Artificial Intelligence and Workforce Management: Practical ways to boost Productivity with AI
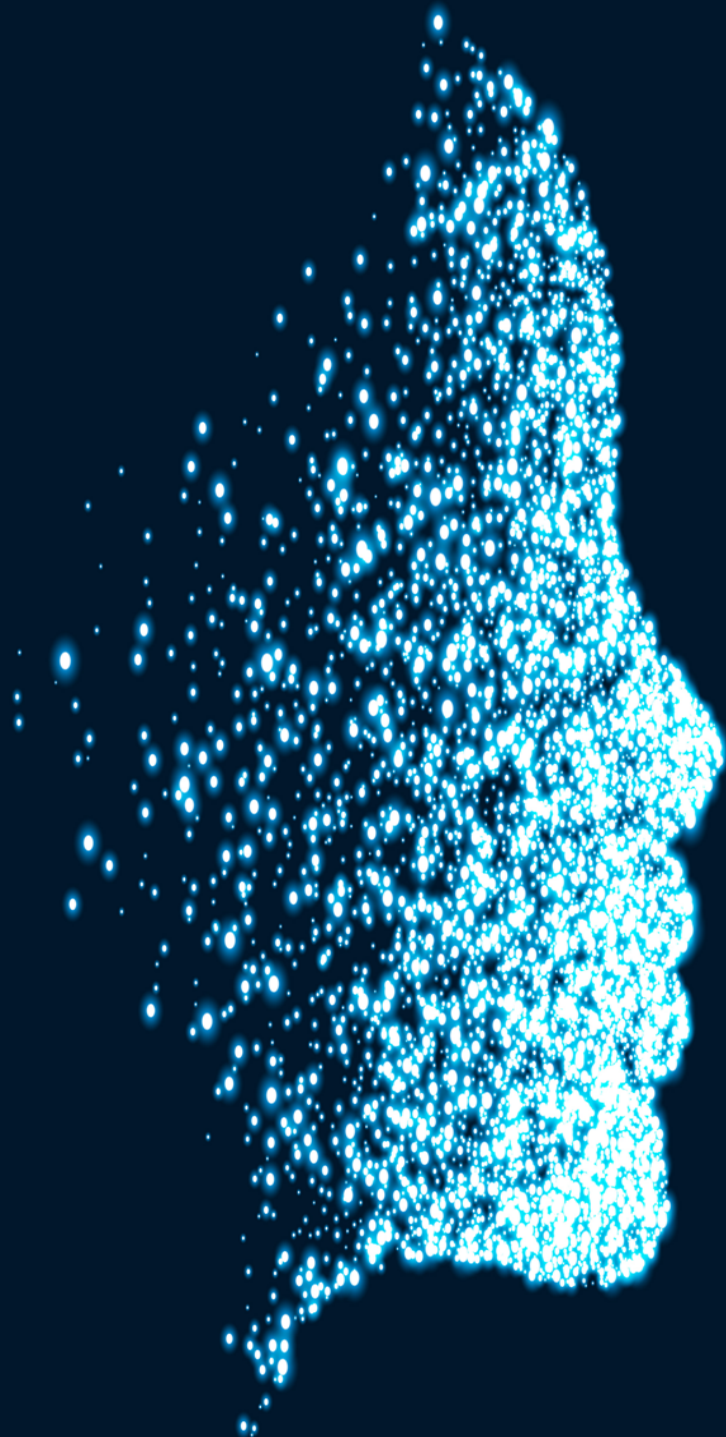
UK Whitepaper Spring 2020

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Introduction

The following whitepaper discusses the ways in which artificial intelligence (AI) can help businesses connect with and manage employees more efficiently, specifically as it pertains to workers who do not use computers in their everyday work. In this whitepaper, you will learn how AI-driven systems:

- Can be deployed in workforce management
- Reduce friction and create a more unified workforce
- Provide deeper insights into workforce productivity and sentiment

When we think about Artificial Intelligence, our imagination might turn to depictions in popular culture such as Skynet from the Terminator movie series or Hal from 2001: Space Odyssey. To be sure, AI has greatly advanced in recent years, beating the top Jeopardy champions of all time and the world's top Go player. [1,2] Businesses in nearly every industry are starting to develop AI programs to help them accomplish a variety of tasks such as identifying cancer faster to delivering more accurately targeted digital advertising. And the world of workforce management is no exception.

Artificial intelligence has a wide variety of applications in human resources, and the industry—like others—are just starting to explore how best to deploy this new technology. From chat bots that can help manage daily callouts to automated employee communication to improved employee sentiment analysis, AI can help businesses boost employee engagement and tackle a host of other common stumbling blocks to productivity.

> **Definition of Artificial Intelligence:** Traditionally refers to the area of computer science that seeks to create software that can learn from a dataset and then react "intelligently," without human intervention. In business, this can refer to a variety of software that ranges from image recognition, pattern recognition, predictive analytics, and others.

And it couldn't come at a better time. In the U.K., engagement rates appear to be stagnant. According to research firm ORC International's 7th annual Global Perspectives survey, employee engagement in the U.K. hovered at 58 percent between 2015 and 2016. And while that may seem to represent a majority of workers, the survey also found that approximately 20 percent of employees would not recommend their employer as a place to work, while the percentage of workers feel they are forced to work beyond what is normally required.[3] Similarly, research by Kronos and the Workforce Institute found that 60 percent of employees cited not feeling valued the key factor when considering resignation.[4]

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[1] https://en.wikipedia.org/wiki/Watson_(computer)#Jeopardy!
[2] http://www.sciencemag.org/news/2017/10/computer-program-can-beat-humans-go-no-human-instruction
[3] https://orcinternational.com/thank-you/global-perspectives-2016-makes-winning-workplace/
[4] http://www.manufacturingglobal.com/people-and-skills/increasing-employee-engagement-manufacturing

So while engagement appears to be at a decent level, there are enough unengaged employees in the U.K. whose level of disconnectedness and lack of engagement can greatly undermine an organisation's productivity.

Unfortunately, most resources used to improve engagement and productivity have been invested in products designed for workers who use laptops or desktops in their day-to-day work. But that doesn't account for the millions of workers who don't use these tools for their work, including workers in manufacturing, but also workers in healthcare, logistics, construction, and other manual labour trades. Too often, technologies designed to improve engagement and productivity overlook these workers' environments and fail to connect them with their company's culture or systems. Or worse, those systems are entirely paper-based, making them arduous and time-consuming to use, both for the workers but also the back-office employees who need to process paperwork.

Luckily, AI technology isn't tied only to laptop or desktop applications but can also be deployed through smartphones. According to a report from Deloitte, smartphone penetration has reached 85 percent of adults in the U.K., making it an ideal technology to deliver user-friendly applications that are both AI-driven and fuel data for advanced analytics.[5] Moreover, AI-driven systems can provide a platform for employees to interact with their employers while also providing management with the data it needs to improve both engagement and productivity.

Let's look at a couple of key examples to understand the possibilities and the promise AI has for workforce management systems.

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[5] https://www.consultancy.uk/news/14113/uk-smartphone-penetration-continues-to-rise-to-85-of-adult-population

Meet the New HR Assistant

For employees who don't need to use or have access to a laptop or desktop as part of their everyday work, HR-related processes are often still paper-based. Need to request time off? Fill out a form. Need to call out sick? Fill out a form (when you get back). Want a wage slip? Ask HR to print it out. Need to fill out an employee survey? Be sure to only use a #2 pencil. Need to communicate a new policy? Print a memo. Need to contact every employee about an emergency? Hit the phones.

All of these tasks are fairly standard for running a business of nearly any size, and yet are often done manually. And even when a company uses software to process these types of interactions, they require an employee to spend the time manually entering it into a system. This means potentially hours of labour spent monthly or even daily, just to accomplish things that should be considered basic.

In fact, one recent study found that small businesses spend an average of 120 working days *per year* on administrative tasks, which is the equivalent to 5.6 percent of staff time. That doesn't sound like much, but if that time was redirected towards productivity British GDP could add an additional £33.9 billion annually.[6] In an economy where businesses are faced with squeezing as much value out of their budgets as possible, it would seem that AI-driven systems designed to reduce time spent on paperwork would greatly boost productivity, and thus a business' revenue.

One AI technology that's been wildly successful in other industries is chatbots, essentially software that simulates human conversation. Retailers use chatbots to help online shoppers find products, while tech support chatbots are popular for troubleshooting common user issues with software. As an HR application, a business might deploy a chatbot to manage employees calling out sick. Instead of an employee calling or texting a manager, who then has to report the absence to HR, a chatbot can record the absence and reason, and then automatically update the employee's records and payroll system. This is just one example that contribute to creating a frictionless workplace, but there are many other applications for chatbots such as administering employee surveys, capturing workplace suggestions, logging employee complaints, among others.

The goal is to use AI built into a workflow that triggers actions based on content.

Employee communications is another area where an AI-driven technology can have a positive impact for both workers and managers. For example, take the recent Jaguar Land Rover and Cadbury plant closures due to water main breaks. An estimated 14,000 employees needed to be notified of the closures immediately.[7] Although some employees were sent messages through one of the company's Facebook page while others received an urgent message by email, notifications mostly left it incumbent on the employees to seek out the proper information.

[6] https://www.telegraph.co.uk/business/2017/09/11/uk-small-businesses-wasting-120-days-year-admin/
[7] https://www.theguardian.com/business/2018/mar/05/water-company-orders-jaguar-land-rover-shutdown-to-fix-burst-mains

What about the employees who don't check emails, or don't use company email often or don't use Facebook? Ensuring all employees were notified likely took hours and hours of human labour. On the other hand, an AI-driven communications system could manage pro-active communication with employees in less than a minute. The cost savings of being able to quickly and efficiently communicate with all employees, regardless of their preferred communication platform, would be significant and would make huge strides towards creating a more unified workforce.

Once a firm ties AI to its employee communications systems, it can develop a virtual concierge for its employees, meaning that frontline workers spend less time filling out paperwork, and back office employees spend less time processing it. Ultimately, AI can free up workers and allow them to focus on more important tasks that contribute directly to productivity.

Better Insights Bring Better Decisions

AI driven systems are effective at reducing wasted time completing workplace administrative tasks, and they're even more efficient at analyzing workplace trends. AI-driven systems can take massive amounts of data and analyse it for patterns in real-time. What traditionally may have taken managers weeks or even months to collect, measure, analyse, and act upon, now can be accomplished at a far faster pace, providing managers with a more accurate way to keep their finger on the pulse of their company.

This can take place on various levels. Managers can analyse individual employee patterns, site-specific patterns, or company-wide patterns. On the individual level, managers can see all data related to specific employees in a timeline. The AI can identify individual patterns, such as the employee calling out sick every time their favorite football team is playing.
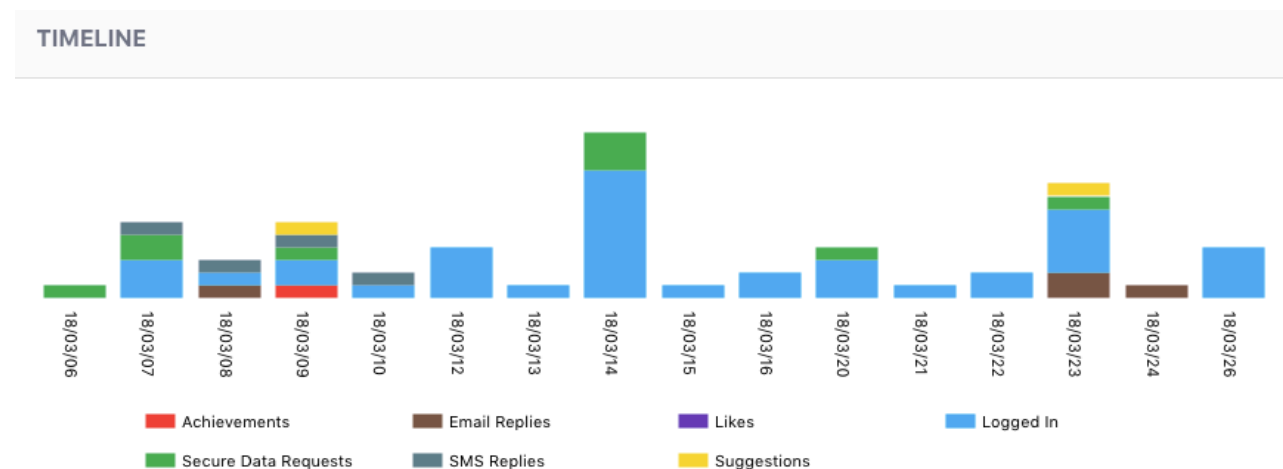
More broadly, though, the AI can analyse anonymous employee sentiment and give better insights into whether employees are responding to initiatives. It can help to pinpoint breakages in workflows, as well as identify which offices or business units are most productive, most satisfied, etc. Insights about a specific business unit's performance or sentiment may be cause for the organisation to reward or address problems in the unit.

AI-driven workforce management software provides businesses the opportunity to transform how it engages its employees. It can dramatically reduce the time—and therefore the cost—of performing everyday administrative tasks. And it can help forge a more unified workforce by providing tools to all employees, not only the ones with access to laptops.

The Future of Workforce Management

Moreover, gaining a clearer understanding of what's happening in a business on the employee, group, or global levels ultimately helps managers quantify metrics beyond simply revenue and profitability; it creates opportunities to see in real time what is happening within the organization, allowing managers to plan and execute employee initiatives that reflect more deeply what employees want while also more effectively creating a cohesive business culture.

About StaffCircle

StaffCircle's mission is to Engage, Empower, Enhance workers and managers at all levels. StaffCircle provides an AI powered employee relationship platform which combines alerts, communication, ideas, tasks, sentiment performance and progression and delivers it to staff via the smartphone in their pocket. This reduces staff attrition and creates greater employee engagement, empowerment and productivity. https://www.staffcircle.com/ROI