

Case Study #3:

IS THERE A CYBERSECURITY INDUSTRY

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INTRODUCTION

Making a case for the need for cybersecurity has already been proven in today's digital age, but is it an industry? Absolutely. CSO magazine predicts that cybercrime will go up to \$6 trillion per year by 2021; the spending for cybersecurity will go beyond \$1trillion between 2017 and 2021; vacant cybersecurity positions will reach 1.5 million by 2019; people affected by human attack surface will reach 4 billion by 2020; and as many as 200 billion IoT devices will require security by the year 2020 (Morgan, 2016). Indeed, cybersecurity is an industry. The problem is, cybersecurity firms may be having a hard time marketing products and services without a specific industry classification. Standardized Industrial Classification (SIC) was created to classify what kind of involvement of a company. It was created in 1930 as a tool to generate the ability to compare economic data. In 1997, the North American Industry Classification System (NAICS) was designed to take the place of the inefficient SIC (NAICS Association, 2013). Codes are used by federal, state and local agencies primarily for two purposes: 1) on a federal level, statistical agencies either gather or publicize data by industry; and 2) on the state and local levels trade associations, private firms, and other entities use them for market research. The Office of Management and Budgets (OMB) established the Economic Classification Policy Committee (ECPC) in 1992. They are tasked with the maintenance of the review of NAICS and with considering proposals for revisions from the public, and they review it every five years (NAICS Update Process Fact Sheet, n.d.).

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INDUSTRY CODE ANALYSIS

Cybersecurity companies have to make due with an industry with no NAICS code, so the table below lists the closest NAICS codes to publish for the company. This will help with analysis and recommendation of the best NAICS code fit and to strategically position the company to align with competitors.

NAICS PREFIX	CLASSIFICATION DESCRIPTION	INDUSTRY CHARACTERISTICS	COMPANY'S BUSINESS ACTIVITIES
334	<p>Computer and Electronic Product Manufacturing</p> <ul style="list-style-type: none"> • 3341-Computer and peripheral equipment manufacturing • 3342-Communications equipment manufacturing • 3343-Audio and video equipment manufacturing • 3344-Semiconductor and other electronic component manufacturing • 3345-Navigational, measuring, electromedical, and control instruments manufacturing • 3345-Manufacturing and reproducing magnetic and optical media (US Census, 2012) 	<p>This code's manufacturing is different from manufacturing processes of machinery and equipment. It is described as having a more specialized designation to technology manufacturing (BLS, 2017). Top technology companies under NAICS Code 334 are: Intel Corporation; Dell, Inc.; Hewlett-Packard Co; Seagate Technology LLC; Rockwell Automation, Inc.; and IBM Enterprise Systems (SICCODE.com, n.d.)</p>	<p>-Development of a suite of cybersecurity products. -Integrates network sensors (hardware) with big data analytics (software). -Provides advanced threat detection.</p>
51	<p>Information</p> <ul style="list-style-type: none"> • 511: Publishing Industries (except Internet) • 512: Motion picture and sound recording Industries • 515: Broadcasting (except Internet) 	<p>According to the Bureau of Labor Statistics, these are the three establishments of the Industry NAICS code: 1) those engaged in producing and</p>	

	<ul style="list-style-type: none"> • 517: Telecommunications • 518: Data processing, hosting, and related services • 519: Other information services • (Note: 516 was discontinued and moved to 519 in 2007, [BLS, 2017]) 	<p>distributing information and cultural products; 2) those that provide the means to transmit or distribute these products as well as data or communications; and 3) those that process data (BLS, 2017)</p> <p>Top technology companies that use NAICS code 51 are Google; VMware, Inc.; SAP; SunGard Data Systems; Parametric Technology Corporation; and SRA International, Inc. (SICCODE.com, n.d.)</p>	
<p>54</p>	<p>Professional, Scientific, and Technical Services</p> <ul style="list-style-type: none"> • 5411: Legal Services • 5412: Accounting, Tax Preparation, Bookkeeping, and Payroll Services • 5413: Architectural, Engineering, and Related Services • 5414: Specialized Design Services • 5415: Computer Systems Design and Related Services • 5416: Management, Scientific, and Technical Consulting Services • 5417: Scientific Research and Development Services • 5418: Advertising and Related Services • 5419: Other Professional, Scientific, and Technical Services (BLS, 2017) 	<p>This code is involved with expertise driven services as it relates to legal advice and representation, accounting, bookkeeping, and payroll services; architectural, engineering, and specialized design; computer; consulting; research; advertising; photographic; translation and interpretation; veterinary; and other professional, scientific, and technical services (BLS, 2017).</p> <p>A top technology company, Accenture, based in Charlotte is a technology firm that uses NAICS code 54. (SICCODE.com, n.d.)</p>	

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44	Retail Trade <ul style="list-style-type: none"> ● 441: Motor Vehicle and Parts Dealers ● 442: Furniture and Home Furnishings Stores ● 443: Electronics and Appliance Stores ● 444: Building Material and Garden Equipment and Supplies Dealers ● 445: Food and Beverage Stores ● 446: Health and Personal Care Stores ● 447: Gasoline Stations ● 448: Clothing and Clothing Accessories Stores (BLS, 2017) 	This code is primarily related to retail stores selling merchandise to the general public from a storefront. Intel is one of the top technology companies that uses the NAICS code 44 (SICCODE.com, n.d.).	
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RECOMMENDATIONS

The best fit for the company's business activities is NAICS code 51. The recommendation is based on similarities of top technology companies that are inclined to closely border some services that may involve cybersecurity services in some aspect. Google is much more than a search engine company. It's business operations also includes big data services (Metz, 2012). SunGard is known for making financial software, but its Availability Services also provides Intrusion Protection Services (IPS) [Managed Intrusion Protection Services, 2014]. SRA International, Inc. just announced a contract with GSA. Part of their services include cybersecurity (SRA, 2017). Parametric Technology Corporation is a software company providing product lifecycle development (PLM) [Reuters, n.d.]. Each of these corporations share some similarities with the company's objective to develop a suite of cybersecurity products, integrating network sensors with big data analytics and providing an advanced threat detection device. Development of a suite of cybersecurity products.

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REFERENCES

- Morgan, S. (2016, December 29). *Top five cybersecurity facts, figures and statistics for 2017*. CSO Retrieved from <http://www.csoonline.com/article/3153707/security/top-5-cybersecurity-facts-figures-and-statistics-for-2017.html>
- NAICS Association. (2013). *How to use NAICS & SIC codes for marketing*. Retrieved from https://www.naics.com/wp-content/uploads/2014/10/How_to_Use_NAICS_SIC_Codes_for_Marketing_NAICSAssociation.pdf
- NAICS Update Process Fact Sheet. n.d. Census.gov. Retrieved from https://www.census.gov/eos/www/naics/reference_files_tools/NAICS_Update_Process_Fact_Sheet.pdf
- 2012 NAICS:334 - *Computer and electronic processing manufacturing*. Industry Statistics Portal Retrieved from <https://www.census.gov/econ/isp/sampler.php?naicscode=334&naicslevel=3>
- Bureau of Labor Statistics. (2017, February 10). *Industries at a glance Computer and electronic product manufacturing: NAICS 334*. United States Department of Labor. Retrieved from <https://www.bls.gov/iag/tgs/iag334.htm>
- Top Companies – *NAICS Code 334 – Computer and electronic product manufacturing*. SICCODE.com. Retrieved from <http://siccode.com/en/business-list/naics%3A334>
- United States Census Bureau. 2012 NAICS: 51 – Information. Industry Statistics Portal (ISP). *Business Data from the U.S. Census Bureau*. Retrieved from <https://www.census.gov/econ/isp/sampler.php?naicscode=51&naicslevel=2>
- Bureau of Labor Statistics. (2017, February 10). *Industries at a glance Information: NAICS 51*. United States Department of Labor. Retrieved from <https://www.bls.gov/iag/tgs/iag51.htm>
- Top Companies – *NAICS Code 51 – Information*. SICCODE.com. Retrieved from <http://siccode.com/en/business-list/naics%3A51>
- Bureau of Labor Statistics. (2017, February 10). *Industries at a glance Professional, scientific, and technical services: NAICS 54*. United States Department of Labor. Retrieved from <https://www.bls.gov/iag/tgs/iag54.htm>
- Top Companies – *NAICS Code 54 – Professional, scientific, and technical services*. SICCODE.com. Retrieved from <http://siccode.com/en/business-list/naics%3A54>
- Bureau of Labor Statistics. (2017, February 10). *Retail Trade: NAICS 44-45*. United States Department of Labor. Retrieved from <https://www.bls.gov/iag/tgs/iag44-45.htm>

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Top Companies – *NAICS Code 44-45 – Retail trade*. SICCODE.com. Retrieved from <http://siccode.com/en/business-list/naics%3A44-45>

Metz, C. (2012, August 21). *Google's mind-blowing big-data tool grows open source twin*. WIRED. Retrieved from <https://www.wired.com/2012/08/googles-mind-blowing-big-data-tool-grows-open-source-twin/>

SunGard.com. (2014). *Keep your business up and running and secure with industry-leading protection against hackers, malware and zero-day exploits*. Retrieved from <https://www.sungardas.com/globalassets/resource-centre/brochures/managed-service-managed-intrusion-and-detection-msv-tec-114.pdf>

SRA (2017, February 9). *SRA Awarded 200 Million Task Order by GSA*. Retrieved from <http://ir.sra.com/phoenix.zhtml?c=131092&p=irol-newsArticle&ID=1254496>.

Reuters. PTC, Inc. Retrieved from <http://www.reuters.com/finance/stocks/companyProfile?symbol=PTC.O>