

# New frontier for increasing workforce productivity

**The 21st century is unfolding in complex and challenging ways. Organisation management is no exception. Long held industrial era management practices are being upended by today's business pioneers who are seeking more from business, work and life itself. By James Pepitone.**

**T**he foundations for today's management practices have gone unchallenged for many years, yet now are being reassessed and more often deemed to be no longer acceptable.

Combined with fresh thinking and a frontier spirit, this rejection is driving reconsideration and, in some organisations, replacement of many longstanding management principles. In their place, organisations are implementing circular organisation structures, project-based work, self-management, unlimited paid vacations, management accountability to direct reports, and many other possibilities.

This flow of new possibilities we are witnessing is, in many cases, guided by no more than an authentic and impassioned search for anything that works better and, now equally important, that feels better. Moreover, the new measure of acceptability for any change in management practices is real world evidence (ie, show me). Yesterday's criteria – academic research studies, clever theories, and entertaining authors, on which so many wasteful management fads were based – is no longer acceptable.

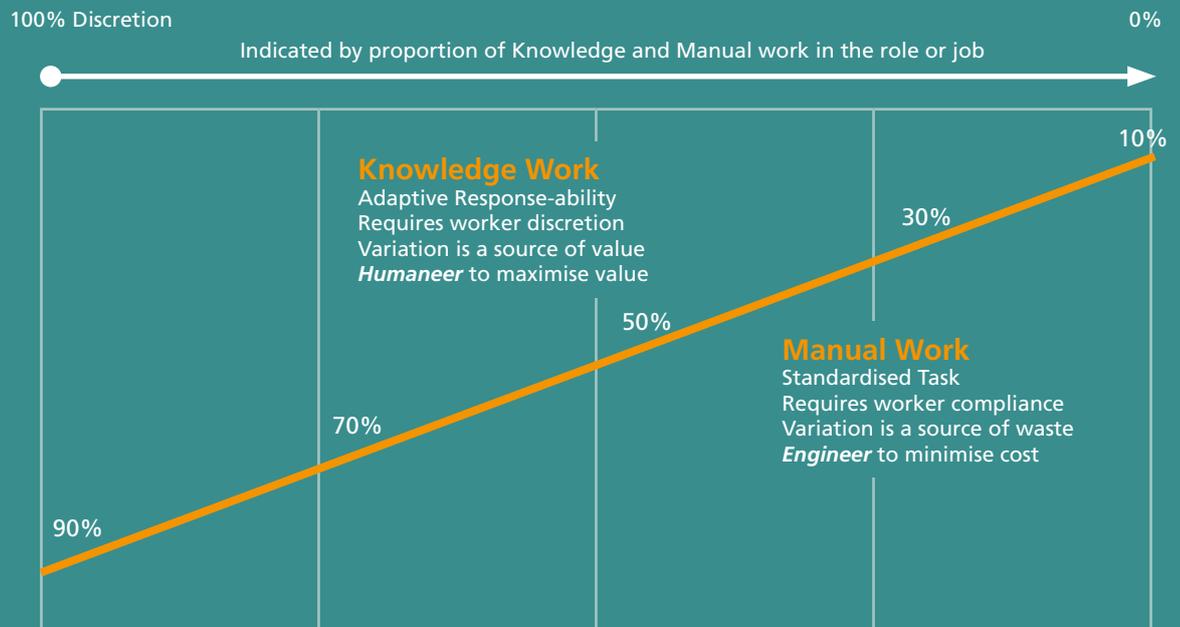
## **Humaneering Technology Initiative**

Among the enhancement possibilities, humaneering<sup>1</sup>, being developed by the nonprofit Humaneering Technology Initiative (HTI), is emerging from its field trials as an effective and sustainable approach to raise the productivity of knowledge workers. This holds true whether knowledge work, as represented in Figure 1, is most of a job (ie, innovation and service work), or just a small part (ie, production and logistics work).

Humaneering supports human effectiveness in ways that



# Work Design Archetypes



Operational Classification	Creation	Service	Logistics	Production
<b>Peter Drucker:</b> Value Creation	Creating Knowledge	Applying Knowledge	Moving Things	Making Things
<b>David Snowden:</b> Complexity Approach Process	Chaotic Novel Act Sense Respond	Complex Emergent Probe Sense Respond	Complicated Good Practice Sense Analyse Respond	Simple Best Practice Sense Categorise Respond
<b>Robert Wysocki:</b> Project Design	Goal/Solution Convergence	Solution Seeking Problem to Solve	Problem and Solution Learning (Agile)	Execution of Familiar Solution (Waterfall)
<b>Elliott Jaques:</b> Mental Process	Parallel	Serial	Cumulative	Declarative
<b>Hersey/Blanchard:</b> Management Style	Delegating	Supporting	Coaching	Directing
<b>Core Challenge</b> Goal Solution	Not Clear Not Clear	Not Clear Clear	Clear Not Clear	Clear Clear
<b>Job Examples</b> <i>Job will vary by situation</i>	Executive Entrepreneur Author/Artist Scholar/Researcher Designer Inventor	Manager/Supervisor Servant Sales Entertainer Analyst/Engineer Physician/Nurse Craftsperson	Administrator Product Sales Call Centre Agent Bank Teller Instructor Delivery Driver	Equipment Operator Assembler Labourer Cook/Food Prep Piece Work Material Processing
<b>Industry Examples</b> <i>Companies will vary based on strategy</i>	Start-ups R & D Design Advertising Biomed/Pharma Consumer Products	Hospitality/Leisure Restaurant Retail "Shops" Police/Security Consulting/Training Medical	Transportation Fast Food Retail "Marts" Banking/Insurance Education Utilities	Manufacturing Construction Chemical/Refining Farming Garment Printing

Figure 1: Copyright 2016 Humaneering Technology Initiative, LLC. All rights reserved.

engineering cannot. Humaneering's principles capitalise on our human nature in ways that result in workers maximising their current and future potential to create economic value. This enhancement is especially important for the design and management of people-dependent innovation and service work. For more standardised production and logistics work, humaneering's principles add and support new opportunities for workers to create economic value, thus increasing their economic potential and contribution.

Humaneering derives its efficacy as an applied science from a continuous four-step process. First is the systematic scrutinising of hundreds of science disciplines by volunteer scholars to curate principles, methods and insights relevant to the design and management of human work. Second is the Delphi method staffed with recruited panels including volunteer managers, practitioners, professionals and scholars whose challenge is to extract and synthesise essential truths and subtle nuances. Third is the testing stage, which involves methodologically varied alpha tests, plus beta field trials much like the ones discussed below. Fourth, and yet to occur in scale, humaneering's protocols will be released publicly, with users encouraged to report their experiences and results, so as to monitor validity and direct continuing refinement.

The nonprofit HTI is developing humaneering for global public good. The vision of one day having a universal applied human science to guide organisation management was conceived in the

late 1930s, yet only now has sufficient science-based understanding of human work accumulated to enable its development. Driving the accelerated development of humaneering now is management's urgency to identify evidence-based work design and management methods that increase workforce productivity, in part because they are better suited than industrial era practices for today's predominant knowledge and service work, new generations of workers, and technology enabled work environment.

### CFO perspective

This article shares a CFO's perspective of humaneering's potential. He is a business unit CFO for a major multinational enterprise, and speaks about results his organisation achieved during the latest phase of humaneering's field trials. Despite the privacy assured participating companies, he generously granted us permission share with you his verbatim comments from a conference transcript.

Near the end of his remarks, the CFO refers to Peter Drucker. Drucker famously said in the early 1990s that raising the productivity of knowledge workers was the greatest challenge facing managers. Humaneering's consistently impressive performance in field trials makes it the first really promising management method for raising knowledge worker productivity.

### Context

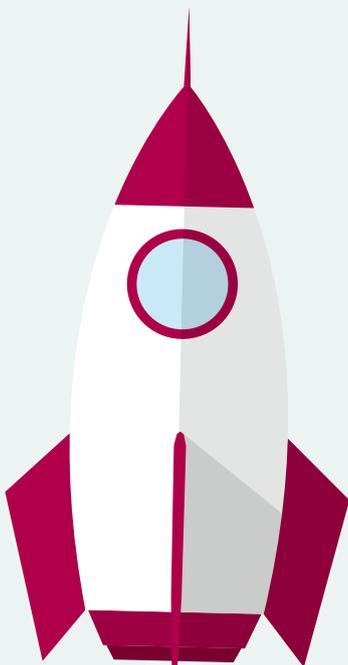
At the end of day one of HTI's recent online planning conference, the CFO for X-Corp (a pseudonym) asked for 10 minutes at the start of day two's programme. He is X-Corp's Champion for its humaneering field trials. Twenty-two of the other 42 companies that field tested humaneering had presented on day one.

Sharing was a central purpose of this virtual conference. Among all the client representatives attending, we knew the least about X-Corp's CFO. When HTI began a third phase of field testing in January 2015, it selected one large organisation willing to commit ample resources to a broad programme of humaneering applications throughout its operations during the ensuing five years. This approach could provide new insights unavailable in the prior two phases.

Previous humaneering field trials consisted of one or a few ad hoc projects selected by the host organisation. Such projects typically focused on seemingly intractable so-called people problems. For example, several said their organisation's turnover was painfully high, recruiting lacked focus, new-hire training was an expensive waste of time, employee engagement levels were low and unmovable, or historic performance levels seemed impossible to raise.

These trial-by-fire experiences were very helpful in revealing humaneering's broad potential as a technology for resolving or substantially improving people issues. However, HTI also needed to assess humaneering's longer term effects throughout a more consistent context (eg, industry, strategy, culture). We suspected that humaneering could be applied recursively for continuous improvement, that humaneering's first principles could be learned and applied with limited training, and that managers rather than employees would provide the most resistance, except when their current operation's performance fell short of senior management's expectations.

Since the author has a transcript from the conference and his permission, he lets X-Corp's CFO speak for himself.



### Verbatim comments

"Our field trial experience has been a little different from most of you in that we agreed to a continuous multi-year programme of applications.

When our CEO asked me to be the champion for a programme to assess humaneering technology, I knew very little about it and what the assignment would involve. He explained just that he had committed us to a small investment over several years, and that the work would likely cut across major functions and responsibilities in the organisation.

When I asked about the programme's objectives, he reminded me of our talent problem. In several areas of our business we do not have and cannot find or hire enough qualified professionals . . . engineers of several kinds and a long list of technical specialties. And so we've been forced to scale back our strategic plans until we can find or create a solution.

I could see where he was headed. If humaneering could somehow increase the current productivity level of our thousands of talented professionals, it would extend their potential and reduce our need for as many new people, especially in hard-to-find disciplines.

We were not just waiting around for a grand solution. In fact, we had already made several much larger investments to increase our supply of people with these capabilities. But these bets wouldn't be paying off for several years.

What we lacked were initiatives that could provide fast relief. This meant trying new ideas, experimenting, and placing smaller bets that, if they paid off, could have a big effect. Even though we just heard of humaneering less than a month before, it sounded promising enough that we needed to try it. The investment and risk were small. And if it did work as represented, the payoff would be substantial, and possibly even strategic.

Okay, here's what happened. HTI helped us set up a functional two-room centre for work design innovation in our headquarters. We repurposed an underutilised conference room and adjoining space into a classroom and presentation gallery that everyone in the company was invited to visit. Our objective was to attract and support our more 'inspired' managers and work with them to apply humaneering in their area. With this facility, however simple it was, curious managers could drop by to learn more, or they could make an appointment, request and assessment of the human work in their operation, or get whatever support they wanted.

In addition to the HTI partner assigned to us, we staffed the centre with a rotating blend of support people from several corporate functions, including operations, human resources, IT, finance, quality/continuous improvement, engineering, organisational development, training and others . . . each potentially having a role to play in humaneering projects. In fact, I have to say that this alone . . . having these people working together in this way . . . may itself be a big win for this programme.

We also held online and onsite classes for managers interested in how humaneering might be helpful to them. Our goal was to create interest and invite application proposals from managers anywhere throughout the organisation. We supported the preparation of these applications, reviewed and assessed them against specific criteria, and then selected the better ones. For these, we asked the responsible managers to 'pitch' their proposal in a 'shark tank' event to compete for available

corporate funding.

Within 60 days we had 13 fundable proposals. The competition for funding created a lot of excitement and interest in innovation and humaneering in work areas that only 60 days prior were considered 'good enough'. We limited our initial round of project funding to four proposals, purposely including one representing each of the four work archetypes. (See Figure 1.)

I'll just quickly outline these for you. For all four projects, we followed the humaneering process of assessment, diagnosis, experiment and implement.

### Production

I'll start with the production archetype project. For this one we focused on a manufacturing operation and in particular on poor performance and high turnover among frustrated equipment operators. We identified high scrap levels and opportunity costs directly resulting from insufficient equipment support.

Though we naturally first suspected the frontline managers as a likely cause, we discovered that it was not the manager, but the manager's manager, who was running up against imposed budget limits. We found it interesting that the costly impact was showing up in the performance of employees working two levels down from the cause, yet the problem was not showing up significantly in the numbers at the level of its primary cause.

We experimented with three cell groups, providing them with unlimited funding for equipment support for 90 days. Because this is a profit centre, we were able to watch the profit of these cell groups start climbing in the third week, while comparing it directly with the added support cost. In just 90 days, the net profit increase for these cell groups exceeded the added equipment support costs by more than 10 to 1. And no less important, the workers in these areas were now energised by their work for the company.

### Logistics

Now to the logistics project. I was surprised among others when the work of this technical support function was better described as logistics, rather than service. Now I get it. The goal is clear, which is to establish or restore our services. The solution is not clear and how it is achieved is in our hands. There is nothing more the customer needs to do, except give us access to troubleshoot and fix the problem.

We were having trouble delivering a high level of technical support to our industrial customers and, potentially related, we were experiencing high turnover and excessive recruiting and training costs. Our techs were frustrated that they were being asked to do things for which they lacked the temperament and skills. Furthermore, they were limited in the effectiveness of their work by an overall lack of standardisation and cooperation. It seemed as though everybody was working differently, which in turn was wasting time and angering customers.

It turns out we had the work designed all wrong. It was designed like a service. So we redesigned the work, the position and the new-hire training, plus we changed our criteria for the kind of talent we should hire for this work. From the very first test group following the redesign, our new techs . . . every one of them . . . are outperforming our prior top performers from their first week in the field. Customer satisfaction went up, turnover went down and, most amazing, our total cost to operate this support function has dropped by 30%. Amazing!

## Service

For the service project, we chose a field service operation that serves commercial customers. The customers felt good about the service they were receiving, yet there was a palpable level of animosity between our service techs and their managers. This was not a few isolated cases. Just about everyone was hostile, defensive, or simply disengaged. My first thought was that we needed to tighten up our hiring or, if the work was excessively stressful, provide on-site psychological counselling.

It turned out that we had over-engineered this work, thinking this was helpful to the service reps. Quite the opposite. We weren't giving our service reps the discretion they needed, so to satisfy their customers they were having to make decisions behind the back of their manager. We were hiring people who excelled at their craft, yet we were assigning them to a manager we had equipped with enough controls to manage a bank.

Here we redesigned both the role of the service rep and of the manager, and carefully aligned them to where the manager's job shifted from mostly control to mostly support. In addition, we worked with HTI to develop a smartphone app based on humaneering so we could better enable the managers with insight into the support needs and preferences of each service rep. The big gain for us here was in service tech productivity, which is up around 25%. Of course, both our employee experience (EX) and manager experience (MX) ratings are substantially higher.

## Innovation

Last, we have the innovation archetype project, for which we selected a critically important R&D operation that had become a bottleneck in executing our strategy. I'm more limited here in what I can say, though I can summarise that, similar to the service work I just discussed, this work was over-engineered and under supported.

Our rare talent working in this operation were being subjected to a never ending stream of top-down administrative requirements. The net effect on them was aggravation, frustration, resignation, and even despair. I was alarmed at what we found, and in particular how many obstacles we were placing in the way of these people.

In addition to customising our management systems for this operation, we engaged our people in more actively creating a culture that better supported their work. And rather than experimenting within small units of this operation, I felt the case for redesign was sufficiently compelling that we sat down the management team and asked for their support with a phased rollout beginning immediately.

This is longer term work and more difficult to show financial returns in the short term, but already we can point to attracting several once valuable members of our team to rejoin us. As well, I understand we are now receiving enquiries from top people working for our competitors who have heard about our changes.

## Final thoughts

Altogether, we've invested about \$1.2 million in our humaneering initiative for the first year. Humaneering is free, of course, but there's the cost for HTI's people to provide the needed training and consulting support, plus the cost for our own people to be involved. There are many moving parts to

calculating what we gained from this investment in 2015, but if I was pressed for an estimate, I'd be comfortable with a number anywhere between \$14 and \$26 million just for the current year.

For 2016 we increased the number of funded projects to nine, and I even took one on personally . . . the engineering and technical talent shortage I mentioned near the beginning of my remarks. Before pitching the project, I asked HTI to make a preliminary assessment of the situation and to outline for me any possibilities for raising productivity that stood out to them.

I'm going over my time, so I'll just mention the principal opportunity they found. To our meeting they brought a reprint of a Peter Drucker article from 1991 that talked about the challenges management faced trying to raise the productivity of knowledge and service workers. Drucker explains in the article how this new kind of work is fundamentally different from work in the past, and as long as organisations persist in managing the new work with their old methods, management will never know what its knowledge and service workers could accomplish if only they were managed more in alignment with human nature and the needs of their work.

Looking back, I suspect that most organisations have been imposing century old industrial era management treatment on employees and their work, regardless of whether this approach created the best possible results. I'll guess that many of you do this too?

Why do we do this? We do it for simplicity, though we probably think of it as administrative efficiency, because that's what we've always done? I mean . . . can any of us afford to waste 20%, 40% or more of our organisation's human potential?

Here's the point. I think humaneering is the solution Drucker imagined for raising the productivity of knowledge and service workers. Based on the gains all of us have realised already, can there be any doubt that humaneering is opening up a whole new frontier for increasing workforce productivity?

That's what I wanted to share. Thanks again for all you who shared yesterday.

### Peter Drucker on workforce productivity

The CFO of X-Corp referred to Peter Drucker's article, 'The New Productivity Challenge' (Nov-Dec 1991). It began this way:

'The single greatest challenge facing managers in the developed countries of the world is to raise the productivity of knowledge and service workers. This challenge, which will dominate the management agenda for the next several decades will ultimately determine the competitive performance of companies. Even more important, it will determine the very fabric of society and the quality of life in every industrialised nation.'

Drucker goes on to point out that impressive productivity gains were achieved for production and logistics work during the 20th century, although by the 1990s only 20% of the workforce performed this type of work, down from 50% just 30 years prior. He attributes these gains to Frederick W Taylor's study and redesign of manual work for greater task efficiency, beginning in the 1880s.

Taylor's methods, with enhancements by others, continue to improve the productivity of manual work (see Figure 1). The task is known, so the work can be standardised, simplified, taught and controlled (ie, engineered), and doing so reduces costs.

However, these methods have not been effective at improving the productivity of knowledge work. In fact, the unwitting application of Taylor's methods to knowledge work generally reduces productivity by starving the knowledge and service worker of the discretion and meaning they seek from such work.

Drucker explains that knowledge and service work begins with asking several questions: What is the opportunity? How can we maximise our creation of economic value? What constraints can be removed or reduced? What unessential tasks can be reassigned to task workers? What technology, capital and other supporting resources are available? Managers wanting to improve the productivity, quality and performance of knowledge and service work need only ask the people who do

the work what support they need, and then partner with them to realise the desired outcomes.

Drucker further points out that for knowledge and service work, the emphasis must be on effectiveness, or maximising the creation of economic value, rather than on efficiency, or minimising the consumption of resources, as is the case for production and logistics work. Deeper insight into this distinction is possible by recognising that all human work includes some manual work, for which the consumption of resources should be minimised, and some Knowledge Work, for which the economic value created (ie, effectiveness) should be maximised.

### Technology transfer programme

Organisations and individuals interested in learning more about their options for early access to humaneering should consider HTI's new technology transfer capabilities for 2017. Among these are:

- Education and development programmes that enable unaffiliated (ie, freelance, independent) individuals to become licensed professional humaneers.
- Satisfaction-guaranteed fixed-cost consulting support services that reduce unknowns coincident with evaluating any new technology.
- New levels of access to knowledge concerning the development, content and release of humaneering to meet needs expressed by commercial and government organisations.
- A position-branding initiative that signals to candidates that a particular job is designed and managed with humaneering principles and results in a distinguished level of employee experience (EX).

Please refer to HTI's new website for details – [www.HumaneeringTech.com](http://www.HumaneeringTech.com). You will also find us on Twitter and Facebook at @HumaneeringTech.

### Footnote

1. To learn more about humaneering see <http://eanpc.eu/insights/Focus/82> and the three-part article, Work Reconsidered: Increasing productivity with humaneering, which appeared in *Management Services Journal* in the Autumn 2014, Winter 2014, and Spring 2015 issues.

