Organizational Strategies for Engaging and Retaining Millennial Employees

A Major Qualifying Project Report Submitted to the Faculty of WORCESTER POLYTECHNIC INSTITUTE in partial fulfillment of the requirements for the Degree of Bachelor of Science

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Abstract

Millennials are often portrayed as entitled, cocky, self-centered and have proven to be unafraid to leave a job (Thompson & Gregory, 2012; Stein, 2013). Studies have shown that two out of three millennials expected to leave their company by 2020 (Deloitte, 2017). Companies are faced with the challenge of retaining these employees despite millennials' inclination towards job hopping. This loss of human capital is a growing issue, as the millennial generation makes up nearly a third of the workforce in the United States and the number is predicted to grow to nearly 75% by 2025 (Dib, 2016). Successful engagement and retention of this generation could mean improved productivity, advanced innovation, and successful adaptation of new technologies (Stein, 2013). By understanding millennials tendencies and developing more effective strategies for managing and retaining these employees, technology companies can attempt to mitigate high millennial turnover rates. Our research focused on understanding millennial workplace preferences and tendencies trends in order to improve engagement and retention in large technology companies. Using published academic articles, millennial interviews, and surveys we found that millennial employees in clan and adhocracy organizational culture types had higher likelihoods of retention than those in other culture types. We also found that skill development, compensation, opportunities for upward mobility, and mentorship were important factors in the motivation of millennials. Our research identified opportunities for further study and concluded that companies need to adapt their retention strategies and organizational structure in order to retain millennials.

1. Introduction

Problem Statement

Throughout the technology sector, companies in the United States are facing the challenge of retaining millennials. Millennials can be defined as anyone born between 1981-1996, according to the Pew Research Center (Dimock, 2018). These individuals are more likely to leave their company if they do not feel satisfied according to a 2017 Deloitte Survey. In fact, two out of three millennials expected to leave their company by 2020. High volatility within the millennial generation negatively affects a company's bottom line, mainly due to increased human resource costs associated with high turnover rates. According to John Hester's (2013) "The High Cost of Employee Turnover", replacing a lower-skilled entry level employee costs nearly 30% of their annual salary and up to 250% if the employee is in a highly specialized position. Successful engagement and retention of this generation could mean improved productivity, advanced innovation, and successful adaptation of new technologies (Stein, 2013). Companies need to develop more effective strategies for managing millennials to avoid losing valuable employees.

2.0 Literature Review

In order to study how companies can more effectively retain their millennial employees, we must first look at millennials and who they are as a generation. This section starts by defining the millennial generation. The literature review then examines the traits that millennials are described as having, particularly their "job hopping" tendencies. It goes on to describe current strategies that companies use for retaining their millennial employees including skill development opportunities, monetary compensation, benefits, and mentorship. The section ends with an explanation of the impacts that company culture can have on millennial retention rates, and outlines the four main culture types that are seen in the workplace.

The Millennial Generation

The millennial generation is loosely defined as anyone born from the mid 1980's to the late 1990's and early 2000's. A 2012 article published in *USA Today* cited the Strauss–Howe Generational Theory definition as the standard definition of millennials. This definition claims that the millennial generation is made up of those born between 1982 and 2004 (Horovitz, 2012). Other sources, such as the *New York Times*, cite research done by the Pew Research Center in 2018 that claims the millennial generation consists of anyone born between 1981 and 1996 (Stack, 2018 & Dimock, 2018). Variation in the definition of the millennial generation is prevalent in all research related to the millennial generation and should be taken into consideration. As a result, most scholarly research is conducted with a loose definition in mind. For the purpose of our research, we will use the Pew Research Center's definition of the millennial generation due to the high frequency of its use within scholarly research.

The generations defined

GENERATION
AGE IN 2018

born 1981-96

Millennials
ages 22-37

born 1965-80

Generation X
ages 38-53

born 1946-64

Boomers
ages 54-72

born 1928-45

Silent
ages 73-90

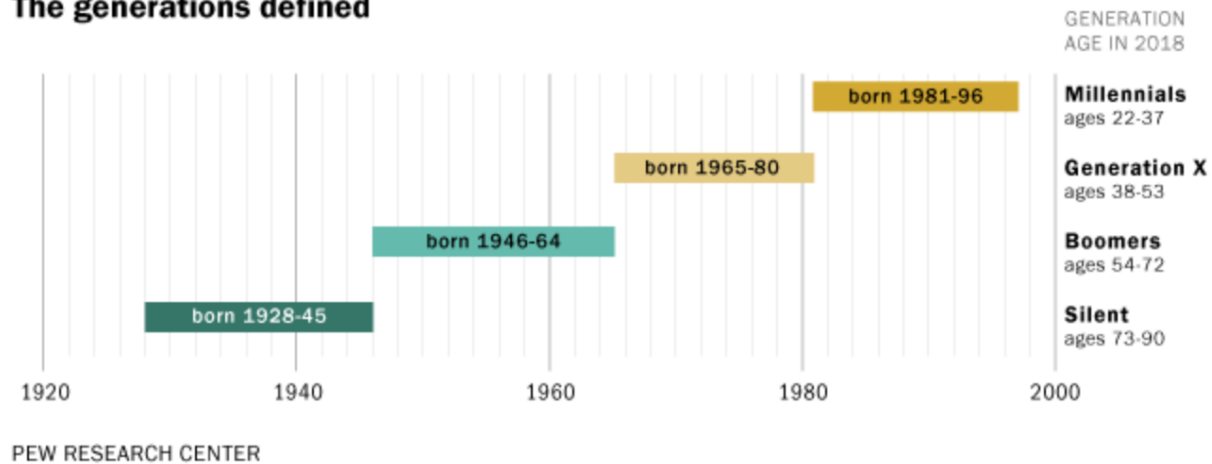1920   1940   1960   1980   2000

PEW RESEARCH CENTER

Figure 1: Birth year cutoff for the past four generations. Reprinted from Dimock, M. (2018,March 01). Defining Generations: Where Millennials End and Post-Millennials Begin. Retrieved March 25, 2018, from http://www.pewresearch.org/fact-tank/2018/03/01/defining-generations-w here-millennials-end-and-post-millennials-begin/

As seen in figure 1 above, millennials are not the only generation in the workforce. However, in 2017 millennials made up approximately 33% of the technology sector in the U.S. workforce, according to a report published by the United States Bureau of Labor Statistics. This marked an increase from 30% reported in the 2015 release of employment data (BLS, 2017). Globally, this number is expected to continue to rapidly grow in the coming years. Aon, a leading global professional service firm, projects this number to continue to grow globally to 75% by 2025 (Dib, 2016).

Many authors have theorized about what this increase in millennials will mean for the workforce. Karen Myers and Kamyab Sadaghiani, authors of a business journal article titled "Millennials in the Workplace" (2010), analyzed the characteristics and skill sets that the generation possesses. They believe that millennials work well in teams, are motivated to have an impact on their organizations, favor open and frequent communication with their supervisors, and are at ease with communication technologies. The authors also suggest that millennials have the ability to

multitask in ways that are superior to other generations (Myers & Sadaghiani, 2010). In an excerpt from *Connecting Generations: The Sourcebook*, Claire Raines writes that millennials are goal and achievement-oriented, and are confident due to parenting styles and the focus on empowerment while in their youth (Raines, 2012).

In addition to these unique generational traits, some studies have shown that millennials are not afraid to leave a job if they are unsatisfied. A 2017 Deloitte Millennial Survey asked respondents how long they would stay with their current employer before leaving to join a new company or do something different if given the opportunity. Survey results showed that two out of three millennials expected to leave their company by 2020 (Deloitte, 2017). An article published by *Forbes Magazine* titled "The Top 5 Reasons Millennials Quit Jobs They Like" (2017), attributes this trend to millennials choosing a better opportunity, prioritizing relocation, going back to school, learning new skills, and changing fields.

Due to these characteristics and behavioral trends, some sources have portrayed the entire millennial generation in a negative light. An article written by Charles Thompson and Jane Gregory titled "Managing Millennials" (2012) states that millennials have a desire for feedback and being told exactly how to tackle a certain problem or complete a task. The authors go on to say that millennials have been shaped by helicopter parents, frequent positive feedback, reassurance, significant leaps in technology, and political and economic turmoil. They argue that these factors have led millennials to become disloyal, entitled, and somewhat selfish. A *Time Magazine* article written by columnist Joel Stein titled, "Millennials: The Me Me Me Generation" (2013) further addresses the negative stigma. This article claims that millennials are "fame obsessed individuals" who believe promotion should occur every two years regardless of performance. The article cites a study that concluded that the occurrence of narcissistic

personality disorder is nearly three times higher for people in their 20's as it is for people who are 65 or older. Stein goes on to write that millennials are entitled, cocky, addicted to technology, and have no respect for authority. In his opinion, the generation has been shaped by the ability to constantly access information. He believes that millennials have simply adapted to their environment and developed these traits due to advancements in technology. A Pew Foundation study reports that more than 80% of millennials sleep with a cell phone by the bed "poised to disgorge texts, phone calls, e-mails, songs, news, videos, games, and wake-up jingles" (Choney, 2010).

However, Stein believes these same negative reasons are the reasons why the millennial generation will eventually be a force for positive change in any workplace. He believes that millennials will leverage their perceived negative traits to advance themselves and the organization they are a part of. Since they have no respect for authority, he claims they wouldn't resent it. Stein also claims that due to their "technology addiction", millennials will know how to best harness technology for company advancement (Stein, 2013). Stein is not the only author who believes that the perceived negative traits of millennials are actually positive ones. Tom Brokaw, renowned author of the book Greatest Generation, argues that millennials approach to the world around them is a smart one. He goes on to say, "Their great mantra has been: Challenge convention. Find new and better ways of doing things" (Stein, 2013). He believes that millennials are changing the workforce for the better.

 Due to the nature of millennial tendencies and traits, some authors believe the answer to retaining these employees comes in the form of having less hierarchical, organizations that put an emphasis on people, relationships, communication, innovation, and creativity (Altizer, 2010; Hewlett et al., 2009). Authors such as Janis Bragan Balda and Fernando Mora believe that

millennials are challenging the status quo and are prompting companies to consider new practices and organizational designs. They believe that this change brings about actionable knowledge that enables multigenerational teams, groups, and collaborative teams to produce results that advance the organization (Balda & Mora, 2013).

While many sources attempt to make broad sweeping claims on generational norms and behaviors, Michael Dimock from the Pew Research Center commented on how generations are "inherently diverse and complex groups" (Dimock, 2018) and are not one homogenous group. The writer goes on to explain that "Generations are a lens through which to understand societal change, rather than a label with which to oversimplify differences between groups" (Dimock, 2018). Dimock believes that there is much to be gained through generational study as long as the researcher understands the complexities involved. He believes it is important to keep this in mind when studying the traits of millennials.

Company Strategies for Retaining Millennials

Companies attempt to harness millennial potential through company sponsored programs aimed at increasing retention and engagement. According to an article titled, "Talent Retention: Six Technology-Enabled Best Practices" (2012) published by *Oracle*, companies can improve retention of top talent in the workplace using the following six key practices: recruit the right people in the first place, improve the manager's ability to manage, provide constant feedback about clear and meaningful goals, empower employees to manage their own careers, proactively drive talent, and continuously measure and improve retention strategies. These six strategies are seen as a starting place in retention of any employees and should be implemented and expanded upon in order to retain millennials.

One area that millennials particularly value is the opportunity for skill development. According to research done by the University of North Carolina in 2013, nearly 65% of millennials said personal development was the most influential factor in choosing their current job (Kratz, 2013). Figure 2 below outlines other statistics collected and reported by this same UNC research study on the importance of skill development. The authors of the article, "Employee Retention Enablers: Generation Y Employees" (2015) argue that millennial employees are loyal as long as the organization provides meaningful work and self-development opportunities. Jeanne C. Meister and Karie Willyerd, two well-respected human resources and corporate training experts and authors of "The 2020 Workplace", agreed that millennial employees value learning. They predict that "in 2020 and beyond, we will see branded lifelong learning centers to ensure ease in continually updating one's skills for both one's current job and one's next job" (Meister, 2010).
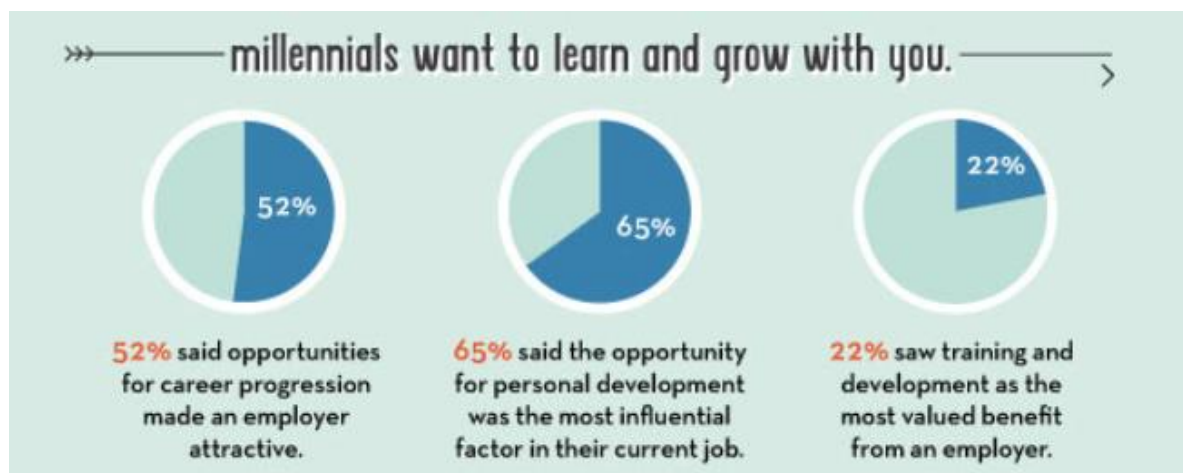

Figure 2: Statistics about skill development. Reprinted from Kratz, Harrison (2013, June 24). Maximizing Millennials: The Who, How, and Why of Managing Gen Y. Retrieved March 25, 2018, from https://onlinemba.unc.edu/blog/geny-in-the-workplace/

Current skill development programs come in many forms, including certifications and opportunities for higher education. Large companies like Boeing and Ford offer educational funding up to $3,000 and $5,000 per year respectfully for employees who are pursuing an

advanced degree program (Boeing & Tuition Assistance). Other companies, like Proctor & Gamble, offer up to 80% coverage of all tuition costs associated with educational courses related to current or potential company positions.

Company sponsored educational opportunities extend beyond traditional higher education programs. Amazon offers an intensive training and leadership program for their employees and will pay for 95% of tuition for courses in high-demand fields. Additionally, Amazon also utilizes "Virtual Contact Centers" to train employees on how to work from home ("Ten Awesome," 2018). Amazon is not the only company to utilize online courses for their employees. AT&T helped create the first ever Online Masters in Computer Science and even created several fast paced technical credential programs focused on entrepreneurship, data analytics and mobile development. These "Nanodegrees" are open to all employees and offer free enrollment ("Ten Awesome," 2018). Companies have even begun to offer nontraditional courses and learning opportunities for employees. Dreamworks boasts a 96% retention rate of employees and Dan Satterthwaite, the company's head of Human Resources, believes that this is due to the classes they offer. During work hours at Dreamworks, employees have the ability to take classes in topics ranging from photography to jujitsu and karate free of cost. He also believes that companies need to offer more than just monetary rewards if they hope to be able to retain millennials (Stein, 2013).

While not the only factor in the retention of millennials, compensation is still an important facet according to Payscale's annual compensation report for 2018. In this report, Payscale outlines several ways survey respondents from large companies plan to retain their top talent. First on the list was merit-based pay plans, followed closely by learning and development

opportunities similar to the opportunities outlined above. Full results of the survey are captured below in figure 3 ("Compensation Best," 2018).

Figure 3: How organizations plan on retaining top talent. Taken from Compensation Best Practices Report – PayScale. (2018, February 12). Retrieved March 25, 2018, from https://www.payscale.com/cbpr

Payscale's report goes on to cite retention issues as the top reason organizations are adjusting their compensation strategy. Additionally, 23% of respondents cited millennial employees as another reason why their company's compensation strategy changed. The full results can be seen below in figure 4.
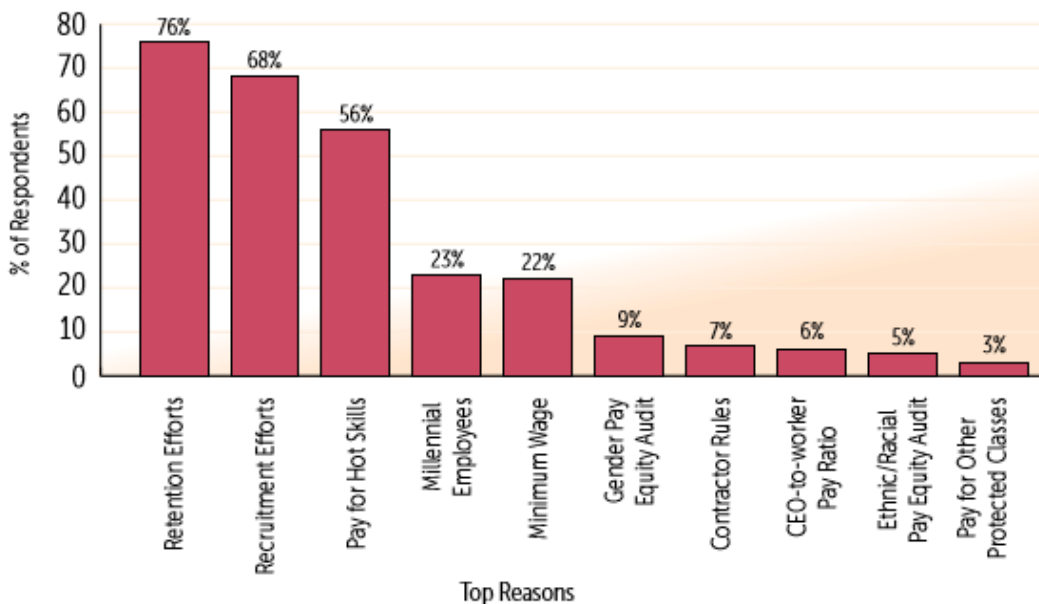
Figure 4: Reasons why companies are shifting their compensation strategies. Adapted from Compensation Best Practices Report – PayScale. (2018, February 12). Retrieved March 25, 2018, from https://www.payscale.com/cbpr

On average, technical employees are well paid right out of college. Data from The Bureau of Labor Statics show that on average, technical employees make $79,700 a year which is well above the national average of $59,039 (BLS, 2017). In addition to a high base pay, Lindsay Nolan writes that perks and benefits can be used as a way to attract and retain millennial employees. She claims that many millennials are more interested in benefits than members of past generations due to their desire to avoid risk as much as possible (Nolan, 2015). Nolan and Payscale argue that compensation is merely a piece of the millennial retention puzzle.

Another factor that some authors have identified as important for retaining millennial employees is mentorship in the workplace. A study done by the University of North Carolina (2013) states that 80% of millennials said they would prefer feedback in real time rather than via traditional performance reviews (Kratz, 2013). Many authors believe this is due to millennials desire for constant feedback. In article published by Jessica Brack and Kip Kelly titled,

"Maximizing Millennials In The Workplace" (2012) the authors argue that since millennials were raised with constant coaching and feedback they expect it to continue in the workplace. Brack and Kelly also state that coaching does not need to be time consuming or overly formal but is essential to keeping millennials engaged in their work (Brack & Kelly, 2012).

While traditional coaching practices are important, some authors believe that nontraditional mentoring is just as important. One such process is reverse mentoring, which is a relationship where the millennial employee serves as a mentor to an older, senior colleague (Murphy, 2012). In an article titled,"The Roar of Millennials: Retaining Top Talent In The Workplace" Lindsey Nolan writes that, "It is relationships that retain millennial workers". She explains that reverse mentor programs can encourage relationships across generations and promote the sharing of knowledge among team members. Nolan goes on to say that reverse mentoring is extremely important for the older generation being mentored, especially when it comes to the use of technology. Conversely, millennials are given the opportunity to feel like their voice is heard and that they are making an impact. Reverse mentoring can also be used to develop millennial skills in leadership due to the innate opportunity to hear and share new perspectives with other parties (Nolan, 2013; Murphy, 2012). This approach is another example of ways companies can engage millennials.

Leadership Development Programs

Many companies have also implemented leadership development programs to train newly hired employees. These programs aim to to encourage employees to stay with the company. Table 1 below summarizes example leadership development programs at three large technical companies: Lockheed Martin, General Electric, and UTC.

Table 1: Traits of three technical company development programs

	Lockheed Martin	**General Electric**	**UTC**
Program Duration:	3 Years	2-3 Years	2 Years
Tuition Reimbursement?	Yes, for continuing education	Yes	Yes, company wide. Not specific to program
Number of Rotations:	3-4 (9 Month Rotations)	3+	4 (6 Month Rotations)
Feature 1:	Attendance at Two National Conferences	Formal reports to senior leadership	600 Hours of Technical Training
Feature 2:	Leadership Training	Advanced Engineering Coursework	Mentorship Program
Feature 3:	Technical Skill Training	Continual Feedback	Coaching and personal development program
Feature 4:	"Fast track to leadership opportunities"	Project driven program	Upon graduation of program, employee is assigned to a full time Manufacturing Engineer role

Table compiled using information from the following source: Ten Companies With Awesome

Training And Development Programs. (n.d.). Retrieved March 26, 2018, from

https://www.monster.com/career-advice/article/companies-with-awesome-training-development-

programs

These Leadership Development programs can have high costs associated with them. In

2015, companies in the United States spent $160 billion on the creation of leadership

development programs, with nearly $356 billion spent worldwide (Beer, Finnstrom, & Schrader,

2015) However, several sources cite that significant financial payoffs can be found among

companies that emphasize training and development. Doris Collins and Elwood Holton compiled

a meta-analysis of 83 studies conducted between 1982 and 2001. This analysis showed that some

company sponsored leadership development programs are effective and others are failing. The

range of effect sizes in their study clearly shows that it is possible to have very large positive outcomes, or no outcomes at all. The study concluded that all companies should evaluate the success of their programs based on the metrics they see fit. The authors felt that in order to be successful, these programs needed to "develop training objectives that are tailored directly to address the obstacles and dilemmas impacting the implementation of the organization's strategic goals" (Collins & Holton, 2004). This can be achieved by adapting development programs to fit each company's unique organizational culture.

Organizational Culture Types

Organizational culture is a big part of the discussion when investigating organizational behavior and retention efforts. In 1999, Robert E. Quinn and Kim S. Cameron's research identified four types of culture that were most commonly seen in organizations. This theory came from the competing values framework, where the competing values were flexibility vs. stability

and internal vs. external focus. These four culture types can be seen in Figure 5. Quinn and Cameron's research defined each organizational culture type by the distinct characteristics of employees, managers, and workplace environment. A summary of each culture type can be found below in table 2.
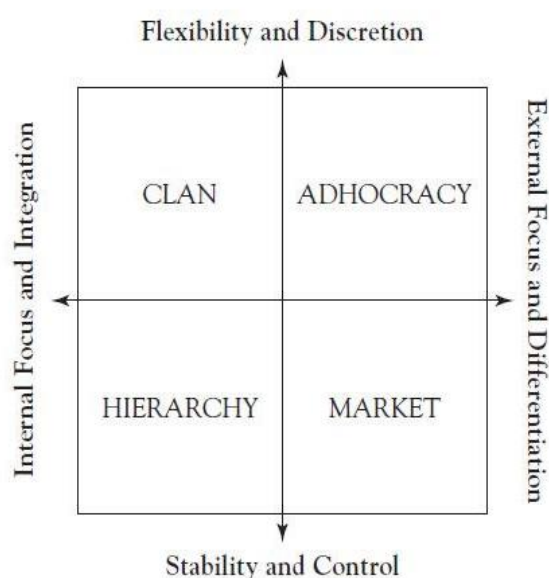
Table 2: Characteristics of Cameron and Quinn's culture types

	Clan	**Adhocracy**	**Market**	**Hierarchy**
Leaders	Mentors	Entrepreneurs	Competitors	Enforcers
Goal	Consensus and Teamwork	Continuous Improvement	Completion of Tasks	Smooth Operations and Predictability
Environment	Supportive and family-like	Entrepreneurial and Loose	Competitive	Structured and Controlled
Core Values	Loyalty, Tradition and Engagement	Individualism and Freedom	Reputation and Success	Efficiency and Uniformity

Clan culture is defined as the organizational culture type that is internally focused and flexible. Collaboration defines this culture type. The environment is typically very supportive and family-like which encourages all members to work together to complete their tasks. Employees tend to have a lot in common and are very friendly with each other. Leaders are considered to be mentors and are there to provide insight to employees when needed. This culture type prides itself on loyalty, tradition and high levels of employee engagement. Consensus, participation and teamwork are concepts that are also highly valued. Success is defined as meeting the needs of customers while caring for all people the company comes into contact with.

Hierarchical culture is the organizational culture type that is internally focused and highly controlled. Procedures decide what should be done and more importantly, how it is executed. The work environment is highly structured with the ultimate goal being smooth operations and efficiency. Employees in this culture type are simply a member of a well functioning team and desire predictability. Leaders focus on creating formal rules and policies that keep the team on track and reduce non-value added time. They often take on the role of monitoring progress and

organizing improvement. Organizations that fall in this culture type pride themselves on efficiency, uniformity, effectiveness, and controlled processes. Extensive planning, problem solving, and low costs define a successful day in a hierarchical organization.

Adhocracy culture is the organizational culture type that is externally focused and flexible. Organizations that fall under this culture type are always looking for opportunities for growth and the creation of new resources. As a result, individualism and freedom are hallmarks of these organizations. Employees in these cultures take risks and are rewarded for experimentation and innovation. This pursuit of innovation is what bonds the organization together towards its common goal of continuous improvement. Leaders are often visionaries and take the form of entrepreneurs. These leaders are focused on moving the group towards the overarching goal of creating new products or services for its customers.

Market culture is the organizational culture type that is externally focused and highly controlled. Organizations that fall under this culture type are results based and focus on getting tasks completed. Reputation and success are considered very important aspects of this culture. Success is achieved when they have high levels of market penetration and competitive prices. This element of competition can be seen at all levels of the organization. Employees are extremely competitive and focused on completing their goals. As a result, leaders tend to be tough on their employees in order to get the best results out of them. These leaders have high expectations and can often be seen as rivals by those who work with them.

3.0 Methodology

Our research was focused on understanding millennial workplace preferences and tendencies in order to improve millennial retention in large technology companies. We achieved this by completing several objectives. These objectives are as follows:

- Gather Information and Determine Scope

- Determine and Analyze Millennial Workplace Preferences and Motivating Factors

- Identify Recommendations for Improving Millennial Retention Efforts

Gather Information and Determine Scope

Our first objective was to gather information and determine the scope of our project. In order to determine what current millennial tendencies and preferences exist in large technical companies, we utilized: online repositories, interviews, and surveys of WPI Alumni and Students. Table 3 below summarizes the research methods we used to obtain information from our two research groups.

Table 3: Research methods used to obtain information

Research Group	Interviews	Surveys	Online Research
WPI Students	✓	✓	✓
Current Technical Company Employees	✓	✓	✓

First we utilized surveys of WPI Alumni in technical companies to determine a broad understanding of workplace cultures and generational tendencies that currently exist. This method allowed us to gain a diverse perspective from a variety of individuals who were apart of different companies around the United States. We obtained this sample of employees by contacting the WPI Office of Alumni Relations who provided us with a list of over 30,000 alumni. The list was manually filtered down to 3,460 Alumni who were selected based on whether or not the company they were currently employed by had over 500 individuals currently employed and was currently involved in the technology sector. These selected alumni ranged from graduates in the mid-1900's all the way up to graduates from 2017. This provided us with a generational variance which allowed for comparisons between generations. We also ensured that each potential respondent was provided an explanation of the purpose of our study along with how the data would be used. Survey questions and procedures can be found in **Appendix A: Survey Questions and Procedures**.

Out of a pool of 3,460 employees, 523 responded to the survey. This resulted in a response rate of approximately fifteen percent, which was five percent greater than our targeted response rate of ten percent. Our target response rate was based on prior research that shows that the average response rate in external surveys is 10%. The demographics of respondents in the alumni survey reflect that the sample accurately represents the population we surveyed. Figure 6 shows the breakdown of respondents in each generation. As shown, each generation is adequately represented in our survey sample. The breakdown of respondents was 22% Baby Boomers, 44% Gen Xers, and 43% millennials. This generational breakdown yielded results similar the population breakdown. Publically available data states that 33% of the current workforce are millennials, 39% are Baby Boomers, and 28% are Gen Xers (BLS, 2018).

Additionally, while approximately 65% of respondents were male and only 35% were female, this is fairly reflective of the gender breakdown found in technology companies in the United States in 2017. Research shows that the current breakdown by gender in technology fields is 79% male and 21% female (BLS, 2017). Therefore, this disparity between the number of responses from each gender does not negatively

skew our analysis. Our sample reflects similar trends to the population and provides enough representation of each group for analysis. However, there is an overrepresentation of employees from the Massachusetts area which could be due to the large amount of WPI Alumni who responded to our survey. This could lead to location bias, which could skew the analysis slightly.
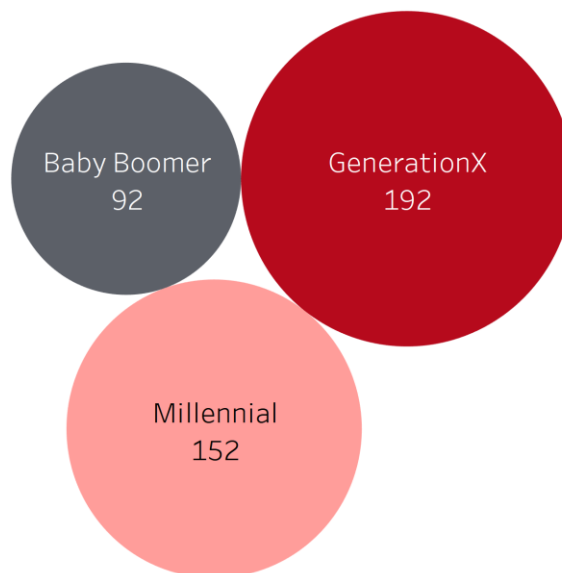
In addition to surveys of Alumni, interviews were also utilized to gain qualitative data on millennial tendencies. This supplemented the quantitative data we gathered through our survey and allowed us to gain specific examples of company efforts to retain millennials. Interview candidates were selected based on whether they were currently employed by a large technological company and if they were apart of the millennial generation. Interview protocol and questions can be found in **Appendix B: Interview Procedure** and **Appendix C: Interview Questions**.

Determine and Analyze Millennials Workplace Preferences

In order to achieve our final goal, we analyzed our survey and interview data. The raw data from the technology employee survey was pre-processed. Full detailed procedure can be found in **Appendix D: Data Pre-processing**. After this was completed, the demographic data was summarized and compared to each respective population. Next, the survey data was statistically analyzed to determine if any connections exist between variables. This was done through the use of the StatTools plugin for Excel which aided in ANOVA Testing, the computation of three Multiple Linear Regression Models, and basic summary statistics. ANOVA testing compared the mean scores of each generation in a variety of questions. This testing procedure allowed us to determine if the differences were statistically significant and not due randomness or small sample size. Tableau was also utilized to create visual representations of findings and demographic data.

Identify Findings and Form Recommendations

Once the information was analyzed, a summary sheet was created which highlighted the main takeaways from our survey, interviews, and observations. Using this summary sheet as a guide, we identified trends in millennial workplace tendencies and preferences. We then selected the figures, tables, and quotes that best convey this information to the reader and satisfy our research questions. Using these key findings as a baseline, we created the report and received feedback from our advisor. Recommendations were formed based on findings and scholarly research. These recommendations additionally outlined areas for further study and investigation.

4. Findings

The survey and interview findings accurately aligned with and expanded upon the background research in our literature review. Through our survey we confirmed that millennial retention rates are lower than those of other generations. Our project findings are based on answering the following overarching research questions:

- ○ What factors influence millennial retention rates in large technology companies?
- ○ What factors motivate millennial employees in large technology companies?
- ○ What type of company culture is beneficial for millennial employees in large technology companies?
- ○ What aspects of existing development programs are the most beneficial in retaining millennials?

Through our survey and interviews, we learned that millennial employees may be more likely to leave if they are not motivated and engaged in their work. Our survey showed that millennial employees are motivated by compensation, future skill development, opportunities for upward mobility, and mentorship. These motivating factors help to determine the type of culture that defines each company. Unsurprisingly, we found that there was a connection with culture types and retention; millennials were more likely to plan to stay with a company for longer in an Adhocracy or Clan culture which promote more flexible and collaborative values.

One popular method that companies have used in an attempt to offer more motivating factors to their millennial employees is through leadership development programs. Our survey showed that these programs are useful in retaining millennials as a result of the focus on skill development both inside and outside of employees specific disciplines. Companies can utilize

these findings and apply them to their own organizational needs in order to tackle the challenge of retaining millennial employees.

Millennial Retention Rates

A research goal was to gain an understanding of how long millennials intended to stay with their company. Our survey of current technical employees posed three questions which asked the respondent to rank, on a scale from one to five, how likely it was that they would stay at the company for more than one, three, and five years. Using ANOVA testing we obtained the following results captured in Figure 7. These results show that millennials in the sample were the least likely to stay with their company at a statistically significant level.
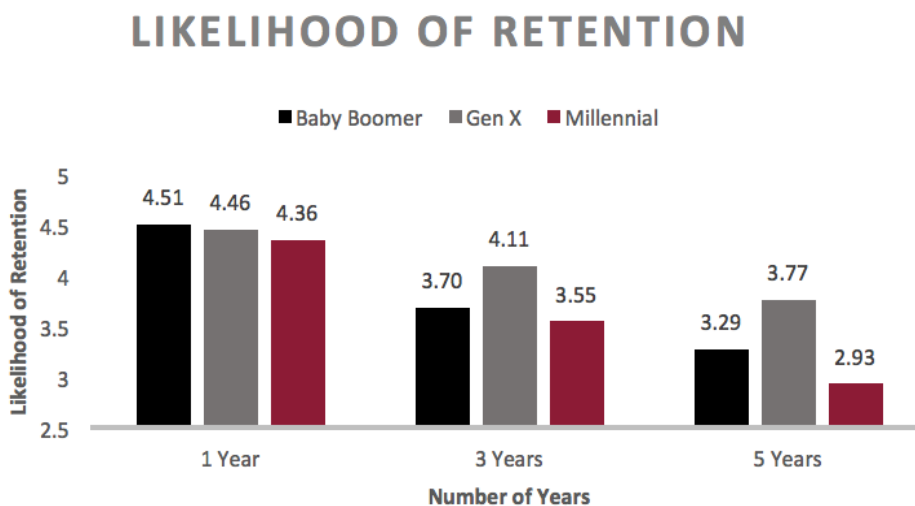
LIKELIHOOD OF RETENTION

■ Baby Boomer   ■ Gen X   ■ Millennial

Figure 7: Sample mean scores of likelihood of retention separated by generation.

The stark difference in likelihood of retention among millennials and other generations displayed in the graphs above prompted the exploration of what factors contribute and predict the likelihood of millennial retention. Using four statistically significant factors, we were able to achieve a model that attempted to do this. The four statistically significant independent variables used were the responses to each of these questions below.

- My company promotes the improvement of processes (Scale 1-5)

- My company values work-life balance (Scale 1-5)

- I would refer an individual to work for my company (Scale 1-5)

- I believe I am being challenged in my current role (Scale 1-5)

Millennial respondent's answers to these four questions were able to predict how likely they were to stay with a company for more than one year and three years. We found that our four factor Multiple Linear Regression Model was surprisingly strong. The correlation coefficient and R squared value for both models can be found table 4 below.

Table 4: 1 and 3 Year Model R Squared and Multiple R Values

	Correlation Coefficient (Multiple R)	R Squared
1 Year	0.6416	0.4117 = 41.17%
3 Years	0.6289	0.3955 = 39.55%

The only difference in the five year model was the model utilized three statistically significant independent variables instead of four. The three statistically significant independent variables used were the responses to each of these questions below.

- I believe I am being challenged in my current role (Scale 1-5)

- My company values work-life balance (Scale 1-5)

- My company promotes the improvement of processes (Scale 1-5)

We found this was a slightly weaker model due to the increasing uncertainty that comes with the increased amount of time. The correlation coefficient and R squared value for the five year model can be found in table 5 below.

Table 5: Five Year Retention Model Multiple R and R Squared Values

	Correlation Coefficient (Multiple R)	R Squared
5 Years	0.5499	0.3024 = 30.24%

The main takeaways from our models are that millennials who are challenged by their work and are a part of a work environment that allows them to have a healthy work-life balance are more likely to stay with that company longer. This finding aligns with prior research that suggests millennials put emphasis on constantly being challenged. During our interviews, we asked millennial employees about work-life balance, and their responses aligned with our survey findings and prior research. One millennial employee from a company of over 100,000 employees expressed their opinion of the importance of being challenged. "[I want a company] that's going to challenge me, but is also going to ensure that you maintain a work-life balance." Millennial employees want to be challenged in the workplace while maintaining a healthy work-life balance. We found that after graduating from university, some millennials may have unrealistic expectations of what a work-life balance entails in the workplace. Prior research shows that millennials have grown up in a very nurturing environment and this can also be seen on college campus around the United States. An interview respondent from a company of 10,000 -100,000 employees described how work-life balance at a company varies from life in college:

> "I didn't really realize until after graduating that work-life balance is very important. In school you can mix the two. You're always around your friends, you're constantly living your life and working all in one. But with work it's much different where you go in and do your job for 8 hours or 9 hours and it would be very difficult to constantly be working under those kinds of conditions and not have the balance of fun and actually living your life which is kind of an important factor. It keeps the workforce engaged as well."

On college campuses, work and life are blended together. As millennials enter the workforce, they may be surprised to learn that work-life balance takes on a different meaning

when they are not constantly surrounded by their friends. They must learn how to balance their work with their life outside of work. Companies may be able to effectively retain millennials if they promote a healthy work-life balance with the understanding that millennials have different expectations as they leave college.

Millennial Motivation Factors

Another area of interest for our study was understanding what motivates each generation. Our survey revealed that there was significant difference in what each generation was motivated by. Survey participants were asked to rank how motivated they were by different factors. Four factors in particular were found to have the most significant difference across generations in our study. The factors were compensation, skill development, upward mobility and mentorship. Survey results revealed that millennials scored higher than the other two generations currently in the workforce at a statistically significant level. Pictured below in figure 8 is a comparison of motivation levels for each factor.

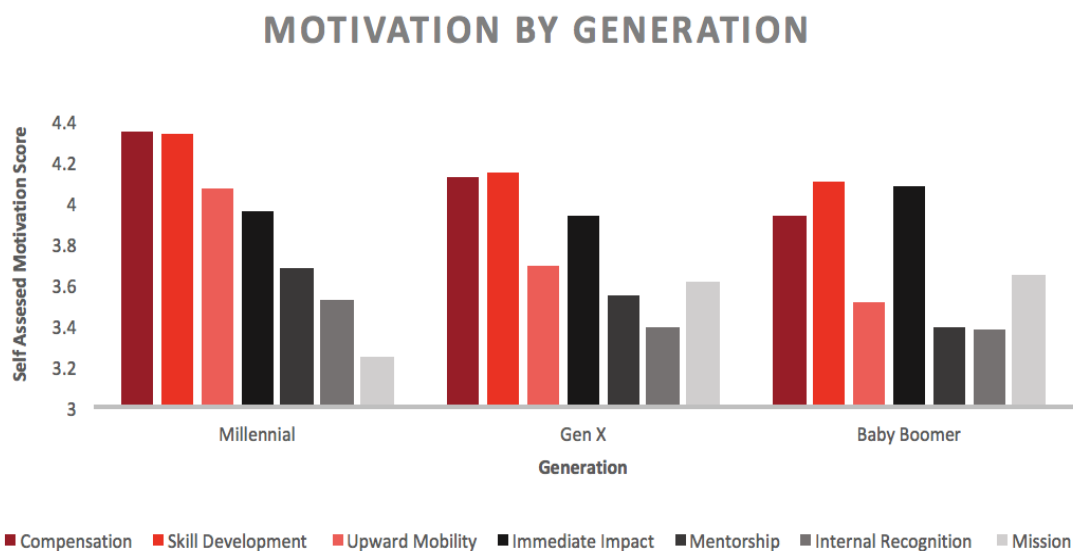**MOTIVATION BY GENERATION**

Figure 8: Motivation Score Comparison between seven selected factors

These obvious differences in motivation levels prompted the exploration of why this was the case. The next four sections will go in depth on what we found regarding millennial motivation as it relates to compensation, skill development, upward mobility, and mentorship.

Compensation

As seen in figure 9, our survey showed that compensation is the number one factor that motivates millennials. The difference in the mean motivation score across the generations are statistically significant as determined through ANOVA testing. The results are captured in figure 9 below.
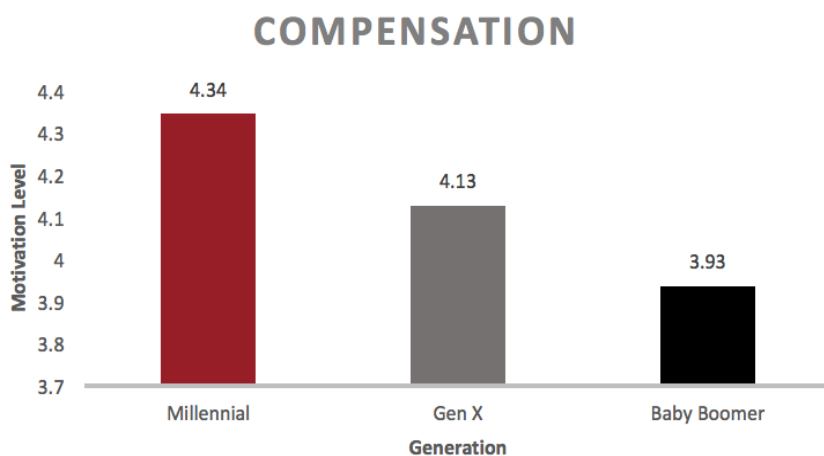
COMPENSATION

Figure 9: Compensation motivation level separated by respondent generation

As shown in figure 9, millennials are more likely to be motivated by compensation than Gen X and baby boomers. Our interview respondents elaborated on this finding when they were asked if they were motivated by compensation. In these conversations, we found that millennial employees in our sample are highly motivated by compensation, but only up to a baseline number. According to one millennial employee at a technology company of 50,000 - 100,000 employees, compensation is a motivating factor but not the only thing that is important. "To a

degree, yes. But that's not enough to motivate me day in and day out. Especially with engineering you're going to get compensated well enough regardless of which direction you go." After achieving a baseline number, millennials are less likely to be motivated by compensation. As described in the quote, engineers generally reach that baseline level early on in their career because of their technical backgrounds and relatively high compensation levels, nearly $20,000 dollars higher than the national average. As a result, compensation alone is not enough to retain employees.

Interview subjects shared similar sentiments when asked if receiving a better compensation offer from a different company would be a reason to leave their current company. With all interviewees, the answer was a resounding no because many felt that if they were happy, more money would not be a reason for them to leave. One millennial at a technology company of 50,000 - 100,000 employees voiced their thought process. "I'd say no...I'm happy with them and unless I became unhappy for a reason that I haven't experienced yet then no, I'm not going to leave with a better offer." For this employee and many other millennials, compensation is not the only factor that they consider when making the decision to leave their current company. Factors such as future skill development and the opportunity for upward mobility play a larger role in keeping them around.

Future Skill Development

Millennial employees are motivated by the opportunity for future skill development, which was found to be the second-most motivating factor based on our survey. As shown in the graph below, millennial employees in our sample were found to be more motivated by the opportunity for skill development than other generations. Through ANOVA testing, the

difference in motivation levels were found to be statistically significant. The results are captured in Figure 10 below.
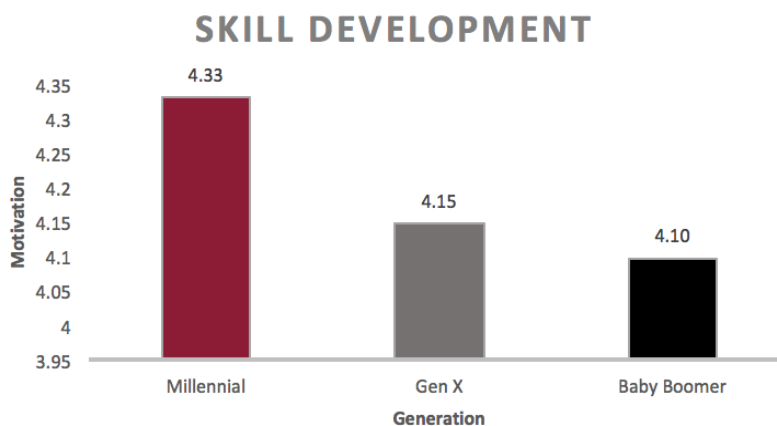
SKILL DEVELOPMENT

Figure 10: Skill development motivation level separated by respondent generation

As seen in the graph, millennial employees are more likely to be motivated by skill development than employees in previous generations. We asked millennial employees at large technology companies if they are motivated by the opportunity for future skill development. The interview responses aligned with the survey findings and helped to explain why millennials are more motivated by skill development. According to a millennial employee at a technology company with 50,000 - 100,000 employees, it is one of the factors that motivates them the most. "That's one of the bigger ones actually, because even if the particular role that I'm in is not my favorite, you're being put in a role to get skills and so you have to realize why you're in a role and what skills you're looking to get out of that role….you're becoming the best employee that you can be regardless of what role you're in". For this millennial, it is important to always be aware of the skills they are developing in each role so that they can get the most out of it in order to be a better employee. The interviewee explained that they are motivated to develop their skills

even if they are in a role that they do not necessarily want to be in. This explanation aligns with our survey results, showing that millennials want to learn and grow.

Other survey respondents elaborated on this finding even further. A millennial employee at a technology company with 1,000 - 10,000 employees explained the importance of constantly learning and developing skills even after college. "Learning as a whole is and has been very important to me. I found that after graduating [from college] I was getting bored doing the same things over and over. So developing skills and learning is a good motivator to maintain that motivation moving forward." In college, students grow accustomed to constantly learning and developing their skills through their schoolwork. When they enter the workforce, millennials may be expecting to be able to develop their skills in a similar manner. As explained by the interviewee, some millennials are under-stimulated when doing repetitive tasks for their jobs. The opportunity for skill development is a motivating factor and can help retain and engage millennial employees. Companies can provide employees with more variety in their job by allowing opportunities for skill development in order to engage their millennial employees.

Upward Mobility

Upward mobility is another major factor in Millennial Motivation. We found that millennials in our sample entered entry-level positions at technology companies with the understanding that they would not necessarily have an immediate impact in their company. Yet, they were motivated by the expectation that they would be promoted and would rise through the ranks. If companies did not offer these opportunities, millennials in our sample were more likely to leave the company in search of higher positions. Our survey revealed that millennials were more motivated by upward mobility than other generations at a statistically significant level. Figure 11 below displays the mean motivation scores of each generation in our sample.
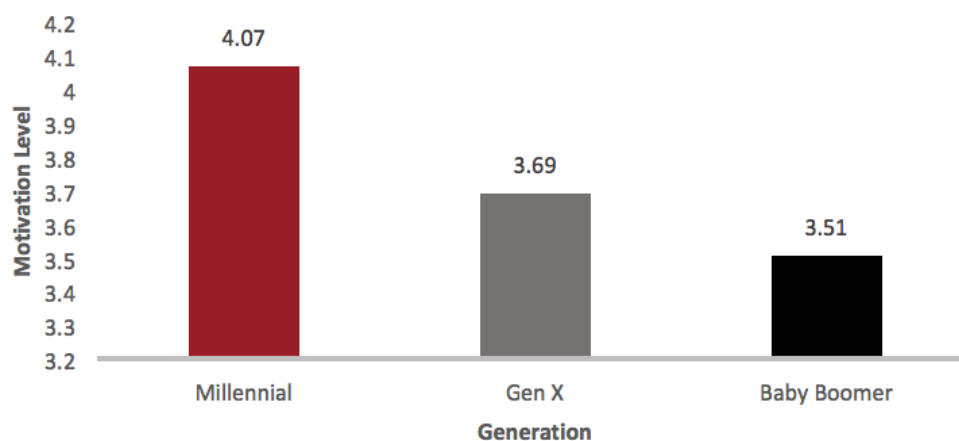
UPWARD MOBILITY

Figure 11: Upward mobility motivation level separated by respondent generation

We found millennials were motivated by the opportunity to have an impact on their direct work. They understood that they were not yet experts in the field, and therefore did not expect to have the responsibility to make important company decisions just yet in their careers. When asked if they have evidence that their work contributes to the overall success of the company, one interview respondent at a company of 50,000 - 100,000 employees, said that they do not have company-wide influence, but that they do feel that their work contributes on a smaller level in their company. "At this stage, with my experience, not so much, because you're talking about a company that makes billions and billions of dollars and huge decisions all the time. I personally have not been involved in any of those [decisions] so as of now it can be hard to feel that [my work contributes] but within my small segment of the company, yes." As explained by the interviewee, millennials in entry-level positions at large technology companies generally do not have influence in their current position, particularly as a result of the vast size of the company.

Though they do not currently have evidence that their work directly contributes to the overall success of the company, millennials may be interested in achieving that further down the line. Interview respondents suggested that they are motivated by future possibilities. We asked interviewees if the ability to influence decision making motivates them in the workplace. A millennial interview respondent at a technology company of 1,000 - 10,000 employees elaborated on their expectations for the impact that they will have in the coming years. "I have found my place in the company and I know what I can influence at this point. So knowing that I could influence more isn't something that motivates me immediately. I'm sure that in 5 years in the company I could be looking for more influence." Although this millennial is content in their current position, they are confident that they may want to pursue opportunities for influence in the future.

Moving forward, millennials may be more likely to stay with a current company if they are given opportunities to have more influence and responsibilities. For some millennial employees, this desire for more opportunities is something they predict they will pursue in the future. For others, it is something they are currently striving for. When asked the same question, another millennial at a technology company of 10,000 - 20,000 employees explained that upward mobility is currently a motivating factor for their career. "What motivates me is the responsibility, getting authorities, getting work, getting the ability to have challenges, and it is mostly responsibility…. which does not necessarily mean title". Interestingly, this particular millennial is not necessarily motivated by their title, but more so by their responsibilities. For millennials, the opportunities to have more responsibilities is a gateway for the opportunities for positional upward mobility in the future.

As millennial employees gain knowledge and skills in their position, they expect be provided with opportunities to have more of an impact. If company opportunities meet their expectations, millennials may be more likely stay. When asked if receiving a better offer at another company would motivate them to leave their current position, interview respondents said it would depend on how you define a "better" offer. One millennial respondent from a technology company of between 10,000 - 20,000 employees said explained that they would consider leaving their company for a position with more responsibilities at another company. "It could mean better offer - face value, money and vacation time, the benefits side - not really. I think if you look at better offer as more responsibility, yeah." According to the interviewee, if a better offer meant better compensation or a higher title, then they would be more likely to still want to stay at their current company. But if they were considering a job that had more influence and responsibility, that may be more of a reason to leave.

The pursuit of opportunities for influence and responsibility suggests that millennials want to have an impact. A millennial respondent from a technology company of over 100,000 employees explained that in the end they just want their work to have an effect on the company. "If I thought I could have more of an impact on a company's business I would leave my company to have more impact." This interviewee is motivated by the potential for future impacts on the overall success of the company and they plan to pursue the opportunities that will best allow that to happen. Companies may be able to better engage and retain their millennial employees by providing opportunities for more responsibilities and influence and by showing millennials how their work directly contributes to the overall success of the company.

Mentorship

We found that millennials in our sample are more motivated by mentorship than other generations at a statistically significant level as shown in figure 12 below.
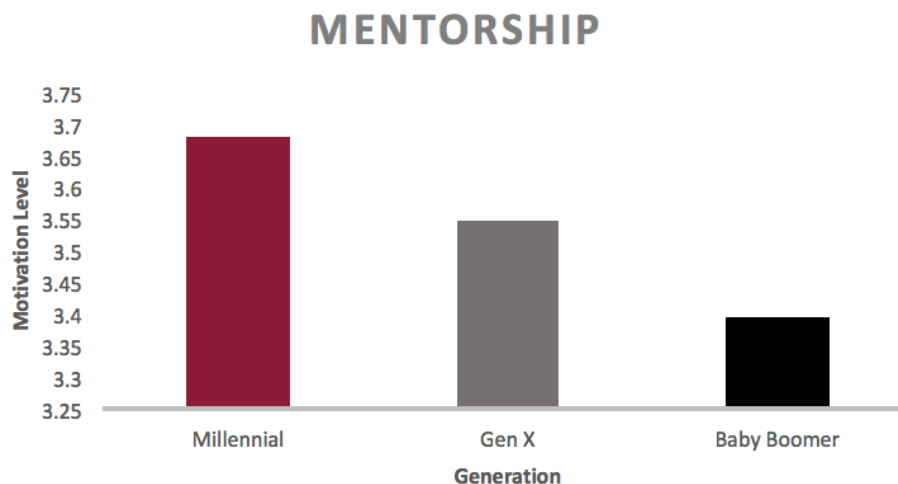
MENTORSHIP

Figure 12: Compensation motivation level separated by respondent generation

We found through our research that millennials are more accustomed to having mentor-like relationships than other generations. As a result, millennial employees enter companies with the expectation that they will receive frequent positive feedback, guidance, and reassurance. In some cases, millennials may depend on this encouragement to stay motivated. We asked interviewees if mentorship motivates them in the workplace. An employee of a technology company that contains between 1,000 - 10,000 employees explained how mentors help motivate by using words of encouragement. "Every now and again my mentor will say wow that was a good job, you did well there just keep doing what you are doing." This employee is motivated when mentors give positive feedback as a confirmation that they are on track with their work and doing a good job.

Mentors are useful to millennial employees because they can be a role model in and out of the office. When asked the same question, another interviewee of a technology company that

contains between 50,000 - 100,000 employees expressed appreciation towards their mentors.
"It's nice having mentors because you can really feed off their energy and the way they live. I
got involved in the mentor program and I already have four mentors in my company."
Millennials benefit from having mentors to look up to, and can mimic their energetic attitude at
work and their admirable lifestyles outside the office. There is no limit to the number of mentors
an employee can have, so mentorship has endless potential. This particular millennial recognizes
the benefits from having mentors and already has four mentors within the company.

Not only is mentorship beneficial for the mentee, it also has benefits for mentors.
Millennial employees are looking forward to be involved in the other side as they gain more
experience in their companies and become mentors themselves. When asked if they are
motivated by potential opportunities to become a mentors in the workplace, interview
respondents revealed their excitement about the prospect of being able to become a mentor. One
employee of a technology company that contains between 10,000 - 20,000 employees expressed
their enthusiasm. "I am in a spot where I can start mentoring newer people coming in…and I am
excited about that opportunity". Millennials, like this one, are entering positions where they have
enough knowledge and experience that they will be able to start mentoring less experienced
employees. More mentorship opportunities, both having mentors and being mentors themselves
will help to engage, motivate, and retain millennial employees.

We also found that some companies have also began to redefine mentorship by giving the
millennial employee the responsibility of mentoring senior leaders within the company. An
employee of technology company that contains over 100,000 employees described the unique
program. "I actually got a mentor when I exited the program. So technically I am mentoring
them but they are a senior leader, because they are trying to see what they can do to improve

millennial retention by having them mentor but I say we have a mentor-mentor relationship in which I kind of mentor him on how millennials think and he can actually provide obviously 30 years of experience that he can mentor me with." Although the millennial employee is the mentor, they still realize that the relationship is a two way exchange of knowledge, and there is the opportunity to gain just as much knowledge from their mentee. Millennials can learn from senior leaders within the company, and senior leaders can learn from millennials. When implemented effectively, this method gives the company an opportunity to close the gap between generations.

Company Culture

Strategies that companies use to retain and engage their millennial employees vary based on the culture of each company. According to research by professors Robert E. Quinn and Kim S. Cameron at the University of Michigan, organizational culture can be broken down into four different types: Adhocracy, Clan, Hierarchy, and Market. Through the use of ANOVA testing, our research found that specific cultures types were preferred by millennial employees in our sample.
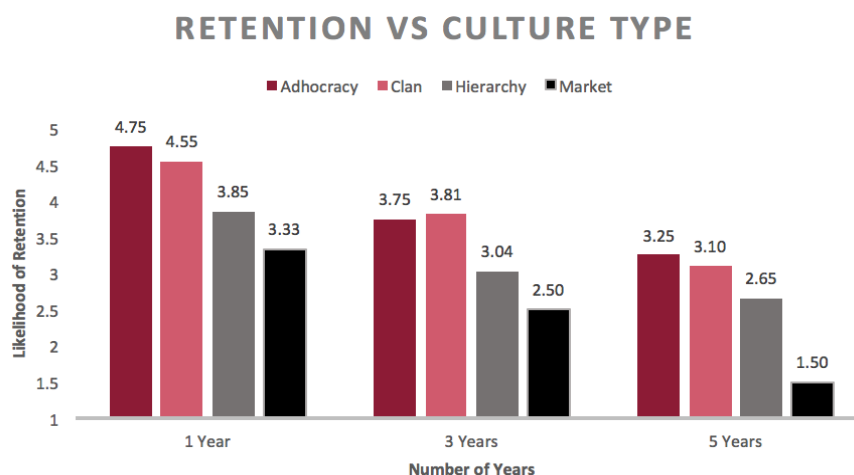

Figure 13: Retention likelihood levels across culture types

As shown in figure 13, millennial employees are more likely to plan to stay with their company for more than one year, three years, and five years when they work for a company that they describe as having adhocracy and clan culture types, and less likely to stay when working for a company with hierarchy and market culture types. Interviews with millennials working at large technology companies revealed this same sentiment. One interviewee currently employed by a technology company with between 50,000 to 100,000 employees described why the adhocracy culture type is important, particularly in the technology field: "The people working [in the technology sector] need a lot of creativity because you're coming up with ideas to try to improve existing process that have already had a lot of ideas being implemented". The adhocracy culture type at their company helps employees try new things and improve on existing engineering developments. The flexible and innovative traits of companies that have the adhocracy culture type are beneficial in the fast-paced and innovative environment in the technology sector.

Clan culture, which promotes collaboration and teamwork, is also highly beneficial and may be crucial to the retention of millennials. One interviewee explained their positive feelings towards the clan culture traits that their company exemplifies. "I've collaborated on pretty much every project that I worked on….you really can't get it done without working with different people or else you're just not going to do as good of a job. I have loved it". In a clan culture, the environment is very supportive and teamwork-oriented. Because of the friendly and supportive environment, this employee is very satisfied by their current company and plans on staying for the foreseeable future.

Although it was found that adhocracy and clan cultures are more effective at increasing the likelihood of millennial retention, some companies maintain hierarchy and market culture

types instead. In a hierarchy culture, work is very structured and employees are kept on track through struct rules and policies. An interviewee currently employed by a technology company with over 100,000 employees explained the regulative hierarchy culture they experience in their company. "Nothing gets passed without a plethora of red tape...none of those [projects] move forward unless there is a strict amount of supervision and funding behind it, and if you are in a different division of the company, you have absolutely no idea what is going on in other parts of the company, nor are you allowed to ask". The hierarchical culture that the interviewee describes is highly controlled with rules and policies that keep employees on track. The employee also mentioned a frustrating lack of communication between different areas of the company.

Similar to the hierarchy culture, market culture is also highly controlled. In a market culture, competition and completion of goals are highly valued. An interviewee from a technology company of over 100,000 employees described their company as having a "very competitive" culture, and summed up the goal-oriented process that they follow. "You are mostly just rewarded on results. In what manner those results are delivered does not matter...we have pretty rigorous processes we have to follow mostly because of the sensitivity of the data that we have. But it also does prevent you from being able to experiment and try to be innovative at the same time, though it is hard to find that balance sometimes." As described by the interviewee, it does not matter how employees achieve the necessary goals, and they are held to high standards of achievement. On the down side, the rigid processes that employees must follow can inhibit them from pursuing experimentation and innovation.

The hierarchy and market culture types, which both promote structure and controlled procedures, may conflict with the traits of millennials. Both the hierarchy and market culture types restrict employees from information. Millennials, who have grown up in a world where

they have constant access to almost unlimited information at their fingertips, may respond negatively to this lack of workplace transparency. Additionally, both culture types and rely on traditional structures and processes. Millennials, who have been described as being entitled with little respect for authority, tend to challenge the status quo and question these traditional structures. Companies may benefit from reevaluating the culture types that they value and promote as they work to better engage and retain their millennial employees.

Company Development Programs

As seen in our findings, company development programs had a statistically significant effect on whether an employee stayed with a company for three years and five years. Figure 14 below summarizes the trends by year.
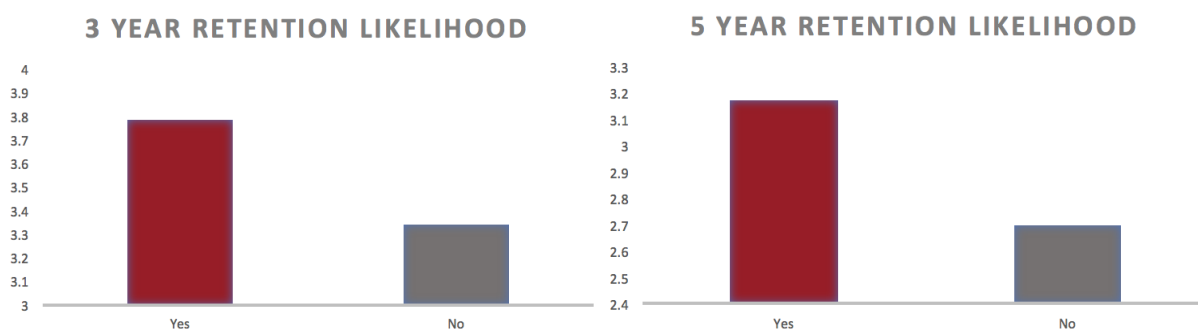
Figure 14: Retention likelihood comparison between those in company development programs and those who were not part of these programs

As shown in our findings, millennials were more likely to plan to stay with a company for three years and five years if they had participated in a company sponsored development program. For current participants in programs, it is likely for them to plan to stay with the company for the duration of the program which may increase their likelihood of staying for three years. But programs rarely last more than five years. The increase in five year retention likelihood for program participants indicates that even after the conclusion of development

programs, those millennials are still more likely to plan to stick around. Millennials who participated in programs had the opportunity to develop useful skills and experience a wide range of backgrounds.

Program participants reported having many takeaways from the program including a connection to their company, knowledge of their company, skills in their discipline, interdisciplinary skills, career advancement, and motivation. Survey respondents who participated in development programs were asked to rate the skills they gained on a scale from 1-5. The mean score of these skills are found below in figure 15.
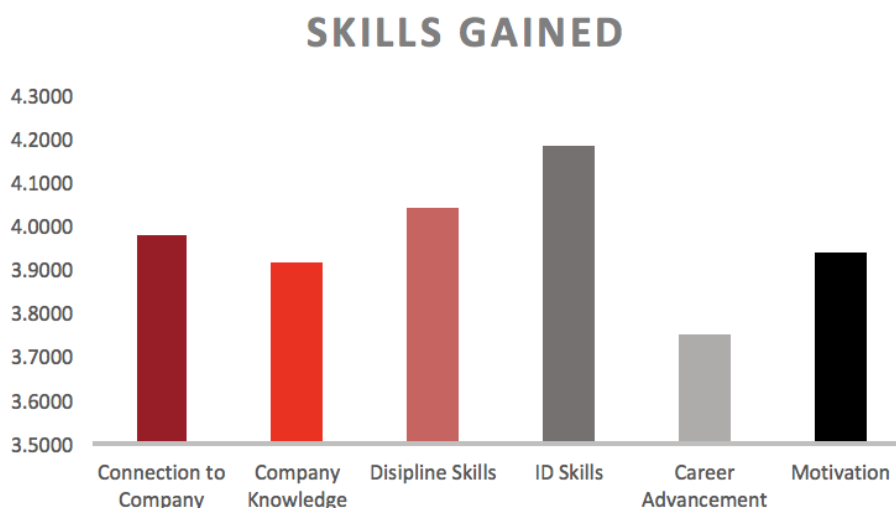
SKILLS GAINED

Figure 15: Top skills gained in company development programs

Interdisciplinary skills was the top skill employees learned through the program. This aligns with our research because many company development programs put a high focus on interdisciplinary skills. Incorporating rotations in programs is a method that has become widely used around technology companies across the country. An interviewee currently employed by a technology company with over 100,000 employees described their opportunities to work in different areas of the company.

"The biggest thing I took from it was the experience of working with two different teams within a year of being out of school and I specifically tried to choose two very different teams within the company so I could have a wide range of experience as well as I looked for very different managers and team style so I could have an idea of what is what like across the company instead of in a single niche in the team."

As explained by the interviewee, rotational programs allow employees to rotate between different departments and locations in order to have a better understanding of the company as whole and gain skills outside their discipline. The experience gives employees the freedom to try new roles and provides opportunities to move to a different sector within a company if they like a role that is different from what they initially planned.

The survey results showed that the second most skill that employees gained through their programs was disciplinary skills. Companies undoubtedly want their employees to improve skills related to their direct positions and therefore focus on that as a main part of programs. Many employees come into the program with high levels of theoretical knowledge in a specific topic. These programs allow for these employees to become masters in their discipline.

By being a part of a company development program, we found that millennials in our sample felt more connected to their company. In their programs, they had opportunities to gain a better understanding of the mission of the company. In many instances, programs provide the opportunity to be paired with employees at other company offices in different locations. These connections with fellow employees helped participants feel more connected to the company. An interviewee from a company with over 100,000 employees described the networking opportunities they had. "It definitely has given me exposure to a lot of good people, a lot of good contacts and it's a massive company." In addition to being more connected in the company and having more networking opportunities, program participants were more motivated as a result of participating in a development program. For some employees, this may result from having a better understanding of the company mission. For others, it may be as a result of being more

motivated by skill development both within their discipline and across multiple domains. An interviewee from a company of between 1,000 - 10,000 employees explained how learning and skill development motivates them. They stated,"Developing skills and learning is a good motivator to maintain that motivation moving forward. Its funny how that works". Company sponsored development programs may vary depending on the company. One employee we interviewed described a program that is very different from most other development programs. This program is sponsored by the company, and is run in a structure that is similar to student-run organizations at universities. The interviewee from a company of 10,000 - 20,000 employees shared their experience being part of the unconventional development program.

> **"**We have a 'Young Professionals' group, which is funded by the company. We have a budget and it is very similar to a student organizations that we have a group, we have members, we have a budget, we bring in speakers we hold social events. It is sponsored in the sense that they pay for it but ultimately it is us who run it... It has given me a lot of opportunity to step up and "excuses" for reaching out to leadership... it has given me a lot of excuses to go to are chief marketing officer .. and by doing that I can learn... it has opened me a ton of doors because people are willing to help and now they know my name".

Rather than having their new hires participate in a classic company-run development program, participants are responsible for leading the program. They are expected to hold leadership development meetings, create networking functions, and hold social events as they see fit. This method provides opportunities for motivated employees develop interdisciplinary skills and even take on leadership initiatives. Unique aspects of development programs like this one may be helpful to reference when implementing strategies for retaining and engaging millennial employees.

5. Conclusions and Recommendations

We can conclude that millennial employees tend to be more likely to stay at large technical companies which display characteristics of an adhocracy or clan culture. Our findings suggest that this could be attributed to higher millennial engagement levels within the collaborative, innovative, and supportive environments. These culture types play to millennial strengths and mimic the environment that millennials have grown up to expect. We understand that culture change in a large organization is very challenging and may not be feasible due to the nature of the work. However, we recommend that companies who want to better retain their millennial employees introduce a more energized and collaborative environment that is less structured and competitive. This can be achieved through small changes in the office environment. One idea is the creation of an open office layout that promotes more discussions and opportunities for collaboration; two things that are essential for the creation of a clan style work environment. Opportunities like working discussion lunches can be beneficial to millennial employees because it promotes collaboration and the exchange of ideas in an informal manner.

Based on our findings we can also conclude that compensation, skill development, upward mobility, and mentorship are the four specific areas of a company's culture that impact millennial engagement the most. We concluded that millennials are motivated to reach a certain compensation level. However, once the compensation hits that threshold, there is no longer a correlation between motivation and compensation. Our findings show that compensation is a factor that should be considered when negotiating a contract with millennials, however should not be used as an incentive for retention within a company. We recommend that companies look into different incentive strategies such as: flexibility of work hours, company perks, and opportunities to give back to the community. These non-monetary methods of compensation

should be considered when putting together a compensation package that prioritizes the retention of the millennial generation.

We can also conclude that skill development is an important engagement factor. Our research showed that cross discipline skill development for millennials is one the biggest motivating factors. We found that millennials perceive skill development programs as beneficial because they allow each employee to gain a competitive edge by preparing them to advance within their company. We highly recommend that companies implement a variety of skill development programs. These programs could range from company sponsored internal opportunities to external conventions or workshops and should allow employees to work on their interdisciplinary skills on a continuous basis. Additionally, company subsidization and promotion of skill-based certifications or an advanced degree could motivate millennial employees. These programs should strive to promote continual development of skills and not just in their first few years in the company.

Another motivating factor is the creation of chances for upward mobility within a company. We can conclude that millennials want to make a direct impact on their company and aspire to climb the corporate ladder. They want a sense of responsibility and purpose in their work regardless how trivial. We recommend that companies give their employees a sense of ownership in their work. This can be implemented by giving them ownership of a leadership programs within the company, such as a young professionals organization or by giving millennials the opportunity to present project updates and ideas during an executive meeting. The key concept that companies should employee is providing opportunities for millennial employees to see the value in their work. If they see a clear path to success and can identify opportunities for advancement within the company, they will be more motivated to stay with that company.

We can also conclude that mentorship is an effective strategy for helping to motivate millennial employees. While many companies have classic mentorship programs that allow more experienced employees to mentor less experienced employees, it may be beneficial for companies to encourage different styles of mentorship. We recommend the implementation of unconventional mentorship programs such as a reverse mentorship program since they promote the frequent exchange of ideas between employees. Not only do our findings show that mentorship engages millennials at higher rates than other generations, it also shows that mentorship offers opportunities for millennials to develop skills and connections throughout the company.

Further Research Opportunities

Our research revealed further opportunities for study related to what companies can do to better retain and engage millennial employees in large technology companies. Because organizational culture is an important factor for retaining millennials, it is important to ensure that prospective employees fit in with the existing company culture before a company invests in them. Therefore, one area of study that we recommend is investigating hiring strategies for millennials. Research could be done to find the most effective hiring practices for ensuring that a millennial employee will fit into an organization's culture.

Leadership development programs have high costs associated them so it is important to know that the investment is worth the return. To ensure that they are worth the investment, further research could be conducted on the effectiveness of company sponsored leadership development programs. Research should attempt to understand the impact that leadership programs have on millennials engagement and motivation levels, both during and after the completion of the program.

We found that once millennials reach a certain compensation level, they are less likely to be motivated by increases in salary. Therefore, further research can be done to find where that specific threshold is so that companies can understand when and how to use monetary compensation to better retain employees. Research could investigate if such a threshold exists and could attempt to understand whether this "threshold" is completely subjective employee to employee. Companies can use that information to structure their payment and promotion strategies based on millennial desires in order to save on salaries expenditures and better retain millennial employees.

Index

1. **Large Technology Company** is a company defined over 500 employees, over 7 Million in receipts and has a focus on technical pursuits. (Source)

2. **Company Culture** is the values and behaviors that contribute to the unique social and psychological environment of an organization. Organizational culture includes an organization's expectations, experiences, philosophy, and values that hold it together, and is expressed in its self-image, inner workings, interactions with the outside world, and future expectations. It is based on shared attitudes, beliefs, customs, and written and unwritten rules that have been developed over time and are considered valid. (Source)

Appendix A: Survey Questions and Procedure

Survey Distribution Method:

_____We were given a list by the WPI Office of Alumni Relations that included over 30,000 alumni who met the loose demographic that we hoped to reach. The survey was then distributed to 3,400 selected alumni via email.

Survey Questions:

Demographic Questions

1. Please select your sex
   a. Male
   b. Female
   c. Other/Intersex
   d. Prefer not to say
2. Please select your age range
   a. 18-25
   b. 26-35
   c. 36-45
   d. 46-55
   e. 56-65
   f. 66-75
   g. 76+
   h. Prefer not to say
3. Company Size (People)
   i. <1000
   ii. 1001-10,000
   iii. 10,001-20,000
   iv. 20,001-50,000
   v. 50,001-100,000
   vi. 100,000+
4. What state is your current office located?
   i. (drop down menu of the 50 states or other /fill-in/)

5. Current Role
   a. Entry Level Position

      b.   Lower Level Management

      c.   Middle Management

      d.   Upper Management

      e.   Management Consultant

      f.   Board of Directors Member

      g.   Other [write in position]

      h.   Prefer not to say

6. How many years have you been in your current company?

      a.   Less than 1 year

      b.   1-3 years

      c.   4-10 years

      d.   11-15 years

      e.   16+ years

           i.   ***Prompt: If they select more than 3 years…***

               1.   How many positions have you had in your current company?

1. On a scale of 1 to 5 how likely are you to stay with your current company for more than a year? (1 being least likely and 5 being very likely)

2. On a scale of 1 to 5 how likely are you to stay with your current company for more than 3 years? (1 being least likely and 5 being very likely)

3. On a scale of 1 to 5 how likely are you to stay with your current company for more than 5 years? (1 being least likely and 5 being very likely)

4. My company *promotes improvement of processes* (1 being strongly disagree and 5 strongly agree)

5. My company *engages talent across the organization* (1 being strongly disagree and 5 strongly agree)

6. My company *inspires innovation*(1 being strongly disagree and 5 strongly agree)

7. Pick the word(s) that best describe your company culture.

      1.   Collaborative

      2.   Energized and Creative

      3.   Competitive

      4.   Structured and Controlled

8. Pick the word(s) that best describes employees at your company.

      1.   Active and involved

      2.   Goal Oriented

      3. Risk Takers

      4. Systematic

9. Pick the word(s) that best describes leaders at your company.

      1. Entrepreneur

      2. Demanding

      3. Mentor

      4. Supervisor

10. Pick the set of values that best aligns with your knowledge of your company's values.

      1. Profitability and Market Share

      2. Teamwork, Communication, and Consensus

      3. Consistency and Uniformity

      4. Change and Agility

11. My company values work-life balance.

      1. (1 strongly disagree and 5 strongly agree)

12. This company is very supportive of change.

      1. (1 strongly disagree and 5 strongly agree)

13. It is easy to get things accomplished in this company.

      1. (1 strongly disagree and 5 strongly agree)

14. Most employees in this company are encouraged to make suggestions for improvement.

      1. (1 strongly disagree and 5 strongly agree)

15. Employees are encouraged to take initiatives and make decisions on their own.

      1. (1 strongly disagree and 5 strongly agree)

16. My organization is intentionally enhancing and increasing collaboration

      1. (1 strongly disagree and 5 strongly agree)

17. My organization is intentionally enhancing and increasing competition

      1. (1 strongly disagree and 5 strongly agree)

18. My company is effectively developing the types of leaders who have the capabilities necessary to lead the company in a digital environment.

      1. (1 strongly disagree and 5 strongly agree)

19. Have you ever been part of a company sponsored development program? (i.e. leadership development program, professional training program, rotational program….etc) If yes prompt question 26

      1. Yes

      2. No

3. Prefer not to say

20. Please rate how strongly you agree or disagree with each of these statements: (Strongly disagree, disagree, neutral, agree, strongly agree)

    1. As a result of the program…

        i. I became more connected to the company.

        ii. I learned more about the company.

        iii. I learned skills that directly applied to my discipline.

        iv. I learned skills that extended outside my discipline.

        v. I learned more about how I could advance my career within the company.

        vi. I was motivated to continue my career with the same company.

21. On a scale of 1 to 5 how motivated are you by…

    1. Compensation?

    2. The opportunity for skill development?

    3. The opportunity for internal company recognition?

    4. The opportunity for upward mobility?

    5. Company mission and values?

    6. Opportunity for immediate impact?

    7. Mentorship?

22. I understand how my work directly contributes to the overall success of the organization.

    1. (1 being strongly disagree, 5 being strongly agree)'

23. I would refer an individual to work for my company.

    1. (1 being strongly disagree, 5 being strongly agree)'

24. I believe the leadership team values my opinion/ideas.

    1. (1 strongly disagree, 5 being strongly agree)

25. I am being challenged in my current role?

    1. (1 being underchallenged, 5 being very challenged)

26. Are you aware of your company's strategic plan?

        i. Yes

        ii. No

27. *Prompt: If they answer yes…*

        i. Does your company emphasize strategic planning?

            1. Yes

            2. No

            3. Unsure

    4. Prefer not to say

1. I understand how my work directly contributes to the overall success of the organization.
   a. (1 strongly disagree and 5 strongly agree)
2. Most managers have an effective interpersonal skills.
   a. (1 strongly disagree and 5 strongly agree)
3. Does your leadership team value your opinion/ideas?
   a. (1 strongly disagree and 5 strongly agree)

Appendix B: Interview Procedure

Interview Protocol:

  All data will be stored, password protected, on Google Drive. After the project is completed, all data will be destroyed. Interviews will be transcribed and a report will be sent to the interviewee to verify the information is correct. Digital copies of interviews will be kept on the Google Drive if consent is given to record. No identities will be revealed.

Interview Consent Script:

Hello, we would like to invite you to participate in our interview. This interview is a part of our research for our Major Qualifying Project (MQP). Based on your preference you will be interviewed in a face-to-face setting or through a web-based platform. The purpose of the research is to identify the best practices of organizational strategy that promote employee engagement with a focus on retaining millennials. The results of our research will be published in our MQP paper in Spring of 2018. We seek to gain a better understanding of internal perspectives based on your first hand experience. This information will enrich our analysis. Answering the interview questions will take approximately fifteen minutes. The interview questions will be provided in advance. All interview results will be stored, password protected, on Google Drive. After the project is completed and presented at the Foisie School of Business MQP Presentation Day on April , all data will be destroyed within 48 hours. Interviews will be transcribed and a report will be sent to you to confirm the accuracy of the information and invite your additional comments as appropriate. Digital copies of interviews will be kept on the Google Drive if consent is given to record. This interview is anonymous; names, addresses, and any other information that may reveal your identity will not be published. We will secure your written expressed permission to quote any of your responses in our MQP paper and poster. Please be aware that this interview process is completely voluntary, and you may skip any question(s) that you do not want to answer. If you have questions about our research for our MQP or the interview process you will participate in, please contact our group at COSMQP@wpi.edu and we will do our best to provide further clarification.

Interview Procedure:

1. Before starting the interview make sure each group member is aware of their role.
2. Chose a setting for the interview that fits the tone of the interview.
3. Begin the interview by each member introducing themselves to the interviewee and reading the consent script.
4. The lead questioner should then introduce the topic of the interview, lay out the ground rules and build rapport with the interviewee.
5. Once that is complete begin the interview
6. At the end of the interview the lead questioner should thank the interviewee and ask if he would like to receive a report and transcript of the interview.
7. After the interview, each group member will type up their notes on a shared google doc and a transcript will be prepared if the interview was recorded.
8. A transcript will be sent to the interviewee and advisors.

Appendix C: Interview Questions

<u>Company Culture</u>

1. Which of the following word(s) best describe your company culture and why?
    a. Collaborative
    b. Energized and Creative
    c. Competitive
    d. Structured and Controlled
2. How would you describe employees at your company?
3. Do you seek a company that promotes work-life balance? Why or why not?
4. Are you expected to make decisions on your own? Please describe an instance if yes.
5. How often do you collaborate in the workplace?
6. How would you describe your managers interpersonal skills?
7. Does your leadership team value your opinion/ideas? How?
8. Are you rewarded for collaboration and if so in what way?
9. Is your work environment competitive? Why or why not?

<u>Engagement</u>

1. Have you ever been part of a company sponsored development program?
    a. If yes,
        i. Please describe your experience with the program.
        ii. What did you learn from the program?
        iii. How did the program help you in your company?
2. What motivates you in the workplace?
    a. Compensation?
    b. Future skill development?
    c. Recognition/Rewards?
    d. Ability to influence decision making?
    e. Mentorship?
    f. Mentoring others?
3. Would receiving a better offer from another company be a reason for you to leave your company?
4. Do you have evidence that your work directly contributes to the overall success of the company?

Appendix D: Data Preprocessing

The Alumni Survey was Preprocessed in the following ways:

- Created a full data set tab that contained all data unaltered

- Created a copy of full data tab and named it edited data. All preprocessing was done to this tab.

- Sorted based on completeness of survey (Deleted 90 responses that were not completed)

- Deleted empty columns that had non relevant information (Survey first name, last name, respondent email)

- Renamed Columns for ease of reading

- Removed responses from 75+ range because there were only 2 and were not relevant to study

- Removed prefer not to say for age because there was only 2 responses and this data was not useful for our study

- Created grouping that took in age and display either millennial, Generation X, or Baby Boomer

- Created grouping for culture types in column Z based on survey responses in Y
    - Clan Culture = Collaborative
    - Hierarchy Culture = Structured and Controlled
    - Adhocracy Culture = Energized and Creative
    - Market Culture = Competitive
    - Mix = More than one response

- Created millennial data set tab based on age grouping that only included millennials

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