MANAGEMENT

Four by Four: Unintended Risks of People Analytics

by Emmanuel Senior Tenakwah

Image Credit | Lukas Blazek

It's important to understand the risks of collecting and applying data in people management.

☑ **INSIGHT** | **NOTE**   15 Nov 2021

People analytics[1] is an intuitive and predictive process that involves the collection and application of data to improve people management processes, functions, and business outcomes. It provides opportunities for business leaders to develop data-driven insights to

decide for employees. People analytics relies heavily on evolving data mining technologies to drive transformations in the HR process, HR business interactions, HR-employee relationship, and quality of insights.[2] The majority of organizations today have people analytics teams, and it is **considered a top priority by at least 70% of company executives**.[3] While traditional HR organizations set up people analytics teams as a specialist group, **most organizations embed analytics as part of their workforce management process**.[4] organizations are increasingly deploying people analytics in recruitment and selection, performance management, and training and development. There have been many discussions on the transformative and analytical ability of people analytics on organizations, managers, and employees. While there have been extensive discussions on the positive sides of deploying people analytics like superior decision making, systematic analysis and exploration of historical data, and the streamlining of processes and resources, some unintended risks pose severe consequences for organizations, managers, and employees. I present four significant risks of people analytics and four lessons for managers to overcome these risks.

Four Unintended Risks

While the benefits of such output-oriented technologies are widely known, there is still a lot to learn about the potential risks associated with the deployment. It is important to note that these risks are not intentionally induced. However, they have harmful implications on employees and organizations:

The first **unintended risk** is the impression that people analytics can accurately capture the full scope of workforce activities - skills, traits, and experiences.[5] This stems from analyzing data related to employees' skills, traits, and experiences to account for employee performance. This can create a **false sense of certainty** which can lead to the illusion of objectivity and thus mislead managers to establish a cause-and-effect relationship that may not exist.[6] This implies that managers may overestimate their ability to influence decisions. Given the rise in the analytical power of people analytics, the perception of this

control also increases, which leads to underestimating the risks involved. This may lead to costly decisions such as unfair promotion and dismissal as people analytics may overlook tacit aspects of employee performance.

A **review by Giermindl et al.**[7] shows that people analytics can lead to estimated predictions and self-fulfilling prophecies. Given that predictions generated are largely conditional probabilities for the occurrence of an event and not necessarily the event itself. These probabilistic predictions can result in erroneous classifications that can affect decisions for employees, such as hiring and firing. These predictions may sometimes force managers to make decisions conducive for them to be realized. For example, a forecast of future performance based on people analytics can push managers to allocate training resources to only employees considered productive. In contrast, others who do not fall into that category are ignored.[8]

Third, people analytics draws on historical data to predict the future through extrapolation. While this is useful in solving critical problems, it ignores novel patterns and thus makes organizations vulnerable to external shocks such as global pandemics. The increasing analytical power of people analytics also means that the mechanisms, assumptions, and processes underlying HR decisions are becoming opaque, inaccessible, and untraceable because they are **too complex to be understood**.[9] This means that HR managers can make decisions regarding staff layoffs without knowing how the algorithm arrived at that. This means it will be difficult for managers to explain the rationale behind these decisions contrary to the most touted benefit of transparency.

Fourth, the autonomy of employees can be affected by the deployment of people analytics. While people analytics promises to increase employees' autonomy and competence, it can **significantly reduce their discretion and working habits**.[10] This is done by replacing interactive processes and practices with predefined goals which mechanize human thinking and behavior. Thus, decisions made by employees will **essentially be reactive chains of action** instead of self-reliant and self-organized decisions.[11]

Four Lessons for Managers

While technological advancements can potentially enlarge the risks of people analytics and potentially increase the negative impacts on organizations and employees, here are four lessons that can provide clarity to managers in their decision-making.

The first lesson relates to the algorithms deployed in people analytics. The algorithms deployed usually make conditional probabilities of events, so people may be subjected to how these algorithms classify them. Managers must be aware of the conditional nature of people analytics and its statistical limitations. This will help limit the number of serious misjudgments which can be detrimental to the organization and its employees. For example, a **prediction on work from home preferences before the COVID-19 pandemic** would have been significantly different from today's reality.[12]

For some managers, the analytic logic behind the people analytics is not too different from other areas of the organization. Therefore, managers need to appreciate the dynamics of people management to appreciate the peculiarities associated with them. It is essential for managers not to be overly reliant on the benefits of people analytics as there are possible adverse and unreflective aspects—this is important given the misguided understanding and the overestimation of the possibilities and effectiveness of people analytics.

The third lesson centers on the helpful information provided to managers. While the information captured by these tools is helpful, they may be incomplete and potentially mislead managers of the actual work performed by the employees. Managers need to create a platform for both parties (i.e., managers and employees) to learn from each other when dealing with such output-oriented technologies. Again, managers need to pay attention to the reductionist tendencies associated with people analytics. This is particularly challenging when advanced forms of people analytics are deployed.

Finally, the paper by **Giermindl et al.**[13] noted that people analytics have superior analytical powers, which can lead to estimated predictions and self-fulfilling prophecies. Managers still need to discern when and where to ignore them in decision-making as it can undermine their power of judgment, reasoning, and critical reflection. Managers can do

this by delving deep into the behavioral aspects of work to understand the human and non-human aspects in decision-making. A better understanding of this will create a happier workforce while the organization moves towards a more innovative future.

Conclusion

People analytics is undergoing significant change as companies continue to invest in programs that rely on data across all aspects of the organization. While it is increasingly transforming the future of work and human decision-making, there are significant risks with broader implications on organizations, managers, and employees. These risks can lead to the erosion of managerial competence and marginalize human reasoning as managers may be tempted to rely on people analytics while putting aside their intuitions because of the superior analytical powers of people analytics. Thus, it challenges to need for genuine human decision-making competencies.

References

1. **Ghosh, P** (2021). What Is People Analytics? Definition, Process, Trends, and Tools
   https://www.toolbox.com/hr/hr-analytics/articles/what-is-people-analytics/
2. ibid
3. Innovation Generation: The Big HR Tech Disconnect 2019/20 Report – Thomsons
   https://www.hrmanagementapp.com/big-hr-tech-disconnect-2019-20-report-thomsons/
4. Fineman, D. R (2017). People analytics: Recalculating the route
   https://www2.deloitte.com/us/en/insights/focus/human-capital-trends/2017/people-analytics-in-hr.html
5. Faraj, S., Pachidi, S., & Sayegh, K. (2018). Working and organizing in the age of the learning algorithm. Information and Organization, 28(1), 62–70.

https://doi.org/10.1016/j.infoandorg.2018.02.005

6. Leicht-Deobald, U., Busch, T., Schank, C., Weibel, A., Schafheitle, S., Wildhaber, I., & Kasper, G. (2019). The challenges of algorithm-based HR decision-making for personal integrity. *Journal of Business Ethics*, *160*(2), 377-392. https://doi.org/10.1007/s10551-019-04204-w

7. Giermindl, L. M., Strich, F., Christ, O., Leicht-Deobald, U., & Redzepi, A. (2021). The dark sides of people analytics: reviewing the perils for organizations and employees. *European Journal of Information Systems*, 1-26. https://doi.org/10.1080/0960085X.2021.1927213

8. ibid

9. Simbeck, K. (2019). HR analytics and ethics. *IBM Journal of Research and Development*, *63*(4/5), 9-1. https://doi.org/10.1147/JRD.2019.2915067

10. Schafheitle, S., Weibel, A., Ebert, I., Kasper, G., Schank, C., & Leicht-Deobald, U. (2020). No stone left unturned? Toward a framework for the impact of datafication technologies on organizational control. *Academy of Management Discoveries*, *6*(3), 455-487. https://doi.org/10.5465/amd.2019.0002

11. Giermindl et al., (2021)

12. Ibid

13. Ibid

Emmanuel Senior Tenakwah (Follow)

Dr. Emmanuel Senior Tenakwah is a Lecturer at the Asia Pacific College of Business and Law, Charles Darwin University, Australia. He received his Ph.D. from the University of Newcastle. He writes on people management and associated practices and teaches courses in HRM and management.