LIS455 Usability and User Experience Research

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Assignment 3: Usability Literature Review – The Future of Talent Management

by

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Present Day Talent Management

Talent management is the method through which organizations strategically place the talent of their employees in order to maximize the capacity of the organization. This is done so within every level of an organization, some less impactful than others, but all playing a role in the bigger picture and direction of said organization. The expansion of corporations, the evolution of the world, and the development of technology has warranted a revisit on the worn concept of talent management in terms of the way it is executed and the future direction it could embark on.

The greatest problems in the efficiency of talent management are when leaders view the organization and its individuals as entirely separate entities with separate goals. Presently, there is a great disconnect between organizational talent management and individual career development [Maggi, 2017]. In Avigdor's analysis of the talent management process he states that "The underpinning assumptions of the practice of talent management are that organizations are systemic and linear, and that talent management must produce a single answer identifying what it means to be a 'talent' in any specific circumstance", it is in the disconnecting the assignment of the positions with the fluidity of personal development that minimizes the potential of a workforce [Avigdor, 2017]. A systemic revisiting can take place through the performance assessor intending to be simultaneously both involved and detached as opposed to viewing himself as simply an objective observer.

Along this point, additional problems arise in the data driven, problem solving mindset that allows little space for directional design from employees. Objective assessment of success in certain positions means a system in which a more qualified employee fills a position when that position is not being completed to satisfaction [Avigdor, 2017]. The difficult with this approach

is that it disregards any input that cannot be quantitatively, however "its main advantage, according to its proponents, is that it minimizes the human factor and potential bias in assessment", which is why it has been the course of action for so much time [Avigdor, 2017]. Ideally there is a way to encompass both the objective approach and the softer approach, allowing for feedback from and qualitative assessment of an organization's employees.

The Future of Talent Management

The future of talent management lies within co-creation and open discourse. As Avigdor states in their dissertation "true flexibility demands an ability to observe the situation, reflect upon it, and acknowledge one's influence in co-creating the situation while also being created by the interaction as it unfolds.", there is no one thing that leads to the maximization of organizational power [Avigdor, 2017]. Although some people may be born more inclined to more easily possess particular talents, talent itself is created, so what Avigdor emphasizes is that successful talent management is made up of both organizing and placing already existing talent as well as the further development of employee talent in accordance with personal goals. For this reason "talent management's traditional promise of future-oriented focus and reliable predictions is illusory, given that all participants are continuously merging their ongoing experiences to spontaneously co-create the future in unpredictable ways.", if the ideal talent organization of a corporation is constantly changing that indicates a successfully developing employee body [Avigdor, 2017].

The ideal future direction for addressing the needs of talent management is simply a basis of collaboration. Maggi in their career was accountable for developing career management policies, processes and skills and in the research presented Maggi "found the collaborator and catalyst conversations were particularly relevant to the joint achievement of individual and

organizational goals" as a method of addressing the disconnect between organizational talent management and individual career development [Maggi, 2017]. A lesser accepted role of an organization is its capacity to enable and encourage the development of its individual employees. Often people have more potential than they recognize themselves, which is where the role of the organization comes in through assisting in the identification and meeting of employees' needs in order to proactively manage their career. The key in this is to find a place in which organizational and individual needs intersect, that way efforts are equally motivated. In Maggie's dissertation she paints the problem in talent management and its solution well with the statement;

> "Organizational talent management was largely conceived in terms of formal processes, whereas individual career development was largely described in terms of informal approaches with little reference to talent management. Thus, it seemed that, for most organizations, talent management and career development were operating in parallel with little crossover. However, both would seem to be inextricably linked. Individuals are the subject of talent management, and without their development, deployment and retention, the organization will not deliver its talent management aims." [Maggi, 2017]

Aside from the theoretical future of talent management, there is additionally a bright future for talent management in its utilization of emerging technology. One significant aspect to optimizing the management of talent is the identification and development of talent. Alexandra's paper on mobile and computer-based talent assessments discusses the usability of pre-employment online talent assessments as a method of determining what skills a candidate has and if the candidate is a good fit for a job [Alexandra, 2014]. This research is crucial because just as future driving AI is in talent management, simple assessment sites are and will be a driver in strategic talent organization. Tests that are not proctored and online raise concerns in how

accurately they may assess one's skills, but as tools for talent assessment improve, Alexandra assesses whether usability varies when it comes to computer run tests as opposed to mobile devices, as to not discriminate against those who may not have access to desktops. Resulting from this study, there were a few differences in usability ratings between methods, additionally the overall conclusion is that the usability of both computer and mobile tests are high. In further assessments on mental impact of online testing, subjects reported low levels of stress, physical workload, and high levels of perceived success [Alexandra, 2014]. These findings indicate a very potential use of online talent assessments as a way to feed the data pool for efficient data mining to fuel talent management decisions.

Further along the path of emerging technology, the computation of talent management is an emerging research topic in data mining as access to big data in talent offers opportunity for leaders to objectively and efficiently approach management in terms of the decisions involved [Hui, 2021]. One of the best uses of technology is ease in decision making, using intelligent decisions which, as stated by Hamidah, "refers to the ability to make automated decisions that is closely similar to human decision" [Hamidah, 2012]. Hamidah's study utilized data mining to identify patterns that could be leveraged to produce decisions with methods such as clustering, that groups employees with the positions most appropriate for them. More specifically, in Hamidah's article the human resource challenge of managing talent is addressed using intelligent Decision Support System (IDSS) and data mining technologies [Hamidah, 2012]. The article lists the roles of an HR department in an organization which "are developing existing talent; forecasting talent needs; attracting and retaining the right leadership talent; engaging talent; identifying existing talent; attracting and retaining the right leadership and key contributor; deploying existing talent", these roles heavily lean into decision making, which faces challenge

as it involves the human factor of error in terms of preference and judgment, potentially leading to inconsistency and unexpected outcomes [Hamidah, 2012]. Thus to optimize the management of talent, ensuring the right people are in the right positions can be objectively approached with data mining technology to search for patterns in employee data and artificially learn from employee experience in order to successfully place them into positions.
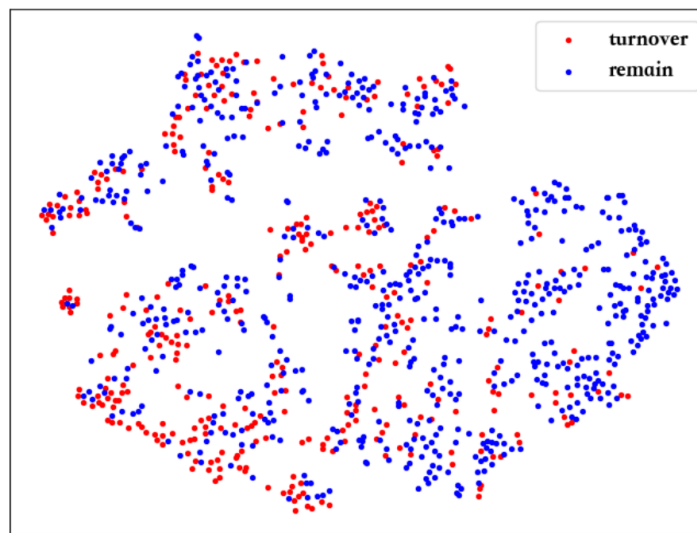

Figure 1

Further contributing to emerging AI for talent management, Person-Organization fit (P-O fit) refers to a metric on how compatible an employee is with their organization and it is a modeling method that utilizes a data driven neural network. This modeling is done so with the assessment of data on primarily talent turnover and job performance [Ying, 2019]. Ying's study in particular "designed an Organizational Structure-aware Convolutional Neural Network (OSCN) for hierarchically extracting organization-aware compatibility features in P-O fit." with the intention of serving as a reliable talent manager. Figure 1 shows a representation of the effectiveness of Person-Organization fit grouping, the red points represent the turnover employees and the blue points represent the samples who are not. As shown, they are grouped

into clusters based on their representation predicted by the P-O fit model, indicating that the model can be used to predict turnover and potentially other employee behavior.
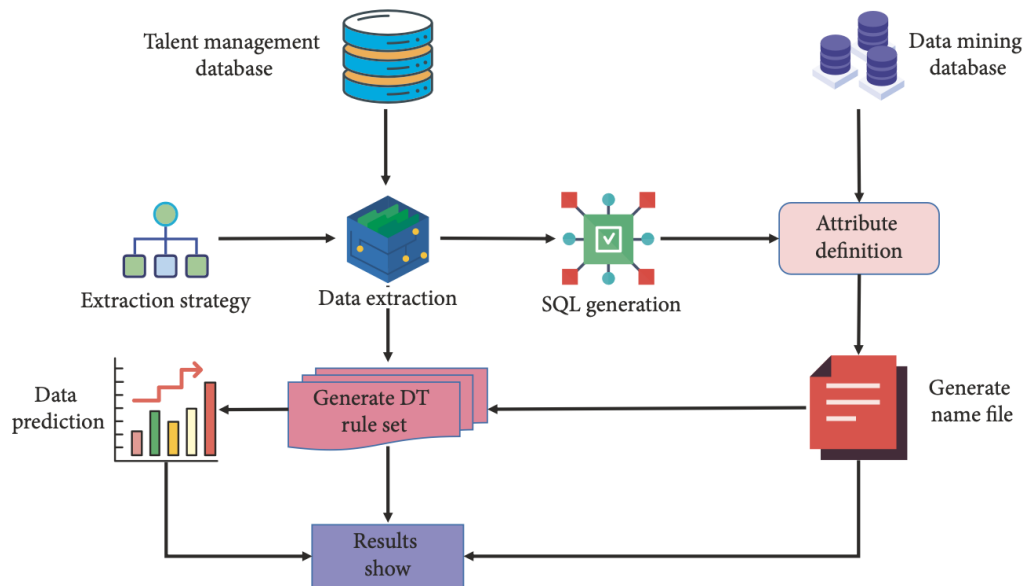

Figure 2

There have been efforts to implement these emerging AI systems into functioning software pipelines for talent management. In Zhang's paper a talent management system is developed that incorporates a wireless network through the use of DT technology, with the intention of assisting in effective decision making with respect to talent management [Zhang, 2022]. Zhang describes wireless network optimization as "a series of processes to obtain relatively stable network coverage, capacity, and quality through certain economic investment so as to obtain better performance" within this there is "an independent subsystem of the talent management system, the data mining subsystem is mainly used by business decision-makers to support business talent management decisions" [Zhang, 2022]. Figure 2 displays the structure of this and the decisions in terms of talents, loyalty, and employment that this system has the capacity to provide [Zhang, 2022].

Closing

The theory of talent management is strategically organizing the talent of a corporation in a manner that maximizes the ability of the organization, a crucial practice within every level of an organization. However the disconnect between organizational talent management and individual career development continues to hinder success as expansion further increases. The solution to this and the future of talent management is in a shift of the present data driven mindset. There is ease in leaning on data because it is straightforward and quantifiable, however when human error involves itself the decisions based on quantitative information is not always the most productive decision as it contains bias and confounding beliefs. This is where the future of talent management software comes in. What the corporate world needs is software that incorporates every angle of emerging technology, using online assessments to gather data on employees as well as performance trajectory data in order to map and model prediction, and with the grouping produced from this data future development can be guided with recommendations. At the end of the day the win-win and intersection point of goals for an organization is the place where employees are engaged by personal development and the organization is benefitting from an engaged employee all while gearing said employee to fill more significant roles over time and proper advanced talent management technology has the potential to do exactly that.

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