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### BUS4402W Honors Capstone

Jake Doherty

Merrimack College, dohertyjj@merrimack.edu

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Jake Doherty  
BUS4402W, Fall 2020  
Honors Senior Capstone

## **Introduction**

One may assume construction as an outdated, loud, and hazardous industry. However, Aecom a globally known infrastructure firm has made a substantial push in altering this narrative. Aecom increased their appearance around the globe by serving several clients in multiple countries. For the sake of changing the narrative the company increased technological investments that made its day-to-day operations safer and more efficient. Furthermore, the larger infrastructure firm strives to differentiate itself from others by widening its operations into new markets. As the construction industry continues to evolve Aecom must be flexible with the corporate and business level strategies it adopts. To identify the effectiveness of the strategies used by Aecom a full analysis of the company's financial status, industry appearance and competition, and choice of strategy must be conducted.

## **Overview/History/Recent News**

Aecom (ACM), a world-renowned infrastructure firm headquartered in Los Angeles, California was established in 1990. Aecom serves as a strong competitor in multiple professional service industry segments. Prior to 1990, Ashland Oil a Kentucky based firm, attempted to buy five companies to diversify itself. Ashland's strive for diversification failed; resulting in them deciding to allow the original five firms buy their previous ownership back. This resulted in the five firms joining to create Architecture, Engineering, Construction, Operations and Management, also known as Aecom. Since the establishment of 1990, Aecom acquired multiple firms and became a publicly traded company in 2007 (Aecom).

Around the globe Aecom obtains 86 offices that possess 86,000 employees. They provide their services to clients in over 150 countries spanning over the globe in Europe, the Middle East, greater China, Southeast Asia, Australia, India, and the United States, their primary country. Aecom's sales have remained consistent in the past few years, most currently reported as \$19,715 million for the trailing twelve months (TTM). Earnings ensued a negative trend within the past 12 months, coming in at -\$430 million. In previous years, earnings continued to grow exponentially and took a downturn after 2017, where earnings dropped over 59% (Morningstar). The drop-in earnings occur partially on account of the decline in active work due to the corona virus pandemic.

Aecom offers various services across different areas and markets. Whether the client resides locally or globally, Aecom proposes several different services that can be at the client's disposal. Global services include architecture and design, engineering, asset management, economics, and construction. Local services focus on more specific areas such as digital infrastructure services, pedestrian modeling, and vertical transportation services. Aecom specializes in many niches; with their main specialization areas being multinational investment and development, public-private partnerships and visualization and virtual reality (Aecom).

One socioeconomic issue that greatly affect all businesses across the world, including Aecom, is the coronavirus pandemic. In order to help aid cities across the U.S. with the COVID 19 crisis, Aecom continued to work with major U.S cities to construct facilities to treat and contain the virus. Some of these jobs include creating alternate care facilities and hospitals to provide spaces for positive tested patients. The pandemic caused a halt across the entire industry. From the beginning of the pandemic until around May, in person work was prohibited, which resulted in a loss in sales and revenues. "The Company successfully and rapidly transitioned to a

greater than 90% remote workforce while continuing to support its clients; utilization across the business remains above pre-COVID levels” (Aecom). According to projections per quarter, Aecom fell extremely short for their first fiscal quarter. Additionally, for the following two quarters, projections decreased significantly. The pandemic caused these trends and negatively impacted the industry as whole.

### **Internal and Competitive Analysis**

Due to the professional service industry having a large amount of functional companies it is classified as a saturated industry. Saturated industries see a decline in the velocity of demand. However, this industry will continue to see a steady influx of demand due to the human race’s need for buildings, roads, and power plants. Within the professional service industry Aecom’s strategic competitor is Jacob’s Engineering Group (J). Jacob’s Engineering Group, headquartered in Dallas, Texas is home to 52,000 employees across the globe. Similar to Aecom, Jacobs services clients in numerous countries. Throughout the globe Jacob’s clients reside in the U.S., Caribbean, Europe, Middle East, United Arab Emirates, Qatar, Saudi Arabia, and Asia Pacific. Jacobs exists as the strategic competitor of Aecom on the account of competing in similar market segments, as well as operating in an abundance of different countries. In addition, both companies trade publicly on the New York Stock Exchange.

In order to analyze the difference in financial conditions of both Aecom and Jacob’s, Wal-Mart was also examined. Due to the fact that the financial conditions of Aecom and Jacob’s are in comparison to Wal-Mart’s, this would position Wal-Mart as the benchmark company. Wal-Mart is a strong benchmark company due to its ability to obtain a competitive advantage in the retail industry. Even though, Aecom and Jacob’s are in a separate industry both companies can acquire knowledge in business strategy from Wal-Mart.

When comparing the financial measurements of Aecom to its strategic competitor, Jacob's Engineering Group, Aecom is the more sizeable company. According to Table 1 below, Aecom contains 86,000 employees with 43,000 working in the United States. In addition, Aecom established 86 offices across 49 different countries. In comparison Jacob's Engineering Group totaled 52,000 employees in 400 offices around the globe. Aecom's total sales, \$19,715 million (TTM), surpassed Jacobs' total sales of \$13,400 million (TTM). Aecom posted negative earnings of -\$430 million (TTM) due to the failure of expansion through acquisitions and investments. This reporting of a negative earning by Aecom is a short-term issue and will not affect the company in the long run. Aecom increased its overall stock price in the past six months. Jacobs reported earnings as \$552 million (TTM). In terms of market capitalization, Aecom posted a value of \$7.2536 billion, while Jacobs reported a value of \$12.6771 billion. This may be expected given the fact that Aecom does not pay out dividends to its shareholders. Thus, investors leading investors to not purchase shares of Aecom due to a lower market capitalization value.

Neither Aecom nor Jacobs size up to Wal-Mart, which is one of the leaders in the retail industry. Wal-Mart carries 2.2 million employees across 11,500 stores. Wal-Mart accommodates over 25 times the amount of Aecom's workers and nearly 130 times the number of stores. Furthermore, Wal-Mart outperformed Aecom in terms of sales and revenues for the TTM, with more than \$542,000 in sales and around \$18,000 in revenues (Table 1). Currently, Aecom does not pay dividends to its shareholders and investors. Wal-Mart announced a slightly higher dividend yield than Jacobs'. Wal-Mart's dividend yield of 1.54% may be more attractive to potential investors in comparison to Jacobs'. However, both companies experience relatively low dividend yields in terms of industry average. As depicted in Table 1, Jacobs' and Wal-Mart

possess similar payout ratios, 31.3% and 34.1% respectively. Wal-Mart's situation appears to be more sustainable than Jacobs' considering the higher revenues that are obtained by Wal-Mart.

**Table 1 – Competitive Analysis of Aecom, Jacobs Engineering Group, and Wal-Mart**

	<b>AECOM</b>	<b>Jacobs Engineering Group</b>	<b>Wal-Mart</b>
Total Sales (USD Millions)	\$19,715 (TTM)	\$13,440 (TTM)	\$542,026 (TTM)
Earnings (USD Millions)	-\$430 (TTM)	\$552 (TTM)	\$17,895 (TTM)
Market Capitalization (USD Billions)	\$7.2536	\$12.6771	\$401.8262
Number of Employees	86,000	52,000	2,200,000
Number of Stores	86 (Offices)	400 (Offices)	11,500
Price to Earnings Ratio	23.18	41.42	22.41
Dividend Yield (%)	-	0.80%	1.54%
Payout Ratio	-	31.3% (TTM)	34.1% (TTM)

Source: *Morningstar*

Overall, Aecom and Wal-Mart experienced consistent sales growth throughout the years 2017 to 2019. Each year Aecom reported a positive growth rate with the most substantial rate identified as 10.72% in 2018 (Table 2). Wal-Mart has also posted positive consistent growth rates throughout the past three years. With their most sizeable growth being noted in 2018 at 2.98%. In contrast, Jacobs' announced fluctuating sales growth rates from 2017-2019. Table 2 displays a sales growth rate of -8.59% in 2017, 49.51% in 2018, and -14.99% in 2019. Aecom disclosed an earnings growth rate in 2017 at 253.13%. Troy Rudd, CFO of Aecom, stated "Our performance in fiscal 2017 was highlighted by strong cash flow, record backlog, and accelerating revenue growth, which serve as clear evidence that our diverse business and design, build, finance and operate vision are delivering results..." (Rudd, 2017).

**Table 2 – Comparative Trends in Sales and Earnings**  
**Year-to-year amounts for the 2017-2019 period**

	2017	2018	2019
<b>AECOM</b>			
Sales Growth %	4.55%	10.72%	0.09%
Earnings Growth %	253.13%	-59.79%	-
<b>Jacobs Engineering Group</b>			
Sales Growth %	-8.59%	49.51%	-14.99%
Earnings Growth %	39.56%	-44.36%	418.86%
<b>Wal-Mart</b>			
Sales Growth %	0.78%	2.98%	2.81%
Earnings Growth %	-7.15%	-27.71%	-32.37%

Source: *Morningstar*

After a year of exponential growth in earnings, Aecom experienced a 60% decline the following year. Aecom should have expected this due to the enormous spike in their earnings growth rate from the previous year. Although, it would be challenging to obtain the same growth rate two years in a row. Aecom possess acceptable growth in comparison to Wal-Mart because of the consistent positive trend in growth that both companies have displayed from 2017 to 2019.

Aecom continues to grow as a company and believed to be in the growth stage of the industry lifecycle. In the most current years there has not been high spikes in Aecom's sales growth, but there is a consistent trend of positive growth rates. As seen in Table 2, Aecom does not have a large range of fluctuation in their sales growth. Their earnings growth rate does have a lot of fluctuation, commonly seen most companies in the growth stage of the industry life cycle.

As displayed in Table 3, both Jacobs' and Wal-Mart's profitability exceeded Aecom. In 2019 Aecom reported a -6.71% return on equity, while Jacobs and Wal-Mart reported 14.84% and 8.87% respectively. Over the years 2017-2019 Aecom totaled a 5.88% return on equity. Both Jacobs and Wal-Mart produced over 20% return on equity within the past three years. This depicts that both companies obtain higher levels of profitability compared to Aecom. All three of

the companies experience relatively low debt to equity ratios, all consistently being under 1. Obtaining the higher of the three ratios signifies that Aecom displays the most debt. According to [www.investopedia.com](http://www.investopedia.com), the optimal debt to equity of a company exists around 2 or below, that insinuates, Aecom's debt level is manageable.

Wal-Mart obtains a significantly higher A/R turnover than Aecom and Jacobs. In the past three years Wal-Mart reports A/R turnovers of over 80. Aecom and Jacobs respectively announced similar A/R turnovers with Aecom's ranging from 7.17 to 8.04 and Jacobs' from 9.04 to 11.77. Thus, Wal-Mart being the more efficient company with Jacobs and Aecom following, respectively. When examining the return on equity ratio for these there was a lower return on equity ratio when the debt to equity ratio was higher.

	2017	2018	2019
<b>AECOM</b>			
Return on Equity	9.22%	3.37%	-6.71%
Inventory Turnover	-	-	-
A/R Turnover	7.94	8.04	7.17
Debt Equity Ratio	0.93	0.85	0.89
Current Ratio	1.20	1.16	1.16
<b>Jacobs Engineering Group</b>			
Return on Equity	6.69%	3.16%	14.64%
Inventory Turnover	-	-	-
A/R Turnover	9.74	11.77	9.04
Debt Equity Ratio	0.05	0.37	0.21
Current Ratio	1.56	1.45	1.34
<b>Wal-Mart</b>			
Return on Equity	17.23%	12.67%	8.87%
Inventory Turnover	8.26	8.60	8.75
A/R Turnover	84.80	87.40	86.48
Debt Equity Ratio	0.54	0.47	0.69
Current Ratio	0.86	0.76	0.80

**Table 3 – Efficiency Ratios for the 2017 to 2019 Period**



Source: *Morningstar*

Although, Aecom did not follow this trend, Jacobs, and Wal-Mart both saw a decrease in their return on equity when they had higher amounts of debt. All three of the companies boast solid price to earnings ratio, none of them being particularly low. The most favored company by investors is Jacobs with a price earnings ratio of 41.42 (Table 1). This may be from investors expecting Jacobs to have higher growth potential in the future.

### **Strengths and Weaknesses**

Aecom, a reliable infrastructure firm around the globe for the past 30 years relies heavily having a superior performance in new markets, high customer satisfaction, and having a strong free cash flow. Aecom continues to be exceptionally reliable by providing efficient services in construction management, engineering, architecture, operations, and management. They continue to enter new markets and exceeding competitor's expectations. Every new market that Aecom enters is a new opportunity to earn a new revenue stream. This also allows Aecom to spread out its economic risk by being a serious competitor in multiple market segments. Furthermore,

Aecom is immensely proud of their customer satisfaction. Having clients in over 150 countries there are numerous customer tastes and preferences. Aecom has been able to satisfy each one of these necessities by providing their customers with superior outcomes. The ability to have a strong free cash flow allows Aecom to be very fluid when moving into new projects and even new market segments. Aecom announced sales of \$19,715 million (TTM). Having extremely successful sales contributes to Aecom's ability to own a strong free cash flow. This also gives Aecom the ability to expand and invest in new technological advances in the company.

One of the main weaknesses Aecom needs to address in order to help fix their short-term fiscal issues is the posting of negative earnings for the trailing twelve months. Due to substandard investing techniques Aecom announced earnings for -\$430 million. To address these issues Aecom needs to restructure their investment strategies moving forward. As a company Aecom needs to be more selective when investing in technologies, real estate, advertising, etc. In their selection process Aecom should ensure that they are maximizing their return on investment. Weaknesses that are associated with Aecom are their lack of dividend payouts. Paying dividends can be attractive to potential investors and increase their likelihood of purchasing shares of the company. Aecom currently does not pay dividends.

Another weakness is their return on equity ratio, also known as their profitability. Aecom posted a -6.71% return on equity, which influenced their earnings for the TTM. For a company to become successful and obtain a competitive advantage they need to be profitable. Additionally, Aecom does invest a considerable amount in R&D, but they have not been able to compete with some of their competitors in terms of innovation. To continue strive forward Aecom must address these weaknesses and aspire to improve.

### **External Competitive Analysis/Economic Moat**

According to an Analyst Report posted by Morningstar, Aecom (ACM) and Jacobs Engineering Group (J) possess a no-moat rating. Engineering and construction firms often obtain a no-moat rating due to intense competition, the standardized nature of most construction projects, notable customer power, high cyclicality, and high event risk. Legal interactions between construction engineering firms and clients arise due to subcontractor performance. The client of the project may be dissatisfied with the quality of work completed by the subcontractors, which is taken responsibility for by the construction engineering firm. Furthermore, construction projects' return on investment are cyclical. Therefore, a downturn in the economy can negatively impact the overall return on investment of the overall project.

Although, moat creation can arise in certain sectors of the professional services industry. Aecom excels in its design and consulting services. In 2018 Aecom was ranked the second highest design firm in the U.S. by Engineering News Record Magazine (Morningstar). The firm attracts the interest of customers by being able to produce unique and sophisticated design plans. For example, Aecom pitched the Los Angeles Rams with a brand-new design concept for the Rams' new stadium. Aecom spots this brand-new stadium as another signature project that the company can add to its portfolio, thus, making them more appealing in future project bids. Moreover, Aecom grasped a share in the nuclear decommissioning market. The company aids in the cleanup of nuclear waste, as well as decommissioning oil and gas spaces that are no longer in use. (Morningstar). Aecom's ability to obtain an economic moat rating is reliant on its continuous growth in their reputation, project portfolio, and relevance in niche sectors.

Additionally, Jacobs Engineering Group operates in a critical mission solution segment. The critical mission solution segment, which deals with all operations in IT such as, cybersecurity, data analysis, application development, etc. accounts for roughly 37% of the total

revenue generated by Jacobs (Morningstar). This entire department at Jacobs possesses long term contracts with government agencies including the Operations Center for the Missile Defense Agency. Jacobs provides this sector with all IT assistance and is responsible for a substantial portion of Jacobs' revenue. If Jacobs continues to pursue smaller more specific sectors where they can offer their assistance, they will be able to start a foundation of obtaining an economic moat rating.

### **Business Strategy/Horizontal Integration, Acquisitions versus Organic Growth**

Aecom utilizes a broad differentiation business strategy along with a broad low-cost strategy. In previous years, the company analyzed every opportunity in order to expand within the professional services industry. As mentioned before Aecom targets the nuclear decommissioning sector of the industry. Aecom identifies sectors where their services can be utilized. Nuclear decommissioning offers Aecom business with government clients, industrial companies, mining companies, oil and gas clients, and power companies. Aecom provides each of these company sectors with their own individual services. For instance, Aecom issues environmental site assessments, as well as demolition services for industrial companies (Aecom). The company continues to seek other opportunities in segments where it can become a relevant front runner. Aecom cautiously analyzes industries where they can become most profitable.

More recently, Aecom focuses on obtaining a broad low-cost strategy. Previously, Aecom operated in over 150 countries, but the company exited almost 30 countries. Aecom's strategy is to abandon all pursuit in international at-risk construction opportunities. As stated in the Aecom's 2019 fiscal year press release, "The Company has completed approximately 25% of its plan to exit at least 30 countries as part of a strategy to simplify its operating structure and to

hone management's focus on the most profitable growth opportunities" (Aecom). Aecom sees an extreme upside in this strategy where it believes it can obtain higher margins in its most profitable markets. Additionally, Aecom completed the sale of its management services business in January of 2020. This strategy became a part of Aecom's \$225 million administrative cost reduction plan.

Similar to Aecom, Jacobs Engineering Group utilizes broad low-cost business strategies, but can also be noted for using focus differentiation strategy. In previous years Jacobs acquired CHM2, which was an engineering company that operated in related construction fields. Jacobs' used this acquisition to heighten and expand its portfolio in transportation, water, nuclear, and environmental services (Morningstar). The total acquisition of CHM2 was around \$3.3 billion. In order to consolidate its area of operations and costs Jacobs' completed the sale of its energy, chemical, and resources business. After further analysis Jacobs focuses on two areas of business, Critical Mission Solutions and People and Places Solutions. Critical Mission Solutions accounts for 37% of the company's revenue while People and Places Solutions accounts for 63% of the company's revenue (Morningstar).

### **International Strategy**

In previous years Aecom operated in over 150 countries. More recently the company exited 30 countries in order to focus their efforts in their most profitable markets. The company operates in the U.S., parts of Europe, the Middle East, Southeast Asia, and Australia. Aecom focuses on its global reputation to service the steady demand that is needed in the professional services industry. Aecom uses their brand name to attract clients globally. The company is recognized for their innovativeness and quality of services. Their ability to appear globally

allows for low local responsiveness, as well as low pressures for cost reduction in previous years.

### **Corporate Strategy/Acquisitions Related and Unrelated**

The reliability of Aecom attracts its clients globally, thus giving them the appearance of using an international strategy. After the company decided to exit 30 of their 150 countries it is still believed that Aecom is considered to be using an international strategy. This strategy allows for Aecom to gain a much larger revenue stream. Since it is operating in over 100 countries Aecom has a larger client base than many infrastructure firms. Aecom continues to advance in size, but in a more cost efficient and less risky way. The company now seeks integrations in their most profitable markets as a way to decrease the amount of companies it is competing with. For example, in 2014 Aecom was able to finalize an acquisition with URS Corporation. Aecom bought URS for roughly \$4 billion or \$56.31 per share. After the assumption of debt, the final price tag of the acquisition was \$6 billion. The acquisition provided Aecom with 95,000 employees globally.

The acquisition resulted in Aecom's ability to continue to expand its market presence. "URS brings strong sector expertise in important end markets, including oil & gas, power and government services" (Aecom). Aecom only diversifies itself with related companies or related sectors of the market. All of Aecom's acquisitions have been with engineering, design, or management companies that further expand the company's presence in an existing market. After previous investments that did not benefit Aecom it would be beneficial for the company to continue to use related diversification to expand. After posting a negative earnings value the company should steer in the path of market sectors it is familiar with.

### **Asses and Project**

Aecom's continuous reliability poses a major strength for the company. In construction, design, and engineering consistency and reliability can determine a firm's success. Due to Aecom's global presence in the professional services industry there is a lot of pressure for the company to consistently produce reliable services. If Aecom adopted a reputation of producing unsatisfactory structures, it would not be able to be present in over 100 countries. Its brand name can be seen as the company's most valuable asset. When clients hear the name Aecom they think of successful and reliable service. Another strength that Aecom obtains is its strong free cash flow. This allows Aecom to buy out its competitors, start new projects, and expand into new markets. The company posted sales of \$19,715 million (TTM). With the company generating this amount of money it is able invest in new mergers or acquisitions, as well as, investing in new technologies that can aid in making day to day operations more efficient.

Aecom possesses short-term fiscal issues of posting -\$430 million in earnings for its trailing twelve month. The company does seem to be addressing this situation by exiting 30 countries where they are not as profitable as they first believed. Aecom must continue to make less risky investments in order to increase their earnings. This new shift in strategy can also help additional fiscal issues the company seems to be having such as their return on equity of -6.71%. Another weakness that has become apparent is Aecom struggles to merge with companies that contain different company cultures, which can be a known struggle for any company. This can be important to the success of that specific merge. Additionally, it can affect the growth of the entire company. In the near future Aecom should continue with their acquisition strategy. If Aecom can continue to grow as a company and dominate in its core markets it will be able to obtain a continuous competitive advantage in the professional service industry.

### **Suggested Changes**

Aecom should consider continuing to analyze countries or markets where there is not a lot of profitability. Overall, the company does seem to be shifting towards a more profitable low risk portfolio. The 30-country exit did benefit the company financially. Following the large country exit the company posted exceptional revenue numbers. If the company continues to prioritize markets where it already obtains a competitive advantage and invest more money into those areas' profitability will only increase. Every five years I believe the company should do a geographical scan of profitable countries and non-profitable countries, which will lead them to divest in some countries and invest more in others. The quantity of time provides a solid time frame for the company to assess its initial return on investment and decide its further course of action for the next five years.

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