

**Being judged as a number in a 'portfolio of workers' and being quantitatively assessed on your performance and being monitored by the digital audit trail captured on your computer – is this the way forward that employers should promote (or demote) their workers in the future? Discuss.**

From a logical point of view, quantitatively assessing and monitoring performance could be a way forward to promote/demote workers in the future as the organisation can make informed decisions. However, the scepticism of workers lies in the fact that a lot of their privacy is heavily invaded in this process. The need for these measures is based on the issues getting over the initial self-consciousness after resuming at a workplace or the lack of close supervision by employers. Ultimately, the end goal for quantitatively assessing and monitoring workers is to identify behaviour changes in workers and improve workplace efficacy. Employers want answer to questions such as “why are remote workers slacking off?” “why is a particular worker more efficient than others?” “what do workers spend more of their time on?” “What is the average productivity rate?” and so on. These questions have become imperative as it will help the organisation understand its workforce. After all, they are in business to attract shareholders, investors and expand the business. This corroborates the essence of Samer Takriti's work in modelling IBM's workforce and creating useful insights on each worker which will enhance IBM's productivity and profit.

IBM's research mathematician and stochastic analyst Samer Takriti's worked on a mathematical model of thousands of IBM workers tech consultants that will serve as a way of piecing together the relationship between their skills by segmenting each worker by their skills and expertise. Turning skills into numbers makes them measurable, a worker can be promoted or demoted based on their market value.

The effect of modelling human workers (although invasive to think about) would result in a more effective workforce. Pierre Haren, a PhD from Massachusetts Institute of technology, a prominent member of the numerate and founder of ILOG explained that breaking workers into skills and knowledge makes tasks that would take weeks or days were accomplished in smaller timeframes such as minutes or hours. The vantage point for the organisation will be the ease of identifying outliers i.e workers that do not collaborate properly with colleagues or aren't putting as many efforts to the job.

You might ask, “how does modelling workers benefit the organisation?”, the simple answer is the visibility of strengths, skills and expertise that each worker has is revealed to the employer and could even be hidden to the worker. Upon discovering this the employer can place the worker in a situation where they will thrive.

Mathematical models can be developed on high performing workers which is used in modelling workplace DNA. This model can be adopted in training the other workers. Aleksandra Mojsilovic, one of Takriti's modeller's made an illusion of a worker, Joe Smith. With the knowledge the organisation's management has on Joe Smith, they can observe his experiences and routines and train other workers and predict mathematically which worker is fit for similar roles. The company requires this data to determine which workers are contributing to its profits and their value.

Although, there's been a lot of constraints with workplace monitoring (AKA big brother tracking) it has become very crucial in this age of cyber terrorism, fraud and other security concerns. Workplace surveillance software is a digital necessity, it helps to monitor emails, phone conversations, number of emails being sent, websites visited, documents and apps opened and keywords. Over time, it can build a picture of a worker's typical user behaviour and help create alerts when there's a deviation.

Such is the case study of Enron's collapse in 2007 carried out by Professor Kathleen Carley and 30 grad students at Carnegie Mellon University which studied the flow of emails within Enron during its dying months. Carley found a growing network of workers were trading ever more dire reports and rumours about the company crisis and planning life after its collapse. If workers are less engaged with their job, the employer can create tools that tie them to schedule and more productive programs that optimise their time at the job. Otherwise, a persistent nonchalance or incompetence could suggest the worker is making attempts to leave the company.

The entire essence of these measures is to create knowledgeable insights about the workers which will boost productivity and attract shareholders and investors. Arguably, a lot of these measures could lead to workplace biases and ingenuity. At what point is an employer simply crossing the line between a worker's personal-life and work-life? The workers might be misjudged because the system may not interpret or quantify certain behaviours correctly as human beings are dynamic and change very often.

#### **Appendix: Some quotes from Baker (2009).**

- Ref p20 "His team was building mathematical models of thousands of IBM's tech consultants. The idea, he said, was to piece together inventories of all of their skills and then to calculate, mathematically, how best to deploy them."
- Ref p22 "Takriti would be modelling human workers."
- Ref p22 " "if you had the full employment history, you could even compute the steps to become a Joe Smith," Most of this, of course, would involve training programs, not genetic manipulation."
- Ref p35 "The interpretation of our social networks is an exploding field of research. Online calendars show how employees use their time and who they meet with. By tracking the use of cell phones and handheld computers, researchers may be able to map the worker's movements. Call records and e-mails define the social networks of each consultant – who do they copy on their e-mails? Do they send blind copies to anyone? These hidden messages could point to the growth of informal networks within the company."
- Ref p36 "It's an informal network, she says. It took shape as Enron collapsed. This group sent out about one thousand messages a day and became a clearinghouse for inside dope. If the company had been studying this network, executives might have interpreted it as an insurgency taking shape."
- Ref p38 "That the efforts underway at places like IBM will not only break down each worker into sets of skills and knowledge. The same systems will also divide their days and weeks into small periods of time-hours, half-hours, eventually even minutes."