MANAGING WITH DATA: WHAT IS THE IMPACT OF EMPLOYEE DATAFICATION ?

Data and AI technologies are increasingly transforming the workplace, with tools that support workers and make processes more efficient. Sometimes, this involves collecting data on employees themselves on a large scale and using it to automatically manage employees. This practice can have a significant impact on various aspects of the working environment. In this brAInfood, we explore the current state of data collection in the workplace, its consequences, and strategies to mitigate potential negative impacts.

WHAT IS DATA COLLECTION AT WORK?

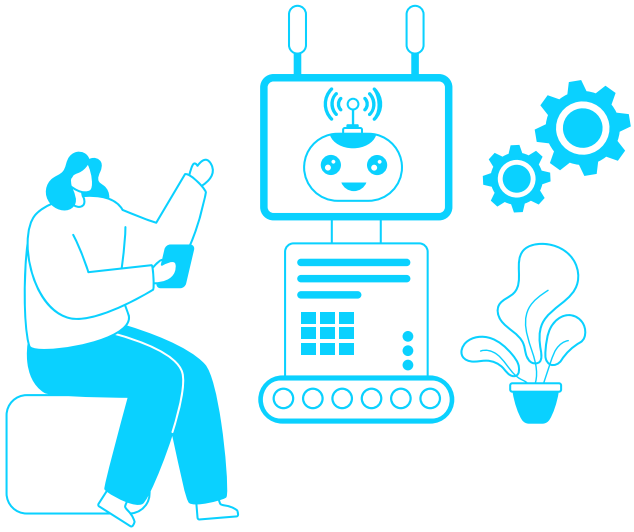
Data collection at work has been happening for decades. It is quite normal for your employer to ask you to upload your qualifications or keep track of how many hours you work on a particular project. With the advent of 'big data' and AI, employers can collect increasingly detailed data on employees, including how and how fast they perform their work. When an employer uses this data to manage employees in an automated way, for example for scheduling and assessing performance, we speak of **algorithmic management**.

A well-known example of an industry where algorithmic management has become quite normal is the '**platform economy**'. These are often digital companies and start-ups that provide goods and services through an online platform, such as Uber, Deliveroo, and Fiverr. The people delivering these services and goods are controlled by AI systems that, for example, calculate the fastest route and determine the order of deliveries. In addition, their performance is often assessed based on customer ratings, such as grades or smileys. In some cases, this even determines the level of compensation.

The platform economy is an extreme example where algorithmic management has become the standard, but elements of this are also increasingly being **used in other sectors** to make work more efficient. Here are some examples of data being collected at work:

- **Person analytics**: an HR department can collect data on employees' characteristics, behaviour, or professional past to make decisions on hiring, promotion, and dismissal. Companies are increasingly using recruitment or evaluation software to automate parts of this process.
- **Performance metrics**: this may involve measuring employee productivity. Employers today can access many tools for this, such as motion sensors, GPS tracking, or keyboard monitoring. Another example is a call centre that measures how much time an employee takes to complete a call with a customer. This data is linked to other data and compared with the performance of other employees as part of the evaluation.
- **Attendance and time management:** this includes tracking working hours, punctuality, or the time taken by the employee to complete a task. Time tracking software, for example, records time spent on different tasks and helps identify inefficiencies.
- **Well-being**: workplace well-being can be tracked using data-driven methods such as satisfaction surveys or monitoring stress levels via wearables like smartwatches or software analytics (analysis of communication and email traffic). Furthermore, a staff member's engagement with a team can also be mapped through a tool that calculates the number of interactions or active participation in discussions.

Besides tools that collect real-time employee data, advanced technologies, such as machine learning, enable **predictive analysis of employees**. These technologies analyse patterns and trends in the collected data to predict future behaviour, such as estimating employee turnover or identifying potential skills shortages. This allows companies to proactively address issues and optimise workforce planning.



POTENTIAL IMPACT

Employee datafication offers employers **significant benefits and valuable insights** that can drive efficiency, productivity, and informed decision-making. In an ideal world, companies can optimise workflow, improve employee performance, and tailor training programmes to individual needs. A data-driven approach also creates transparency because performance metrics are clear and can identify areas for improvement. It can also enable personal development and wellness initiatives for employees, creating a supportive environment that can increase overall job satisfaction and engagement.

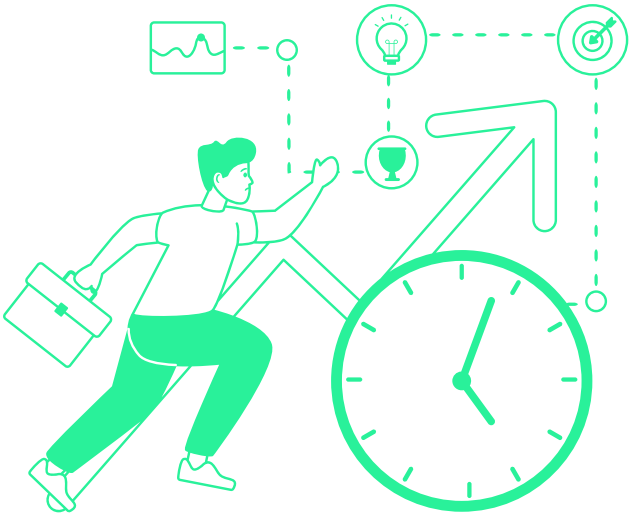
The ideal scenario above **needs some contextualisation**, as employee datafication can also have a negative impact on the workplace:

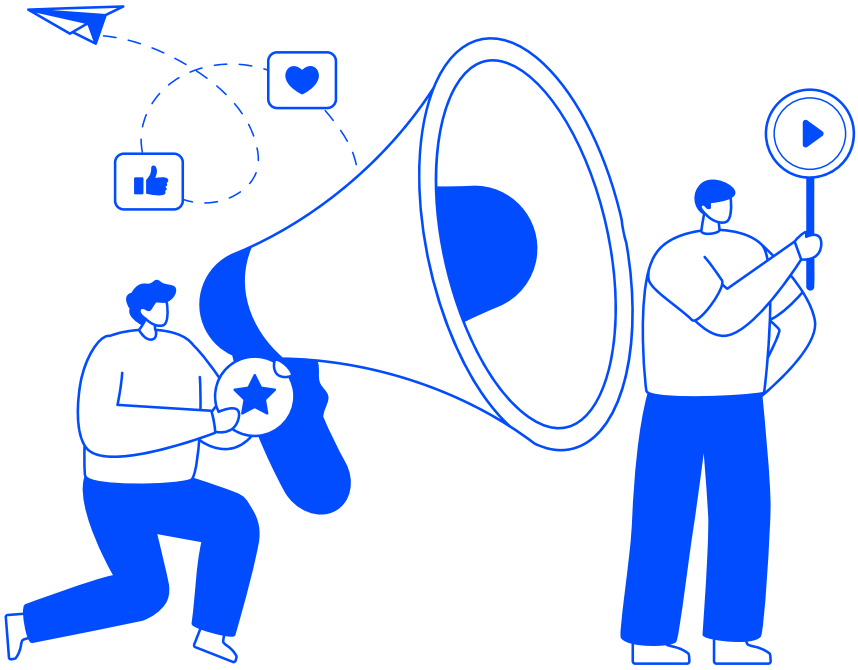
- **Work stress**: Several studies show that regular or continuous monitoring and data collection can give rise to stress, as employees feel they are under constant surveillance and pressure to perform. It can also encourage higher work pressure, which can cause physical health problems such as injuries or safety issues. This was demonstrated in the case of Amazon's warehouses.
- **Reduced autonomy**: A work environment that focuses on statistics while omitting human considerations in assessment can make employees feel controlled (by the introduction of new technology). A study by the Dutch Rathenau Institute on the impact of algorithmic management outside the platform economy confirmed this sentiment among 28% of the employees surveyed. According to the researchers, employees in this situation experience less autonomy, more mental strain and an increase in burnout complaints.
- **Discrimination**: Data profiling allows employers to categorise and assess employees based on different metrics, making it easier to identify and address specific behaviours or performance levels. This can lead to discriminatory practices where employees are punished or rewarded based on data-driven profiles that ignore individual circumstances. It can also lead to action against employees who do not fit the ideal data pattern, fostering a culture of mistrust.
- **Unequal power relations**: Datafication of employees and algorithmic management also increase the concentration of power with employers. For example, in the context of the platform economy, employees are obliged to comply with data-driven employee expectations because their income depends on it. However, technology that controls workflow can perpetuate inequitable practices, as it is often used to enforce rigid performance standards, justify low wages, or undermine job security, worsening existing inequalities in the workplace.
- **Privacy & ethics**: Finally, data privacy and the unethical handling of employee data can cause concerns. A good guiding policy is an important prerequisite for this.

WHAT CAN YOU DO TO AVOID NEGATIVE IMPACT?

Algorithms can thus be useful to make work easier and better organised, but they must be used in an acceptable and fair way to avoid negative impact as much as possible. A number of international and national legislative frameworks apply to algorithmic management and data collection at work, including the General Data Protection Regulation (GDPR), as well as the Platform Work Directive and the European AI Act (both soon to enter into force). In addition to these guidelines and requirements, the employer can carry out a thorough analysis of the potential impact of the algorithm beforehand and mitigate possible risks. Various assessments and tools can be used for this. For example, the Guidance Ethics Approach can be valuable to identify the different impacts and actions together with employees.

It is also important in algorithmic management that employees are involved in the implementation from the beginning, so that their wishes and concerns are taken into account. Besides the impact of the system on productivity and performance, it is also necessary to include workability as an evaluation criterion. Working conditions, workload and employee well-being are an indispensable prerequisite for the successful adoption and positive impact of a new technology, and are therefore just as important as the efficiency gains the application brings. Want to know more about why employee engagement is so important when introducing data and AI systems in the workplace? Be sure to check out our white paper on data, AI, and work (only available in Dutch).





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