
The Lonely Crowd: Humans as Digitally-Controlled Expert Machines

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Innovation, creativity and ingenuity — previously the characteristics of a successful business are now losing importance. Today business corporations are regarded as efficiency-oriented productivity-boosting systems. Consequently, corporate managers try to boost efficiency and productivity by constantly introducing technical, cultural and organizational change.

This approach makes business corporations increasingly similar as managers introduce standardized processes and computer programs¹ that not only dictate the speed of work processes but also shape the organizational structure of corporations. Work groups² are monitored and controlled via key performance indicators (KPI) and *agile* work methods are implemented, which for managerial and financial control purposes make work tasks numerically transparent, but also compress and accelerate the workflow.

Colleagues must compete

The widespread use of technical and social engineering methods (expert systems) has one overarching objective: to push employees to their physical and psychological limits. By benchmarking and comparing individual and group performance with other departments, facilities and competitor businesses, employees are motivated to compete to raise their productivity. However, another outcome of this micro-management is that employees become disengaged, they lose sight of the overall business process and their role within it. The real purpose behind this comprehensive deployment of workflow systems is to allow closer efficiency-oriented control of both employees and managers.³

Digital in-house communication media (blogs, social media), although propagating a shared corporate identity, can not hide the fact that humans are being excluded from decision-making and are increasingly isolated — worse still, they no longer experience their work as meaningful. Skilled employees feel they have been degraded to data operators or human expertise machines, who contribute their professional knowledge, as and when required, but otherwise are simply cogwheels within restricted and temporary project teams or cost centers.

Utilized, automated, other-directed — and increasingly isolated

Intelligently-designed user interfaces ('enriched' with game elements to extend the attention span of users), work processes (increasingly complex) hidden behind IT programs, will create an alienated workforce. Employees who have no idea what happens to work they perform (the specialist knowledge they input) or why it is needed, will eventually lose interest. They are increasingly subject to digital control by workflow systems, as each work task is sub-divided into ever-smaller time units and cost units. They, the real experts, must provide (on demand) their professional expertise as input for so-called 'expert' systems. The classic Taylorism of the factory, which formerly impacted factory operatives only, has now been transformed into all-powerful *digital* Taylorism, which affects all employees, including office workers and managers.

The digitalized integration of work tasks may, at first glance, appear to optimize work processes and benefit the business enterprise. However, it makes operational and administrative processes inflexible (not flexible or agile). It disempowers the creative human factor, the professional/technical employee, and prevents them from being genuinely productive. They are forced to meet pre-defined performance targets, their work becomes repetitive, and their assignments seem never-ending. Professional and skilled workers feel their professional skills, capabilities and ideas are becoming virtually redundant and their long-time commitment and practical experience is valued only within the logic of expert systems. Eventually these professional and highly-skilled employees will become emotionally exhausted and 'burned out'. Consequently, this managerial method will fail to meet its objectives, because it is essentially contradictory. It is just as contradictory as putting people under psychological pressure that makes them ill, while expecting them to work longer and retire later.

Individualization weakens group cohesion

Individual employees are assigned to multiple project teams according to their competencies, which are filtered and categorized as useful or not useful by human resources software (recruiting on demand). The aim is to match individual employees to individual work tasks. Organizational self-identification (my department) is replaced by a technical function as social engineering methods are used to assign staff to temporary project teams, which creates a feeling of isolation and disengagement. This newly regulated relationship between the individual and the group can also mean that teams will even commit to over-ambitious targets that are unrealistic. Consciously or not, managers will be delegating the managerial and entrepreneurial risk to partly informed subordinates.

Social capital is under-appreciated

Two other things are overlooked: firstly, how *self-efficacy* (the belief in our ability to confront challenges and successfully complete a task) is important for the health and well-being of employees and, secondly, the valuable contribution that *social capital* makes to the operational performance and long-term success of a business. Social capital is the value to a business of the trust, dependability, shared identity, mutual recognition, and collaboration between people (colleagues, supervisors, suppliers, customers, etc.) who are involved in work. Social capital does not accrue if people consider their work is without purpose (no pride in their work). The *purpose of work* is found not only by whether it pays for daily life, but also by whether it is self-determined and meaningful; whether employees can engage and express themselves through that work; whether

they feel part of something bigger than themselves (see Kurt Lewin and Viktor Frankl⁴) and feel recognized and accepted within a social group, as defined by solidarity and a code of conduct.

The commercial logic and utilitarian morality of a business is counter-productive if it justifies only profit maximization, and employees are only entities from which value is extracted. Such a business will not only fail to generate social capital, it will also lose its essential social purpose. There is then also the real risk that technological (especially digital) innovation will undercut the minimum psychological and social standards that define *good work*⁵.

Scientific studies⁶ show that employee stress multiplies disproportionately as the degree of digitalization increases; whereas employees who really participate, whose creative input is welcomed, experience lower stress levels. A feeling of powerlessness, when subordinated to computerized systems, negatively impacts the mental health of staff (burn-out syndrome); which today also impacts professional and managerial staff, who are being burdened with ever-more documentation duties and administration, while their professional expertise becomes ancillary.

More social innovation, more collaboration — less techno-fetishism

Many Western business corporations are on a one-way street: instead of doing things differently, they are doing more of the same. Many managers still rely on micro-management, key performance indicators, and ever more efficient processes to compete against other businesses, regions and countries that can produce similar goods but cheaper. These 'competitors' often ignore social and ecological standards and, therefore, are stealing the future of their own populations.

Here Western businesses could take the lead with a new shared approach, with more innovative thinking including ideas contributed by all employees, which could ensure long-term profitability as well as the well-being of the workforce. This means ideas for sustainable growth and collaboration within the workplace. As a first step, one-sided efficiency-focused tactics should be discarded and local decision-making extended to employees together with a wider span of tasks and greater autonomy. Managers must also recognize the true value of acquired knowledge and practical experience, the real benefits to be gained from social integration and a culture of recognition (by superiors and colleagues) as well as the closer involvement of stakeholders.

We must humanize *digitalization* not *digitalize* humans.

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Footnotes

1. Enterprise Resource Planning programs (ERP) where corporate managers admit they have no influence over or insight into the underlying ERP technology and algorithms, and where ERP providers merely promise higher efficiency, sometime in the future.

2. See: Stephan Siemens and Martina Frenzel (2014): *Das unternehmerische Wir. Formen der indirekten Steuerung in Unternehmen*.

3. See: Raffetseder, Eva-Maria; Schaupp, Simon; Staab, Phillip (2017): *Kybernetik und Kontrolle. Algorithmische Arbeitssteuerung und betriebliche Herrschaft*. In *PROKLA 187 Arbeit und Wertschöpfung im digitalen Kapitalismus*, pp. 229 – 247, Münster, Germany.

4. See: *Managerism, Lesson number 30, Re-lecture number 2 Victor Frankl*.

5. See: DGB-Index *Gute Arbeit: Arbeitshetze und Arbeitsintensivierung* index-gute-arbeit.dgb.de

6. See: Extract from *Digitalisierung und Arbeitsintensivierung* DGB-Index *Gute Arbeit* (2017), "Increasing digitalization leads to more work stress (45%), more workload (54%) and more time pressure (60%)."