

Mountain Plains Journal of Business and Technology

Volume 21
Issue 1 *Highlighting Leadership*

Article 6

Date Published: June 2020

Managing Millennial Turnover in the IT Industry: Leading with an “Inside-Outfluence” Approach

Travis J. Hollman
University of Nebraska at Kearney, hollmant@unk.edu

Kyle W. Luthans
University of Nebraska at Kearney, luthanskw@unk.edu

Follow this and additional works at: <https://openspaces.unk.edu/mpjbt>

 Part of the [Human Resources Management Commons](#)

Recommended Citation

Hollman, T. J., & Luthans, K. W. (2020). Managing Millennial Turnover in the IT Industry: Leading with an “Inside-Outfluence” Approach. *Mountain Plains Journal of Business and Technology*, 21(1). Retrieved from <https://openspaces.unk.edu/mpjbt/vol21/iss1/6>

This Conceptual Work is brought to you for free and open access by OpenSPACES@UNK: Scholarship, Preservation, and Creative Endeavors. It has been accepted for inclusion in Mountain Plains Journal of Business and Technology by an authorized editor of OpenSPACES@UNK: Scholarship, Preservation, and Creative Endeavors. For more information, please contact weissell@unk.edu.

MANAGING MILLENNIAL TURNOVER IN THE IT INDUSTRY: LEADING WITH AN “INSIDE-OUTFLUENCE” APPROACH¹

TRAVIS HOLLMAN
UNIVERSITY OF NEBRASKA AT
KEARNEY

KYLE LUTHANS
UNIVERSITY OF NEBRASKA AT
KEARNEY

ABSTRACT

This paper proposes a new perspective for leaders to consider for strategically managing the turnover problem of millennial employees in the Information Technology (IT) industry. Using a combination of the existing relevant literature and interviews of experienced IT managers, the purpose of this research is to identify and synthesize not only the problems, but also the best practices of managing and retaining millennial IT talent. Based upon qualitative data, emergent themes were identified and then reviewed against the existing body of literature covering millennial employees’ retention and turnover in the IT industry. Areas of common ground were integrated to propose a conceptual model, which we call the “Inside-Outfluence” approach, for effectively managing and retaining millennial talent in the IT industry.

This proposed Inside-Outfluence management approach seeks to mitigate employee turnover by empowering managers to establish meaningful relationships with employees through two-way, interactive communication and individual considerations. It disregards stereotypes. It views the manager’s role as that of (a) a *conversation initiator* who is responsible for developing trust and meaningful relationships and (b) a *coach* who is responsible for using this information to tailor a unique personal development plan for each employee. It views the IT organization as a fluid culture made up of a collection of unique individuals and relationships having a new paradigm “Outfluence” contained *inside* a relatively fixed set of ideological boundaries. By fostering frequent conversations and individual flexibility within these organizational boundaries, individuals are encouraged to organically optimize their relationships with each other, and thus, the culture of the organization as a whole. We contend that such an Inside-Outfluence approach will result in engaged and more productive IT employees in general, and millennial employees in particular, who will feel more loyal and connected with their organizations, their colleagues, and their managers. Ultimately, it is suggested that this new conceptual approach will strengthen the psychological contract between an IT organization and its human capital and improve the retention of its millennial employees.

Keywords: management; leadership; millennials; turnover; IT; information technology

INTRODUCTION

A growing number of millennial anecdotes pervade casual conversation among Information Technology (IT) managers. The tone oscillates from somber and frustrated to challenged but hopeful. A common theme of concern is that millennials are leaving their IT employers. Managers and business owners are struggling to understand why it is happening and

¹ Submitted: 25 Nov 2019; Revised: 17 Mar 2020; Accepted: 26 Mar 2020

what they can do to minimize it. We spoke with one CEO who succinctly illustrated the confusion and frustration of the situation: “Our millennial programmer told us things were going great. Two weeks later, he quit. What am I supposed to do with that?”

Millennials make up a large and increasing share of the rapidly growing IT industry (U.S. Department of Commerce, 2016; Csorny, 2013). According to a comprehensive study across all industries by the Gallup Organization (2016), 21% of millennials changed jobs within the last year, accounting for three times as many job switches as any other generation. A considerable 55% were not engaged, meaning they were not “emotionally and behaviorally connected to their job and company” (6). Sixty percent were open to different job opportunities, which was 15 points higher than any other generation. The problem is compounded in the IT industry, which has relatively high turnover to begin with and is dominated by the millennial generation. Switching jobs is ubiquitous in IT, and it has been for quite some time. At the turn of the century, an estimated one-fifth of IT workers switched jobs on a yearly basis (Whitaker, 1999), and there is evidence suggesting that annual turnover of IT employees approaches 25 to 35% in larger companies (Westlund & Hannon, 2008).

Because IT workers tend to have specialized, hard-to-replace skills, the cost associated with replacing these workers is especially significant—up to two and a half times the original worker's annual salary (Horwitz, Heng & Quazi, 2003). To the extent that IT human capital is rare, difficult to imitate, non-substitutable, and creates value for an organization, managers have a compelling reason to retain IT talent as a source of competitive advantage (Ferratt, Agarwal, Brown, & Moore, 2005). In a trillion-dollar industry (“IT Industry Outlook”, 2016) that is characterized by high turnover and vulnerable to job-hopping millennials, it follows that managers are becoming increasingly desperate to find solutions and new thinking. For instance, are IT millennials frequently changing jobs because of some unique generational quirk? And if that is true, then should IT managers treat them differently than they treat workers from other generations? On the other hand, perhaps managers could do a better job of acclimating their younger employees to existing company cultures and policies?

Within the research community that studies IT personnel, “individual voluntary IT turnover is one of the most-examined phenomena” (Zylka & Fischbach, 2017). Even so, there is a paucity of literature that examines the triad of IT, millennials, and turnover under one umbrella. Recent research has started to fill the void. For instance, George & Wallio (2017) studied turnover intentions for millennials in the public accounting environment while Pant & Venkateswaran (2019) looked even more specifically at psychological contract expectations of millennials “from nine information technology and business process management companies.” Still, the overall shortage of millennial turnover in the IT industry is worth noting because it has not been established that findings on turnover in one industry context or in one generational context will translate to similar findings for millennial IT workers. For instance, there is reason to believe that IT is a unique industry that should be examined and managed within its own context (Joseph, Ng, Koh, & Ang, 2007). The potential benefits of finding an ideal management model for this unique group warrants further exploration.

LITERATURE FOUNDATION

Authors Neil Howe and William Strauss have been widely credited for defining the term “millennials” (“15 Economic Facts”, 2014). Whereas they defined it as the generation that was born after 1982 (Howe & Strauss, 2009), an informal sampling of more than a dozen other academic and popular press sources resulted in a loose consensus that defined millennials as those born on or after 1980 and up to the year 2000. This generation now represents about one-third of the total U.S. population, making it the largest generation in the U.S. (“15 Economic Facts”, 2014).

On its own, the millennial generation has been researched quite regularly (Thompson & Gregory, 2012; Twenge, 2010). Similarly, a review of the literature on IT workers (i.e., “knowledge workers”) can be traced back several decades (Drucker, 1959). Prior research has also examined turnover of employees in the IT industry, but without regard to generation. For instance, existing research has, with mixed results, looked at the connection between how well an organization can meet employee expectations (person-job fit) to avoid discontentment and eventual turnover (Wingreen, LeRouge, & Nelson, 2017). However, a review of the literature revealed a dearth of research related to managing millennial turnover in the IT industry. Given this scarcity in the literature, the purpose of this exploratory qualitative study is to identify the antecedent variables which impact millennial IT worker turnover and, based upon interviews of practicing IT business owners and managers, propose an organizational framework for improving the retention of these valuable human capital assets.

IT Employee Turnover

Because the demand for skilled technical workers is strong, experienced IT professionals can find new jobs, creating a high potential for turnover (McKnight, Phillips, & Hardgrave, 2009). Given the relative lack of research on this important topic, a logical place to begin the literature review was with the examination of IT employee turnover, without regard to generation. Ferratt et al. (2005) contributed to the study of IT turnover literature by examining the impact of different human resource management (HRM) configurations on the retention of IT workers. In this study, the researchers found that firms which utilized a human-capital focused (HCF) bundle of HRM practices had significantly lower rates of IT worker turnover when compared with a task-focused (TF) configuration. In firms that employed the HCF strategy, special emphasis was placed on developing a longer-term orientation and relational focus among their IT workers. In these organizations, importance was placed on the implementation of HR policies and practices designed to build employee commitment through increased career development opportunities, promotion from within, and greater worker participation.

This approach was also characterized by lower starting salaries and less emphasis on immediate financial incentives. Instead, greater concern was placed on mentoring, development, and individual consideration for IT workers. The average annual turnover for IT professionals in these firms was 10.3%. In contrast, the TF pattern reflected a short-term orientation and transactional focus. Starting salary was relatively high, but mentoring, development, overall support, and promotions were relatively low. The companies which utilized a TF configuration had an average of 14.5% annual turnover for IT workers.

Because IT employees are often perceived as being more loyal to their profession than they are to their employer, McKnight et al. (2009) examined the impact of job and workplace characteristics on their turnover intentions. Specifically, the researchers found that job characteristics such as skill variety, feedback, autonomy, and task identity had a significant and inverse relationship with the turnover intentions of IT workers. In addition, job satisfaction and work exhaustion were found to mediate the effects of job characteristics on turnover intention. However, as hypothesized, workplace characteristics such as trust in senior management and information sharing demonstrated an even greater impact. Beyond job design strategies, the results from this study suggested that effective IT managers should emphasize workplace contextual variables which can positively influence IT worker retention. Fostering trust and implementing policies and practices that create perceived fairness in the workplace were found to positively impact job satisfaction, and ultimately, the loyalty of IT workers.

Joseph et al. (2007) provided a systematic appraisal and integration of research studies which have examined IT worker turnover. Their meta-analytic review of 33 studies uncovered four important observations. First, they found that prior research has primarily focused on intentions to quit and not actual turnover behaviors. Second, the researchers argued that most of the literature was too broad and unstandardized. Third, they pointed out that a majority of the research was lacking in turnover antecedents specific to the IT industry (e.g. the ability to telecommute); they contended that what led to turnover in another industry did not necessarily apply to the IT industry. Fourth, they found that virtually all studies relied on March and Simon's (1958) theory, which explained turnover as a result of the employee's desire to move and ease of movement. On a practical level, the Joseph et al. (2007) study indicated a need for further empirical study of turnover causes and of turnover mitigation strategies within the IT industry.

Generational Turnover Patterns

Many complexities must be considered when hiring and retaining employees. Contemporary research suggests that these complexities become more pronounced when recruiting and retaining members of the millennial generation. For example, Thompson and Gregory (2012) reported that millennials are more likely than members of other generations to switch jobs. In a 2010 study conducted by the Pew Research Center, 60% of employed millennials indicated that it was very unlikely that they would remain with the same employer for their entire careers. In a separate cross-sectional study, Cennamo and Gardner (2008) found that millennials were more likely to have thoughts of leaving their company when compared to baby boomers. Research has also suggested that millennials value work-life balance and are less likely to be as work-centric. In comparing generational differences, Twenge (2010) conveyed differences among respondents along generational lines when asked questions like "I would quit my job if I inherited a lot of money" and "I expect my work to be a very central part of my life."

Poor "fit" has been identified as one possible cause for turnover. It has been found that, across multiple generations, poor fit between organizational and individual work values can lead to increased turnover intentions (Cennamo & Gardner, 2008). Twenge (2010) made a useful contribution to the review of generational work values by examining the vast amount of published research that existed on the topic. Twenge found that all but a few studies relied on cross-sectional rather than time-lag methods. This was an important finding given that the cross-sectional studies

did not determine whether the differences in work values were due to generational membership or due to age or career stage. Several additional useful facts emerged from the Twenge study:

- Younger generations “express a weaker work ethic, believe that work is less central to their lives, value leisure, and seek more freedom and work-life balance than their Boomer counterparts” (204).
- Millennials, along with Generation X, scored higher in traits considered to be “individualistic.”
- Multiple generations were found to be relatively similar in their attitudes toward leaving companies. Millennials were actually more satisfied with their jobs than older generations. The difference came when examining “initial intentions and behaviors” (206). Although millennials generally liked their jobs, they were more opportunistic when presented with an alternative offer.
- Finally, Twenge suggested that companies should focus on work-life balance and flexible schedules when it came to recruiting millennials. Additionally, “Managers should also try to treat employees as individuals and not just as members of their generation” (209).

Thompson and Gregory (2012) summarized the themes frequently cited in the popular press regarding millennials in the workplace. They grouped them into a series of common stereotypes assigned to the generation as a whole: disloyal, needy, entitled, and casual. Based upon their findings, they recommended a framework for improving attraction, motivation, and retention of millennials. Specifically, they stated that the key to millennial retention depended on having a good relationship with the millennial’s immediate manager, and that the immediate manager stepped in for the roles once filled by “helicopter parents.” They referenced Hershatter and Epstein (2010) when they concluded that millennials “expect the same level of feedback, praise, and guidance, as well as a focus on their individual development in the context of work” (239). Additional empirical studies have demonstrated that high quality and frequent exchanges between employees and their immediate supervisors—including coaching, feedback, and conversations—had a positive effect on engagement and a negative effect on intentions to quit (Agarwal, Datta, Blake-Beard, & Bhargava, 2012; Gallup, 2016).

Based on their review of the literature, Thompson and Gregory (2012) recommended that “managers who can adopt a leadership style rooted in the individual consideration domain of transformational leadership—one that promotes relationships and meeting individual needs—are the managers who will most successfully attract, motivate, and retain their millennial employees” (243). The authors drew from the research of Avolio and Bass (1995) in calling for managers to act as coaches, mentors, and developers of their employees and to provide frequent feedback with individual consideration. Bass (1999) describes transformational leaders as those who led through inspiration, intellectual stimulation, and individual consideration. Additional research has supported Thompson and Gregory’s recommendation of applying transformational leadership for managing millennials. For example, the results of a survey of 341 working adults suggested that transformational leaders who cultivated positive psychological capital within their organizations “may contribute to employees feeling they are more empowered and in turn help reduce their cynicism and urges to quit” (Avey, Hughes, Norman, & Luthans, 2008, 123).

The framework created by Thompson and Gregory (2012) contains four implications for managing millennial turnover. Summarized here, they were: (a) invest time and resources into cultivating genuine relationships with employees; (b) behave in ways that build mutual trust; (c) use a coaching approach when interacting with employees; and (d) use individual considerations when working with employees. Interestingly, Thompson and Gregory's recommendations were on par with several other authors who offered up similar, but somewhat paradoxical advice: the millennial generation might be best managed by treating its members as individuals and forgetting that they belonged to any particular generation.

Wong, Gardiner, Lang, and Coulon (2008) cautioned managers against using generational stereotypes. They found that a survey of over 3,500 managers in Australia resulted in few meaningful differences in personality and motivation between millennials, Generation X, and baby boomers. They further concluded that their results were not supportive of the generational stereotypes that were common in management literature and the media. They emphasized "the importance of managing individuals by focusing on individual differences rather than relying on generational stereotypes, which may not be as prevalent as the existing literature suggests" (878).

The literature summarized to this point has reviewed key insights into IT worker turnover patterns and recommendations for improving IT worker retention. In addition, generational differences regarding the propensity to change jobs and a framework for managing millennial turnover were provided. However, based upon our review of the literature, we found very little research which provided specific recommendations for mitigating the turnover of millennial generation workers employed in the IT industry. In order to gain a more nuanced understanding of this relationship, we asked a small sample of managers and business owners in the IT industry to offer their unique perspectives regarding turnover patterns and "best practices" for retaining these workers. A summary of key themes which emerged from the qualitative interview data is provided next.

PERSPECTIVES FROM IT MANAGERS

For our study, we invited managers and business owners from an IT industry peer network to share their perspectives concerning millennial IT workers. Industry peer networks (IPNs) are a unique form of "parallel peers" in which the members of the network belong to a sub-segment in a given industry that draws on similar inputs to provide similar goods or services targeted to different sets of customers. These non-competing (and non-colluding) members gather regularly in small groups (typically 20 or fewer carefully selected members) in an atmosphere of significant trust to share knowledge, exchange information about industry trends beyond their core markets, and discuss issues related to company performance (Sgourev & Zuckerman, 2006).

A total of 12 managers from the technology IPN we sampled agreed to participate in our study. On average, each manager had been working with his or her respective organization for 13.7 years, with the shortest tenure being 3 years and the longest tenure being 23 years. The size of the firms the managers worked for ranged from 10 to 99 workers. The average number of years in a management role was 11.8 years, with three managers having at least 20 years of management experience. The least experienced manager possessed 2.5 years of experience. On a weekly basis,

the average number of millennials that the managers worked with was 14.4, with a high of 40 and a low of 4.

Figure 1 provides a list of the questions asked in the brief survey. Upon receipt of the 12 completed surveys, we used a basic iterative process of reading and re-reading the responses to identify consistent themes which emerged. Based upon our qualitative review, four notable patterns were identified and are summarized next.

Management Survey

- “In what ways are the millennials you work with the same or different from other generations you work with?”
- “In what ways do you find it difficult or easy to retain millennial workers in the IT industry as compared to other industries?”
- “Please list aspects of your workplace that you feel might have a negative impact on your millennials’ job satisfaction and engagement.”
- “What strategies do you find work the best to keep millennial workers engaged in their work, happy with their jobs, and interested in staying with your company?”
- “Of the millennial employees who have left your company over the past few years, do you find any common theme in why they leave?”

Figure 1: Survey questions for technology IPN managers.

Theme 1: Turnover Was a Problem

Nearly all the managers felt that the turnover rate of millennials in IT was a pervasive problem; however, some questioned whether the problem was due to the generation, the industry, the age of the worker, or a combination of these. One IT manager stated, “I find work experience and age creates more differentiation than generational differences.” Another manager shared a similar sentiment: “I think they are more transient because of their youthful age and less because they are Millennials. They get married, they move closer to parents, they buy houses, they have kids . . . they do the things young people do. We lose people because of these reasons not because they don't possess work ethic or are flighty, etc.” As Twenge noted (2010), because of the overwhelming reliance on cross-sectional studies, the question remained unanswered as to whether or not age or generational cohort had more of an impact on millennials’ job habits. Additionally, there was some support to suggest that turnover was, in part, due to the nature of the IT industry itself: “I feel the difficulty is largely related to the IT industry in terms [of] remote workers and mobile works [sic] which is happening at all ages within the industry.” Another remarked, “Retaining any employee in the IT industry is difficult.”

Theme 2: Two-Way Communication Was Critical

When asked what strategies the IT managers found to be most effective in keeping millennials engaged and happy, frequent interactive communication with a manager/supervisor was the strongest theme. The IT managers we surveyed said that it was important to let their millennials know *what* was expected of them and *how* they should go about performing their jobs

in an effective manner. “They do seem to want to understand their impact and know what is expected of them,” said one manager. But when it came to making decisions on *when* and sometimes *where* to do their jobs, millennials seemed to prefer control, according to the IT managers we surveyed.

Theme 3: Millennials Are Individualistic

This theme was not always explicitly stated, but implicitly prevalent. For instance, the way in which the managers described millennial behavior in IT was interpreted as being consistently inconsistent. Although at times the managers reinforced the stereotypes identified by Thompson and Gregory (2012)—especially when we asked them to identify behaviors unique to their generation as a whole—the overall feedback from the IT managers painted a picture of a generation that was much more complex and individualistic in its behavior. “My experience is that they are a diverse mix of personalities with a range of work ethics, interests, and demands.” When describing his or her approach to managing millennials, another manager stated, “They each have their individual desires and priorities personally and professionally. If those needs aren’t met and their priorities not understood, they are more likely to begin looking for another job. However, when we take the time to know them, understand them, and build genuine and authentic relationships between them and their managers/co-workers, they are as loyal and committed as any other employees we have regardless of age or tenure.”

On reasons for leaving, the managers’ perspectives also supported the notion that millennials behaved in unique ways and that individual considerations were needed to prevent turnover. Three managers stated that there was no common theme for their millennials leaving, or that they simply weren’t sure why they left. Two said the departing millennials were looking for “new” or “greater” challenges. Four listed pay as either a primary or secondary reason. Only one listed “hours” as a common theme. Another manager noted that millennials were evaluated for continued employment on an individual basis, although perhaps for the purpose of creating a more uniform culture: “We work with each employee on a case by case basis and we push them out because they are not team players.”

Theme 4: Some Stereotypes Were Applicable, Some of the Time

In general, the managers modestly upheld the negative millennial stereotypes noted by Gregory and Thompson (2012), especially when they were given the opportunity to identify characteristics that made the generation unique. But they also contradicted the stereotypes at times. For instance, one manager stated that millennials “have [a] hard work ethic and strive to produce a superior product,” but this type of positive comment was not typical. In general, the following stereotypes were found to some degree in both the literature and in the IT managers’ survey responses: (a) Millennials working in the IT industry were relatively transient, disloyal, and opportunistic; (b) they required frequent feedback and were often “needy;” (c) they were harder to motivate than other generations and were less interested in working long hours; (d) they required more flexibility, especially with work hours and accommodations that supported their lifestyles; (e) they preferred variety through new challenges, but also required frequent feedback when taking on new challenges; and (f) they were seen as having a higher sense of entitlement.

It is important to note that these stereotypes were not consistently upheld by all the managers, nor were they always explicit. The two exceptions to this inconsistency included the need for communication and the need to manage millennials on an individual level, rather than using a universalistic approach. Furthermore, the IT managers surveyed in this study may have been merely repeating stereotypes with which they were already familiar. As Wong et al. (2008) found, many of the stereotypes that are assumed in the popular and academic publications were largely absent when studied empirically. The crux of the matter was that, although millennial stereotypes seemed to apply some of the time, there was no overwhelming support to suggest that turnover might be mitigated long-term by taking a typecast approach.

A CONCEPTUAL FRAMEWORK FOR MANAGING MILLENNIAL IT WORKERS

Based upon the review of prior research and the themes identified in our qualitative study, we propose a refined conceptual model for managing IT millennials aimed at improved understanding and better retention rates. We term this new framework, shown in Figure 2, as an “Inside-Outfluence” (IO) approach. In particular, IO seeks to mitigate employee turnover by empowering managers to establish meaningful relationships with employees—regardless of their generational membership—through two-way communication and individual considerations. It disregards stereotypes. It views the manager’s role as that of (a) a conversation initiator who treats each employee individually and (b) a coach who is responsible for using this information to tailor a unique personal development plan for each employee.

In other words, the Inside-Outfluence framework proposes that individual relationships influence management practices rather than the other way around. It views the IT organization as a fluid, breathable culture made up of a collection of unique individuals contained inside a relatively fixed set of ideological organizational boundaries. By fostering frequent conversations and a moderate degree of individual freedom within these boundaries, the organization encourages individuals to organically optimize their relationships with each other, and thus the organization’s culture as a whole. We propose that Inside-Outfluence will result in engaged, committed, and more productive employees who feel loyal and connected to their organizations, their colleagues, and their managers. This, in turn, will reduce turnover (Blau & Boal, 1987).

The Inside-Outfluence framework is consistent with the recommendations found in the existing literature as well as the recommendations of the IT managers we interviewed. It focuses on the two most prevalent themes that were uncovered: the need for communication and individual consideration. Because the model seeks to organically and fluidly build company culture and individual relationships, it necessarily avoids defining specific tactics that should be employed by managers. Instead, it is proposed that the Inside-Outfluence approach should be viewed as a model that allows managers the flexibility to implement policies and practices that are consistent with the organization’s core values and overall strategic plan. The role of the organizational boundaries (part of the “Inside”) is crucial in preserving that which is most important and non-negotiable for the organization.

Inside Outfluence management approach

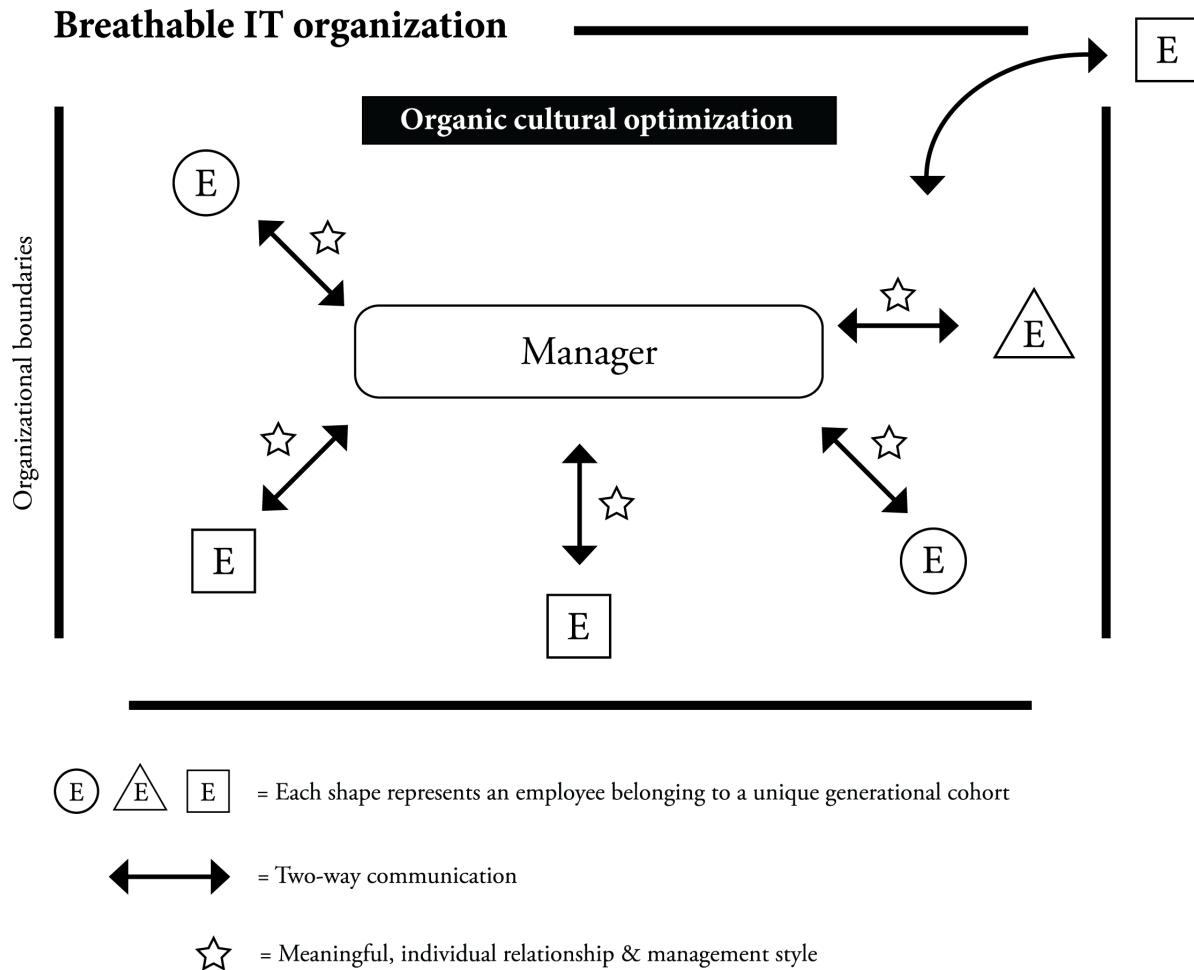


Figure 2. Inside Outfluence Model.

Another strength of the IO approach would be the ability to attract IT workers from the external labor market with personal resources and competencies that align with this type of organizational/managerial approach. Research suggests that organizations with a positive reputation are able to attract greater numbers of job applicants, as well as candidates with better qualifications (Collins & Han, 2004; Turban & Cable, 2003). By creating an organizational culture based upon the pillars of two-way communication and individual consideration, the Inside-Outfluence organization would establish a favorable reputation for active and passive job seekers in the very competitive IT job market. In this way, the internal culture of the IO organization would outwardly influence the workers in the IT job market by attracting individuals who have values and interests which align with the company culture. IT workers would self-select into the IO organization and be more committed to remaining based upon the unique features of the IO culture.

Although supported by transformational leadership theory (e.g., Bass, 1990), the Inside-Outfluence approach differs from it in distinct ways. First, it proposes that IO places less influence on the leader and more emphasis on the subordinate; it encourages the leader to be influenced by the follower rather than trying to influence the subordinate through any particular leadership style or the traditional top down approach. This framework emphasizes the role of the organization over that of its individual leaders. Consistent with our literature review and themes which emerged from the interviews, the IO model requires the manager to focus on two things—meaningful conversations and individual considerations. Although the proposed model could work in tandem with a transformational leadership approach, it should be thought of as a practical, focused approach for IT organizations that want to mitigate turnover of its millennials.

DISCUSSION AND CONCLUSION

There is a general consensus among practicing managers and in the academic literature that millennials are turning over in their jobs at a higher rate than other generations. Particularly in the large and growing field of IT, where millennials are ubiquitous, the value in finding a successful mitigation model for reducing employee turnover is appealing. Extant research has addressed issues related to millennial turnover patterns and employee retention strategies in the IT industry on an independent basis. Although some helpful research exists for reducing worker turnover in the IT industry, the connection with millennials in this industry has not been deeply studied from a management perspective. Drawing from the perspectives of practicing IT managers, as well as existing relevant literature, we propose an Inside-Outfluence framework for managing millennials in the IT industry. Inside- Outfluence focuses on building strong relationships through (a) two-way communication and (b) individual considerations. We contend that the IO framework will help drive employee engagement and commitment, and therefore result in greater retention of millennial IT workers.

At this time, the IO model is only a conceptualized framework. It is clear that further testing concerning the effectiveness of this approach, relative to other organizational design patterns for reducing millennial IT turnover, is needed. In particular, it is important to establish the construct validity of the IO model and a reliable measure of this structure to reflect the dimensions described in prior literature and the initial findings of the survey conducted for this study. Empirically testing the IO framework against organizational models that specifically emphasize hierarchy, internal boundaries, inflexible culture, or generational consideration (versus individual consideration) will help verify the construct validity and effectiveness of the proposed model relative to alternative organizational approaches.

Although we believe the extensive experience of the managers sampled in this study made them subject matter experts to answer our specific questions, we also recognize the limited scope of our sample size. More empirical research is needed to test the validity of the Inside-Outfluence model under various scenarios. Comparative studies with larger sample sizes would help build confidence in the generalizability of our observations and recommendations. If IO does prove to be effective in IT, then it might also work well in other industries and with other generations. Furthermore, we encourage more research concerning the development of best practices for executing Inside-Outfluence in the work environment.

REFERENCES

- Agarwal, U. A., Datta, S., Blake-Beard, S., & Bhargava, S. (2012). "Linking LMX, Innovative Work Behavior and Turnover Intentions: The Mediating Role of Work Engagement." *Career Development International*, 17, 208-230.
- Avey, J. B., Hughes, L. W., Norman, S. M., & Luthans, K. W. (2008). "Using Positivity, Transformational Leadership and Empowerment to Combat Employee Negativity." *Leadership & Organization Development Journal*, 29, 110-126.
- Avolio, B.J. & Bass, B.M. (1995). "Individual Consideration Viewed at Multiple Levels of Analysis: A Multi-level Framework for Examining the Diffusion of Transformational Leadership." *Leadership Quarterly*, 6, 199-218.
- Bass, B.M. (1990). "From Transactional to Transformational Leadership: Learning to Share the Vision." *Organizational Dynamics*, 18, 19-31.
- Bass, B. M. (1999). "Two Decades of Research and Development in Transformational Leadership." *European Journal of Work and Organizational Psychology*, 8, 9-32.
- Blau, G.J. & Boal, K.B. (1987). "Conceptualizing How Job Involvement and Organizational Commitment Affect Turnover and Absenteeism". *Academy of Management Review*, 12 (2), 288-300.
- Cennamo, L., & Gardner, D. (2008). "Generational Differences in Work Values, Outcomes and Person-organization Values Fit." *Journal of Managerial Psychology*, 23, 891-906.
- Collins, C.J. & Han, J. (2004). "Exploring Applicant Pool Quantity and Quality: The Effects of Early Recruitment Practice Strategies, Corporate Advertising, and Firm Reputation." *Personnel Psychology*, 57, 685-717.
- Comptia (2016). "IT Industry Outlook 2016." <https://www.comptia.org/resources/it-industry-trends-analysis-for-2016>
- Council of Economic Advisors. "15 Economic Facts about Millennials." 2014. https://obamawhitehouse.archives.gov/sites/default/files/docs/millennials_report.pdf
- Csorny, L. (2013). "Careers in the Growing Field of Information Technology Services: Beyond the Numbers." <https://www.bls.gov/opub/btn/volume-2/careers-in-growing-field-of-information-technology-services.htm>
- Drucker, P. F. (1959). *The Landmarks of Tomorrow*. New York: Harper and Row.
- Ferratt, T. W., Agarwal, R., Brown, C. V., & Moore, J. E. (2005). "IT Human Resource Management Configurations and IT Turnover: Theoretical Synthesis and Empirical Analysis." *Information Systems Research*, 16, 237-255.

- Gallup Organization. (2016). "How Millennials Want to Work and Live." <http://www.gallup.com/reports/189830/millennials-work-live.aspx>
- George, J. and Wallio, S. (2017), "Organizational Justice and Millennial Turnover in Public Accounting., *Employee Relations*, 39(1) 112-126. <https://doi.org/10.1108/ER-11-2015-0208>
- Hershatter, A., & Epstein, M. (2010). "Millennials and the World of Work: An Organization and Management Perspective." *Journal of Business and Psychology*, 25, 211-223.
- Horwitz, F. M., Heng, C. T., & Quazi, H. A. (2003). "Finders, Keepers? Attracting, Motivating and Retaining Knowledge Workers." *Human Resource Management Journal*, 13, 23-44.
- Howe, N., & Strauss, W. (2009). *Millennials Rising: The Next Great Generation*. New York: Vintage Books.
- Illingworth, B. (2004). "Trust and Technology: Work-life Blending at Unisys." *Strategic HR Review*, 4, 8-9.
- Joseph, D., Ng, K. Y., Koh, C., & Ang, S. (2007). "Turnover of Information Technology Professionals: A narrative Review, Meta-analytic Structural Equation Modeling, and Model Development." *MIS Quarterly*, 31, 547-577.
- March, J. G., & Simon, H. A. (1958). *Organizations*. Oxford, England: Wiley.
- McKnight, D.H., Phillips, B., & Hardgrave, B.C. (2009). "Which Reduces IT Turnover Intention the Most: Workplace Characteristics or Job Characteristics?" *Information & Management*, 46, 167-174.
- Pant, J. and Venkateswaran, V. (2019). "Exploring Millennial Psychological Contract Expectations across Talent Segments." *Employee Relations*, 41(4), 773-792. <https://doi.org/10.1108/ER-04-2018-0096>
- Pew Research Center. (2010). "Millennials: A Portrait of Generation Next." Washington, DC. <http://pewresearch.org/millennials/>
- Sgourev, S.V. & Zuckerman, E.W. (2006). "Improving Capabilities through Industry Peer Networks." *MIT Sloan Management Review*, 47, 33.
- Thompson, C., & Gregory, J. B. (2012). "Managing Millennials: A Framework for Improving Attraction, Motivation, and Retention." *The Psychologist-Manager Journal*, 15, 237-246.
- Turban, D.B. & Cable, D.M. (2003). "Firm Reputation and Applicant Pool Characteristics." *Journal of Organizational Behavior*, 24, 733-751.

- Twenge, J. M. (2010). A Review of the Empirical Evidence on Generational Differences in Work Attitudes." *Journal of Business and Psychology*, 25, 201-210.
- U.S. Department of Commerce. (2016). "Occupations in Information Ttechnology." <https://www.census.gov/content/dam/Census/library/publications/2016/acs/acs-35.pdf>
- Westlund, S. G., & Hannon, J. C. (2008). "Retaining Talent: Assessing Job Satisfaction Facets Most Significantly Related to Software Developer Turnover Intentions." *Journal of Information Technology Management*, 19, 1-15.
- Whitaker, A. (1999). "What Causes IT Workers to Leave?" *Management Review*, 88, 8.
- Wingreen, S. C., LeRouge, C. M., & Nelson, A. C. (2017). "Managing IT Employee Attitudes that Lead to Turnover: Integrating a Person-Job Fit Perspective." *International Journal of Human Capital and Information Technology Professionals* , 8(1), 25-41. <https://doi.org/10.4018/IJHCITP.2017010102>
- Wong, M., Gardiner, E., Lang, W., & Coulon, L. (2008). "Generational Differences in Personality and Motivation: Do They Exist and What Are the Implications for the Workplace?" *Journal of Managerial Psychology*, 23, 878-890.
- Zylka, M. P., & Fischbach, K. (2017). "Turning the Spotlight on the Consequences of Individual IT Turnover: A Literature Review and Research Agenda." *SIGMIS Database*, 48(2), 52-78. <https://doi.org/10.1145/3084179.3084185>