 2016 annual report:

We believe industrial vending is an important chapter in the Fastenal story; we also believe it will continue to be transformative to industrial distribution, and that we have a "first mover" advantage. Given this, we have continued investing aggressively to maximize the advantage.⁸⁴

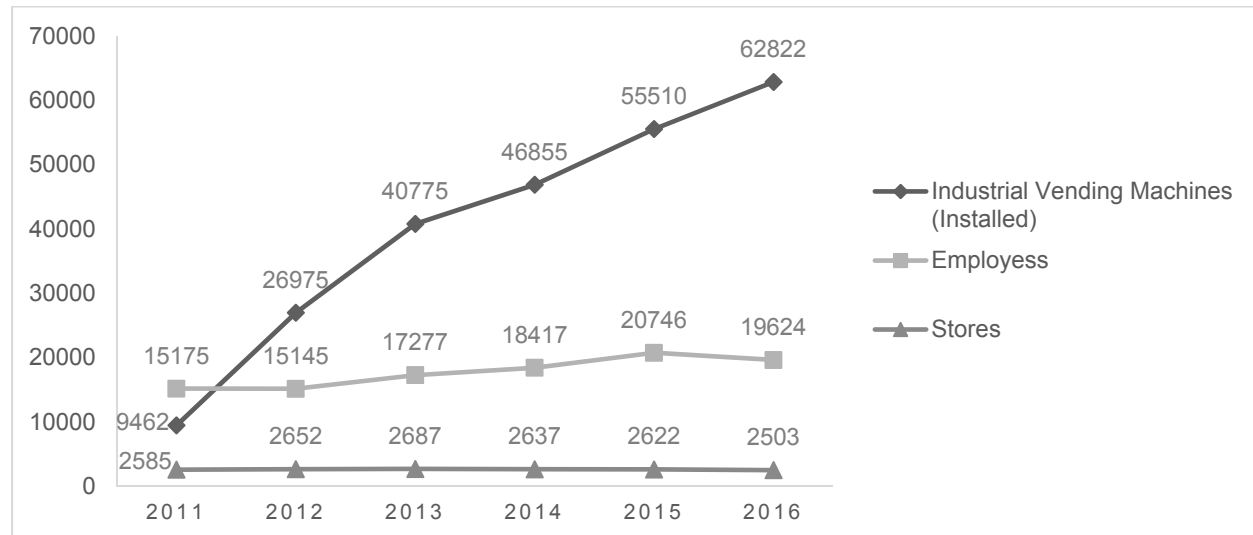
However, for its industrial vending software and hardware components, Fastenal relied on only one vendor, which had the capability to supply the same vending machine components to Fastenal's competitors.⁸⁵ It was also uncertain whether Fastenal's industrial vending machines would be able to compete with Amazon Business's proposed aerial drone delivery system.

Although Fastenal opened 40 new stores globally in 2016, it had also closed 159 stores. In fact, from 2014 to 2016, Fastenal closed 142 stores in the United States alone.⁸⁶ According to Fastenal's chief financial officer, Holden Lewis:

Where it makes sense to open some stores, we'll open, and where it makes sense to close, we'll close. . . . In the past we've talked about store openings, and they've historically been a significant growth driver. Now, those stores are foundational, and our significant growth drivers are Fastenal Onsite and vending. Growth has evolved away from stores to other drivers, although Fastenal is still a store-based model.⁸⁷

Additionally, research by a reputed U.S. marketing research firm, Forrester, indicated that by the end of 2017, approximately 56 per cent of industrial customers in the United States were likely to make more than 50 per cent of their purchases online.⁸⁸ Critics believed that with Forrester's prediction of growth in online sales for industrial customers and Amazon Business's power of low costs, Amazon Business could change the industry structure of the wholesale industrial supply business, just as it had revolutionized the retail market.⁸⁹ Could Amazon Business disrupt the industrial supply component sector? Was an industry leader like Fastenal likely to be adversely affected by competition from an online giant like Amazon Business? If so, how should Fastenal respond to competition: should it opt for a low price or a differentiation strategy to save its market share?

EXHIBIT 1: FASTENAL—NUMBER OF EMPLOYEES, STORES, AND INDUSTRIAL VENDING MACHINES (INSTALLED), 2011–2016



Source: Developed by the authors based on Fastenal Company, "Form 10-K for the Period Ending December 31, 2013," EDGAR Online, February 6, 2014, accessed April 14, 2017, <http://files.shareholder.com/downloads/FAST/4661898678x0xS815556-14-16/815556/filing.pdf>; Fastenal Company, "Form 10-K for the Period Ending December 31, 2016," EDGAR online, February 6, 2017, accessed April 14, 2017, <http://files.shareholder.com/downloads/FAST/4661898678x0xS815556-17-9/815556/filing.pdf>; Mike Baker, "Fastenal's Struggles Continue Relative to Past Performance," CGS Industry News, April 28, 2016, accessed May 16, 2017, <http://newsroom.chainstoreguide.com/2016/04/fastenals-struggles-continue-relative-to-past-performance>.

EXHIBIT 2: FASTENAL—STATEMENT OF EARNINGS INFORMATION AND EARNINGS PER SHARE, 2011–2016

	2011	2012	2013	2014	2015	2016
Gross Profit (% of Net Sales)	51.83	51.52	51.70	50.80	50.40	49.60
Operating Income (% of Net Sales)	20.77	21.50	21.42	21.10	21.40	20.10
Earnings Before Interest and Taxes (% of Net Sales)	20.78	21.51	21.45	21.10	21.30	19.90
Basic Earnings Per Share (\$)	1.21	1.42	1.51	1.67	1.77	1.73
% Change in Basic Earnings Per Share	34.40	17.40	6.30	10.60	6.00	-2.30
Net Sales (\$ million)	2,766.90	3,133.60	3,326.10	3,733.50	3,869.20	3,962.00
Net Capital Expenditure (\$ million)	116.48	133.88	201.55	183.65	145.23	182.94

Note: All dollar amounts are US\$.

Source: Developed by the authors based on Fastenal Company, "Form 10-K for the Period Ending December 31, 2012," EDGAR Online, February 7, 2013, accessed April 14, 2017, <http://files.shareholder.com/downloads/FAST/4661898678x0xS815556-13-13/815556/filing.pdf>; Fastenal Company, "Form 10-K for the Period Ending December 31, 2014" EDGAR Online, February 6, 2014, accessed April 14, 2017, <http://files.shareholder.com/downloads/FAST/4661898678x0xS815556-14-16/815556/filing.pdf>; Fastenal Company, "Form 10-K for the Period Ending December 31, 2016," EDGAR online, February 6, 2017, accessed April 14, 2017, <http://files.shareholder.com/downloads/FAST/4661898678x0xS815556-17-9/815556/filing.pdf>.

EXHIBIT 3: FASTENAL—REGIONAL CONTRIBUTION TO NET SALES, 2011–2016 (%)

	2011	2012	2013	2014	2015	2016
USA	89.44	89.29	88.74	88.61	88.94	88.17
Canada	7.18	6.98	6.84	6.39	5.77	5.77
Other Foreign Countries	3.38	3.73	4.42	5.00	5.29	6.05

Source: Developed by the authors based on Fastenal Company, "Form 10-K for the Period Ending December 31, 2012," EDGAR Online, February 7, 2013, accessed April 14, 2017, <http://files.shareholder.com/downloads/FAST/4661898678x0xS815556-13-13/815556/filing.pdf>; Fastenal Company, "Form 10-K for the Period Ending December 31, 2014" EDGAR Online, February 6, 2014, accessed April 14, 2017, <http://files.shareholder.com/downloads/FAST/4661898678x0xS815556-14-16/815556/filing.pdf>; Fastenal Company, "Form 10-K for the Period Ending December 31, 2016," EDGAR online, February 6, 2017, accessed April 14, 2017, <http://files.shareholder.com/downloads/FAST/4661898678x0xS815556-17-9/815556/filing.pdf>.

EXHIBIT 4: FASTENAL—PERCENTAGE OF NET SALES BY PRODUCT LINES, 2011–2016 (%)

	2011	2012	2013	2014	2015	2016
Fasteners	46.9	44.0	42.1	40.2	38.3	36.6
Safety Supplies	7.9	9.3	11.2	12.8	13.9	14.9
Tools	9.4	9.3	9.2	9.3	9.5	9.9
Janitorial Supplies	6.2	6.6	7.0	7.3	7.5	7.6
Hydraulics & Pneumatics	7.8	7.6	7.3	7.2	7.2	6.9
Material Handling	6.1	6.0	5.7	6.1	6.5	6.4
Others	15.7	17.2	17.5	17.1	17.1	17.7

Source: Developed by the authors based on Fastenal Company, "Form 10-K for the Period Ending December 31, 2013," EDGAR Online, February 6, 2014, accessed April 14, 2017, <http://files.shareholder.com/downloads/FAST/4661898678x0xS815556-14-16/815556/filing.pdf>; Fastenal Company, "Form 10-K for the Period Ending December 31, 2016," EDGAR online, February 6, 2017, accessed April 14, 2017, <http://files.shareholder.com/downloads/FAST/4661898678x0xS815556-17-9/815556/filing.pdf>.

EXHIBIT 5: COMPARISON OF FASTENAL WITH COMPETITORS, AS ON JULY 3, 2017

	Fastenal Co.	W. W. Grainger	MSC Industrial Direct Co.
Market Capitalization (\$ billion)	12.74	10.81	5.01
Profit Margin (%)	12.61	5.84	8.19
Operating Margin (%)	20.04	11.53	13.35
Quarterly Revenue Growth (Year on Year) (%)	6.20	1.40	2.90
Return on Assets (%)	18.56	12.48	11.72

Source: Developed by the authors based on "Fastenal Company (FAST)," Yahoo! Finance, accessed July 3, 2017, <https://finance.yahoo.com/quote/FAST/key-statistics?p=FAST>; "W. W. Grainger, Inc. (GWW)," Yahoo! Finance, accessed July 3, 2017, <https://finance.yahoo.com/quote/GWW/key-statistics?p=GWW>; "MSC Industrial Direct Co., Inc. (MSM)," Yahoo! Finance, accessed July 3, 2017, <https://finance.yahoo.com/quote/MSM/key-statistics?p=MSM>.

ENDNOTE

- ¹ This case has been written on the basis of published sources only. Consequently, the interpretations and perspectives presented in this case are not necessarily those of the Fastenal Company or any of its employees.
- ² Fastenal, "Fastenal 'Blue Ream' to Ring the NASDAQ Stock Market Opening Bell on August 18th," press release, August 15, 2014, accessed April 12, 2017, www.fastenal.com/content/documents/2014/08/FASTENAL-NASDAQ.pdf.
- ³ Brian Sozzi, "What Is an Industrial Vending Machine and Why Are Sales on Fire?" *The Street*, June 4, 2014, accessed April 12, 2017, www.thestreet.com/amp/story/12729029/4/what-is-an-industrial-vending-machine-and-why-are-sales-on-fire.html.
- ⁴ About Us," Fastenal, accessed April 12, 2017, www.fastenal.com/en/3/about-us.
- ⁵ Mike Hockett, "In February, Fastenal Had Its Best Daily Sales Growth in 14 Months," *Industrial Distribution*, March 6, 2017, accessed April 14, 2017, www.inddist.com/news/2017/03/february-fastenal-had-its-best-daily-sales-growth-14-months.
- ⁶ All dollar amounts are US\$ unless otherwise noted.
- ⁷ Fastenal Company, "Form 10-K for the Period Ending December 31, 2016," EDGAR online, February 6, 2017, accessed April 14, 2017, <http://files.shareholder.com/downloads/FAST/4661898678x0xS815556-17-9/815556/filing.pdf>.
- ⁸ Luke Neely, "Is the Worst Over for Fastenal?" *Motley Fool*, March 11, 2016, accessed April 15, 2017, www.fool.com/investing/general/2016/03/11/is-the-worst-over-for-fastenal.aspx.
- ⁹ "About Us: Culture and Values," Fastenal, accessed April 16, 2017, www.fastenal.com/en/3/about-us.
- ¹⁰ Stephen Montemayor, "Fastenal 8th on Reputation-Based Top 100; Pentair Makes Cut," *Twin Cities Business*, February 9, 2015, accessed April 17, 2017, <http://tcbmag.com/news/articles/2015/fastenal-8th-on-reputation-based-top-100;-pentair>; "The Best Performing CEOs in the World," *Harvard Business Review*, November 2014, accessed August 29, 2017, <https://hbr.org/2014/11/the-best-performing-ceos-in-the-world>; Charles Fombrun, "How Do You Rank the World's Best CEOs?," *Harvard Business Review*, February 6, 2015, accessed August 29, 2017, <https://hbr.org/2015/02/how-do-you-rank-the-worlds-best-ceos>.
- ¹¹ Amazon.com, Inc. launched AmazonSupply in 2012, but in 2015, replaced it with Amazon Business: Clare O'Connor, "Amazon Launches Amazon Business Marketplace, Will Close AmazonSupply," *Forbes*, April 25, 2015, accessed August 30, 2017, www.forbes.com/sites/clareoconnor/2015/04/28/amazon-launches-amazon-business-marketplace-will-close-amazonsupply.
- ¹² Nish Amarnath, "Is AmazonSupply a Threat to Traditional Industrial Distributors?," *International Business Times*, June 22, 2012, accessed April 17, 2017, www.ibtimes.com/amazonsupply-threat-traditional-industrial-distributors-705626.
- ¹³ "About Us: Culture and Values," op. cit.
- ¹⁴ "About Us: What Is Fastenal?," Fastenal, accessed April 12, 2017, www.fastenal.com/en/3/about-us.
- ¹⁵ Brian Salgado, "Fastenal," *Manufacturing Today*, September 26, 2011, accessed May 2, 2017, www.manufacturing-today.com/sections/special-focus/230-fastenal.
- ¹⁶ "About Us: Culture and Values," op. cit.
- ¹⁷ "Our History," Fastenal, accessed April 12, 2017, www.fastenal.com/en/99/our-history.
- ¹⁸ Adam Edelman, "Fannie, Freddie to Be Removed from S&P 500," *Wall Street Journal*, September 9, 2008, accessed April 21, 2017, www.wsj.com/articles/SB122099815669516745.
- ¹⁹ Fastenal, *2016 Annual Report*, accessed April 14, 2017, http://files.shareholder.com/downloads/FAST/4620195518x0x927581/B27EA164-2C4A-4851-A117-2ADE6A8AA96/FAST_12.31.2016_10-K_WRAP-FINAL-PRINT.pdf.
- ²⁰ Fastenal, "Fastenal Company Reports 2016 Annual and Fourth Quarter Earnings," press release, January 18, 2017, accessed April 22, 2017, <http://investor.fastenal.com/releasedetail.cfm?ReleaseID=1008269>.
- ²¹ Fastenal, "Fastenal Targets Metalworking Industry with Cutting Tool Vending Machines, Metalworking Specialists and Expanded Product Offering," press release, July 29, 2011, accessed April 22, 2017, www.fastenal.com/content/documents/2013/LandingPages/Metalworking_Press_Release.pdf.
- ²² Fastenal Company, "Form 10-K for the Period Ending December 31, 2016," op. cit.
- ²³ *Ibid.*
- ²⁴ "Custom Manufacturing," Fastenal, accessed April 29, 2017, www.fastenal.com/en/14/custom-manufacturing.
- ²⁵ Fastenal Company, "Form 10-K for the Period Ending December 31, 2016," op. cit.
- ²⁶ "Key Competitive Advantages," Fastenal, accessed April 28, 2017, www.fastenal.com/en/210/key-competitive-advantages.
- ²⁷ Salgado, op. cit.
- ²⁸ "Fastenal—Strong Business Model Gives It a Key Advantage," *Seeking Alpha*, October 17, 2016, accessed April 29, 2017, <https://seekingalpha.com/article/4012567-fastenal-strong-business-model-gives-key-advantage>.
- ²⁹ Fastenal, *2016 Annual Report*, op. cit.
- ³⁰ Neely, op. cit.
- ³¹ *Ibid.*
- ³² W. W. Grainger, *It's About How We Get It Done: 2017 Fact Book*, accessed May 1, 2017, <http://phx.corporate-ir.net/External.File?item=UGFyZW50SUQ9MzMO0T2fENoAWxkSUQ9LTF8VHlwZT0z&t=1&cb=635972058543115051>.
- ³³ *Ibid.*
- ³⁴ "FAST 5000," Fastenal, accessed May 2, 2017, www.fastenal.com/en/10/fast-5000-and-fast-3000-industrial-vending.
- ³⁵ Allan Gerlat, "Special Report: On-Site Vending Machines Provide Work Supplies," *Plastics Machinery Magazine*, May 2016, accessed May 2, 2017, www.plasticsmachinerymagazine.com/technology/injection-molding/special-report-on-site-vending-machines-provide-work-supplies.html.
- ³⁶ Salgado, op. cit.
- ³⁷ Paul Demery, "Fastenal Sparks Growth with Internet Vending Machines," *Digital Commerce 360*, July 18, 2016, accessed May 3, 2017, www.digitalcommerce360.com/2016/07/18/fastenal-sparks-growth-internet-vending-machines.
- ³⁸ Sozzi, op. cit.

³⁹ Gerlat, op. cit.

⁴⁰ Salgado, op. cit.

⁴¹ Nicholas Kitonyi, "How Vending Machine Technology Can Boost Fastenal's Growth," *Guru Focus*, January 14, 2017, accessed May 8, 2017, www.gurufocus.com/news/472568/how-vending-machine-technology-can-boost-fastenals-growth.

⁴² Fastenal, "Fastenal Now Has 50,000+ Industrial Vending Devices Installed at Customer Sites," press release, August 13, 2015, accessed May 8, 2017, <http://investor.fastenal.com/releasedetail.cfm?ReleaseID=927626>.

⁴³ Demery, "Fastenal Sparks Growth with Internet Vending Machines," op. cit.

⁴⁴ Paul Demery, "Fastenal Sparks Q1 Revenue with Sales via Internet Vending Machines," *Digital Commerce 360*, April 12, 2017, accessed May 10, 2017, www.digitalcommerce360.com/2017/04/12/fastenal-sparks-q1-revenue-with-sales-via-internet-vending-machines.

⁴⁵ Steve Blue, "League of Extraordinary CEOs: Why Fastenal's Leaders Say Slow and Steady Wins the Race," *Jacksonville Business Journal*, January 6, 2014, accessed May 10, 2014, www.bizjournals.com/jacksonville/how-to/growth-strategies/2014/01/steve-blue-interview-fastenal.html.

⁴⁶ Ibid.

⁴⁷ "Building Impressions: Stages and Platforms," *Sign & Digital Graphics*, November 20, 2013, accessed May 12, 2017, <https://sdgmag.com/features/building-impressions-stages-and-platforms>.

⁴⁸ Nathan Hansen, "Fastenal Collaboration with Southeast Tech Creates Job Security for CNC Students," *Winona Daily News*, August 21, 2013, accessed May 14, 2017, http://www.winonadailynews.com/news/local/education/fastenal-collaboration-with-southeast-tech-creates-job-security-for-cnc/article_664fbdfa-0a07-11e3-bba0-001a4bcf887a.html.

⁴⁹ Ibid.

⁵⁰ Fastenal, *2016 Annual Report*, op. cit.

⁵¹ Blue, op. cit.

⁵² "Fastenal Co." *Manufacturing Today*, July 21, 2014, accessed May 19, 2017, www.manufacturing-today.com/sections/profiles/1126-fastenal-co.

⁵³ "Building Impressions," op. cit.

⁵⁴ "About Us: Culture and Values," op. cit.

⁵⁵ Building Impressions, op. cit.

⁵⁶ Fastenal, "Fastenal Now Has 50,000+ Industrial Vending Devices," op. cit.

⁵⁷ Ibid.

⁵⁸ Building Impressions, op. cit.

⁵⁹ Fastenal, "Fastenal Now Has 50,000+ Industrial Vending Devices," op. cit.

⁶⁰ Fastenal Europe, "Growth through Customer Service!," brochure, accessed May 19, 2017, www.fastenal.com/content/international/pdf/eu-en-fasteners.pdf.

⁶¹ Fastenal, "An Overview of Fastenal's E-Business Partners and Technology Solutions for E-Procurement," accessed May 20, 2017, www.fastenal.com/content/documents/2012/LandingPages/eBusiness/Fastenal_eBusiness_Overview.pdf.

⁶² "Facilities Maintenance," Fastenal, accessed May 19, 2017, www.fastenal.com/en/247/facilities-maintenance.

⁶³ "Key Competitive Advantages," op. cit.

⁶⁴ Fastenal, "Fastenal's New *All Hazards Guide* Features Core Supplies for Emergency Preparedness, Response and Recovery," press release, January 2012, accessed May 20, 2017, www.fastenal.com/content/documents/2013/LandingPages/All_Hazards_Press%20Release.pdf.

⁶⁵ Fastenal Company, "Form 10-K for the Period Ending December 31, 2016," op. cit.

⁶⁶ Doug Kass, "Why Fastenal Is the Worst Stock in the World," *The Street*, February 2, 2016, accessed May 25, 2017, www.thestreet.com/story/13445026/1/why-fastenal-is-the-worst-stock-in-the-world.html.

⁶⁷ Louis Columbus, "Predicting the Future of B2B E-Commerce," *Forbes*, September 12, 2016, accessed August 30, 2017, www.forbes.com/sites/louiscolombus/2016/09/12/predicting-the-future-of-b2b-e-commerce/#7e60d7601eb9.

⁶⁸ Ibid.

⁶⁹ Michael Kanellos, "Amazon Takes another Step toward B2B with Amazon Supply," *Forbes*, April 25, 2012, accessed May 22, 2017, www.forbes.com/sites/michaelkanellos/2012/04/25/amazon-takes-another-step-toward-b2b-with-amazon-supply/#58ecd7b26d40.

⁷⁰ Amarnath, op. cit.

⁷¹ Fastenal Company, "Form 10-K for the Period Ending December 31, 2016," op. cit.

⁷² Clare O'Connor, "AmazonSupply: Jeff Bezos' \$8 Trillion Plan for Wholesale Slaughter," *Forbes India*, June 11, 2014, accessed May 25, 2016, [www.forbesindia.com/article/forbes-global-2000/amazonsupply-jeff-bezos-\\$8-trillion-plan-for-wholesale-slaughter/37954/1](http://www.forbesindia.com/article/forbes-global-2000/amazonsupply-jeff-bezos-$8-trillion-plan-for-wholesale-slaughter/37954/1).

⁷³ Amarnath, op. cit.

⁷⁴ Ibid.

⁷⁵ Erin Lynch, "12 Ways to Compete with AmazonSupply.com," *MultiChannel Merchant*, June 5, 2012, accessed May 25, 2017, http://multichannelmerchant.com/must-reads/12-ways-to-compete-with-amazonsupply-com/#_.

⁷⁶ Reverdy Johnson, "Amazon Supply Still Lacking in Effort to Take on MRO Industry Leaders," *Blueshift Report*, December 12, 2013, accessed April 20, 2017, <http://blueshiftideas.com/reports/121302AmazonSupplyStillLackinginEfforttoTakeonMROIndustryLeaders.pdf>.

⁷⁷ Lynch, op. cit.

⁷⁸ Ibid.

⁷⁹ Anna Wells, "AmazonSupply: Two Years Later," *Industrial Distribution*, January 3, 2014, accessed May 26, 2017, www.inddist.com/article/2014/03/amazonsupply-two-years-later.

⁸⁰ Ibid.

⁸¹ Marcus Gilmer, "Here's What Amazon's Parachute-Aided Drone Delivery Will Look Like," Mashable, May 31, 2017, accessed June 18, 2017, <http://mashable.com/2017/05/31/amazon-drone-delivery-parachute/#ifU4uCOSg8qU>.

⁸² Fastenal Company, "Form 10-K for the Period Ending December 31, 2016," op. cit.

⁸³ Mike Baker, "Fastenal's Struggles Continue Relative to Past Performance," CGS Industry News, April 28, 2016, accessed May 16, 2017, <http://newsroom.chainstoreguide.com/2016/04/fastenals-struggles-continue-relative-to-past-performance>.

⁸⁴ Fastenal, *2016 Annual Report*, op. cit.

⁸⁵ Fastenal Company, "Form 10-K for the Period Ending December 31, 2016," op. cit.

⁸⁶ Ibid.

⁸⁷ Mike Hockett, "ID Exclusive: Fastenal CFO Discusses Sales Growth, Branches & Pods," Industrial Distribution, March 24, 2017, accessed May 28, 2017, www.inddist.com/blog/2017/03/id-exclusive-fastenal-cfo-discusses-sales-growth-branches-pods.

⁸⁸ Stephanie S. Beecher, "Leaning Industry Continues Its March toward Online Purchasing," CleanLink, accessed October 11, 2017, www.cleanlink.com/sm/article/Cleaning-Industry-Continues-Its-March-Toward-Online-Purchasing--19493

⁸⁹ Johnson, op. cit.