



Humaneering Prepares Management and Energises Workforce for Fourth Industrial Revolution

By James Pepitone.

Participants in the 1999 World Productivity Congress in Edinburgh were among the first to formally learn of the Humaneering Technology Initiative and humaneering's imagined potential to substantially increase the productivity of human work, and in turn to raise the economic well-being of workers, employers, communities and nations.

My presentation, as intrepid as it must have sounded to the audience, launched what has become a global initiative to update contemporary workforce management practices, which remain anchored to Henri Fayol's 19th century experience as CEO of a coal mining business. Our explicit goal was to align human work design and management with human nature (versus machines), thereby unlocking people's inherent yet untapped human potential to create additional economic value, while still meeting management's need for direction setting and control.

Several of the ways humaneering is already fulfilling this

potential have been discussed in Management Services Journal, in a series of articles commencing Autumn 2017.

- Autumn 2017 – Rethinking Managerial Economics, pp12-17
- Winter 2017 – Here Come the Humaneers, pp28-33
- Spring 2018 – HR 'Special Forces', pp35-39
- Summer 2018 – A Better Way to Manage People, pp17-21
- Autumn 2018 – What's love got to do with management? pp33-37

In common across these cases is the ingenuity and pioneering spirit of organisation leaders and their followers, who have seized the chance to experiment with new work designs and workforce management practices in search of increased productivity and better outcomes for all stakeholders.

Like most new technologies, humaneering's usefulness

“The challenge for government, business and society is to find new ways of thinking and acting as our world is disrupted by technology and innovation.” – Uschi Schreiber, Former EY Global Vice Chair

and economic value are determined, not by the claims of the developers, but by the outcomes from its application. And to capture these outcome measures, we turn to the management of the diverse organisations requesting early access to conduct their own humaneering field-trials.

One of our technology-transfer teams is typically involved in a host company’s first applications, to assure the host’s people involved develop a deep understanding and new mindset so subsequent applications are equally successful. This positions our team to provide hands-on support and acquire a nuanced understanding of each unique situation’s dynamics.

At some point following one or more initial applications, our technology transfer team must shift its attention to another new host, so we leave behind a simple way for experienced hosts to submit the relevant data from subsequent applications. While the collection of data continues, it’s natural that we on the field-trial teams become less aware of how each field-trial host is experimenting with humaneering on their own.

Reaching out routinely to our field-trial hosts in October 2017, we learned about a new and substantial application for humaneering. After further study, and our realisation that several hosts had discovered the application, we are excited to now share this new application with you.

But first, I want to provide a brief background on the Fourth Industrial Revolution, which is the application’s *raison d’être*. You may be thoroughly familiar with this topic, so I will keep my description short and narrowly focused. If you are not familiar with the Fourth Industrial Revolution, you may want to check Wikipedia or one of the many videos by the World Economic Forum found on YouTube.

The Fourth Industrial Revolution refers to the beginning of a convergence of new technologies that, during the next 5 to 30 years, will reshape our economic, social, cultural and human environments, thus affecting our lives—including our work and careers—in ways not previously experienced. Professor Klaus Schwab, Founder and Executive Chairman of the World Economic Forum has written two books on the Fourth Industrial Revolution to compile and express the wide-ranging opportunities and real-world vulnerabilities with the potential to fundamentally alter our experience as human beings living on earth.

Among the many concerns raised is the future of work. Initially troubling, the path to work’s future does not begin with a foundation of trust or even a blank slate. Most older workers have witnessed their jobs being emptied of challenging content, meaningful purpose, health benefits, wage increases, professional development, career potential and employment security, which can be attributed to management’s abandonment of stakeholder concerns with the adoption of shareholder primacy (ie, belief that only the shareholders matter). For Millennials, these characteristics were never found in the only work offered to them.

Andy Haldane, Chief Economist of the Bank of England, warned recently that to avoid ‘large swathes’ of people becoming ‘technologically unemployed’ as artificial intelligence begins to replace jobs, the UK will need a skills revolution. Haldane predicted that the disruption caused by the artificial intelligence revolution could be ‘on a much greater scale’ than anything felt during the First Industrial Revolution of the 18th and 19th century. He added that the risk of people being left behind was ‘huge’ as computers and robots change the way we work.

Workers will need more than just a stipend and limited access to online or classroom training resources like those provided in the past. The challenge workers face is greater now, with unlearning being as important as learning. Apprenticeship-like training programs (ie, simultaneous learning and doing) will have the most hope of creating the desired outcomes.

What’s most uncertain for management is how it will be able to emotionally engage workers. You are probably aware of the research by management consulting firms, Gallup, Willis Towers Watson, and others, which has determined that only about 20% of people around the world are truly emotionally engaged in their work. Another 60% are on the fence, with some days somewhat engaged and other days not so much. And then there’s a final group of 20% who are decidedly disengaged, or just basically antagonistic.

Adding to this challenge, around 80% of these people report that their job is ‘okay’, or good enough, all things considered. They have learned to settle for ‘okay’ over time and in the face of the challenges standing in the way of their having a better job. Resolved to this fate, they learn to reciprocate with a job performance this is correspondingly ‘okay’, thus making the exchange equitable (ie, resolving any cognitive dissonance).

This offsetting dynamic illustrates why so many organisations are brimming with untapped human potential that remains unengaged. Today’s holdover industrial workforce management systems and practices, which were selected by early industrial leaders to create strict discipline and maintain unwavering compliance, are not helpful when trying to emotionally engage a contemporary workforce in the 21st century.

The new application I can now share was discovered by not one, but three, of our field-trial hosts, including one who started experimenting with humaneering in 2005 (v1.0), and the other two starting in 2009 (v2.0). We provide these host firms with perpetual non-disclosure agreements, though I’ve secured permission to share some basic descriptive information about each organisation, including its nationality, industry segment, and original application for humaneering, in addition to all three being major, multi-divisional organisations.

1. German, batch fluid processing, excessive operator turnover at new facility
2. Japanese, semi-automated part moulding, mid-management turnover and financial performance
3. United States, continuous Mil spec materials moulding, engineering productivity

In all three cases, the original application of humaneering naturally led to suggestions and then attempts to apply humaneering principles, processes and practices to deal with other frequently occurring issues, such as performance, turnover, complaints and recruiting. Initially, there was reluctance

by management, HR and workers to take a new approach, even though the typical response in the past had rarely been satisfactory to all. With the humaneering-based solutions, it seemed like everyone could more easily agree on a resolution.

As a byproduct of this experience, it became easier to work through issues, and to arrive at new ways of working that were better for everyone involved. In effect, this in time changed the

These emerging technologies are not merely incremental advances on today's digital technologies. Fourth Industrial Revolution technologies are truly disruptive – they upend existing ways of sensing, calculating, organising, acting and delivering. They represent entirely new ways of creating value for organisations and citizens. They will, over time, transform all the systems we take for granted today – from the way we produce and transport goods and services, to the way we communicate, the way we collaborate, and the way we experience the world around us. Already, advances in neurotechnologies and biotechnologies are forcing us to question what it means to be human. (Klaus Schwab, *Shaping the Fourth Industrial Revolution* (2018), pp. vii).

unit's culture, increasing collaboration, initiative and openness to changes.

In addition to this culture change, more attention is being paid to minimising any waste of opportunity and maximising the economic value created by each worker. This became each worker's responsibility, which in turn led to the worker's interest in opportunities to utilise new technology where it increased their productivity, including situations where entire tasks were farmed out to more productive operations, which then created opportunities for workers to perform higher-value work.

And if that is not enough breakthrough, all three organisations have designated humaneering as their preferable foundation for navigating the Fourth Industrial Revolution. Their approaches are naturally different on numerous dimensions, yet all the representatives I met with expressed confidence, if not relief, in having identified a 'go-to' approach with which to begin working.

One of the questions we still have is what role natural emergence played in the success that's been achieved. Would the result be the same if a manager just announced these changes one day or was it the gradual building of trust and learning new ways of working that ultimately enabled the transformation to take place. We will be researching this question in 2019.

Three things we do know. First, humaneering enabled managers in all three organisations to consider new and more productive ways of managing today's workforce, without requiring wholesale change or taking unwise risks. It's not an overstatement to say that the managers might be even more excited than the workers involved because of the new potential they've developed to manage more effectively.

Second, many or possibly most of the workers involved have found a new level of trust in management and new level of interest in their work. Clearly, the younger workers are more responsive, engaged and hopeful than are those workers who had been working in the old situation for more than five years. It's not that the more experienced workers will not come around, but they may require more individual attention to 'untie' issues that hurt or betrayed them sometime in the past.

Third, as technology transfer professionals, my teams and I can feel confident in recommending humaneering as a facilitative foundation on which management can engage workers for navigating the Fourth Industrial Revolution. Now, more than ever before, employers will need their workers to be much more than just compliant and disciplined in following rigid work standards. The future of work will likely remain uncertain until it is created through collaboration of managers and workers.

About the author

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