Knowledge Workers’ Deeper Needs:
Why Economic Incentives and Technology Are Not Enough
Peter Drucker’s Challenge for the 21st Century

At the turn of the century, Peter Drucker wrote a paper praising the unprecedented productivity gains for manual workers in the 20th century.¹ He then challenged knowledge workers—workers that primarily work with information and output knowledge—to find ways to similarly accelerate their productivity in the 21st century.

In college, the solution to this challenge would have been obvious to me. Knowledge workers could accelerate their productivity to unprecedented levels by optimizing economic incentives and developing new technology.

This is at least what my economic classes had me believe. These classes taught me that people responded to economic incentives. Therefore, if you want more of something, you pay more for it; and if you want less of something, you penalize it. These classes also taught me that technology was the primary driver of long-term productivity growth. Therefore, once workers were fully motivated, they would benefit most from new technology.

These views were not just my views or those of academic economists. The belief in economic incentives and technology was also a guiding principle for businesses and governments on how to make people more productive.

These beliefs persist but are incomplete and can be problematic.

The focus on the benefits of economic incentives and technology has distracted us from their downsides. More importantly, this focus has caused us to neglect the deeper needs of knowledge workers, which are key to unlocking their full potential.

The Downsides of Technology

After college, I started working as an economic analyst. Technological growth, like the rapid acceleration in information processing speed, was making me more productive. But it also had downsides.

First, I was constantly distracted. Email alerts at work regularly broke my concentration and made me think every email I got was urgent, when they often were not. Social media and smartphones made things worse by exploiting my fear of missing out on something interesting or important. This kept me in a constant state of anxiously checking my social media accounts and smartphone.

Second, technology created filters that gave me a more distorted view of reality. Google searches, social media feeds, and Amazon recommendations were designed to show me things based on my viewing history. There were certain benefits to this, but it also meant many important viewpoints and ideas I had not looked for in the past were being filtered out. This made the world seem more homogenous.

Third, I was worried my skills could become automatable, making me expendable at work. This process had already begun as new software automated some of the data analysis I was doing. I learned machines were not just automating manual work, as I had thought, but also knowledge work.

**Knowledge Workers and Money—It’s Complicated**

After working for a few years, I started business school and learned, like technology, economic incentives were more complicated than I had realized. While economic incentives can motivate people, they also have the potential to demotivate them—especially knowledge workers.

In class, we learned about studies that showed economic incentives backfiring. In one, subjects that were given more economic incentives did a better job than others when it came to manual tasks like pushing a button repeatedly, but did worse than others when it came to knowledge tasks like solving math problems. In another, subjects that were compensated to solve a creative problem took much longer to reach the right solution compared to those who were not compensated at all.

While counterintuitive, these findings have an interesting explanation. When economic incentives make knowledge workers’ think they are doing something almost exclusively for pay, it hurts their intrinsic motivation—the internal satisfaction or sense of fulfillment one gets from working on or completing a task. This loss of intrinsic motivation can hurt their productivity more than the gain in extrinsic motivation can help it.

**Deeper Needs Drive Knowledge Workers**

Reading Victor Frankl’s book *A Man’s Search for Meaning* has helped me better understand intrinsic motivators—or what I have come to consider our deeper needs.

In his book, Frankl argues that a human’s deepest need is purpose. As a prisoner in a Nazi concentration camp, he saw that the most resilient people were the ones who felt they had a purpose in life, such as protecting a loved one. This purpose helped motivate them to push through hardship and survive while others fell into despair.

But purpose is not enough. While Frankl is right about the central role of purpose, many people I know in mission-oriented jobs, like charity work, are unfulfilled and unmotivated. These people have other needs that are not being satisfied.

Psychologists Edward Deci and Richard Ryan’s research has given me insights into three other deeper needs of humans: the need for autonomy, the need for community and relatedness, and

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4 Frankl, Victor E (1946) “A Man’s Search for Meaning”
the need to have competence in what one does.\textsuperscript{5} According to Deci and Ryan’s research, satisfying these needs makes knowledge workers more fulfilled and more productive.

These findings fit well with my personal experiences. The people who seem the most motivated and productive to me tend to be the ones that have at least three of these four deeper needs satisfied.

Interestingly, these people seem to have satisfied their need to build competence early in life.

**Build Competence First**

Building competence is not easy and does not happen overnight. The most competent people I know spent serious time building the right skills and habits to become competent.

However, the effort to build competence, while challenging, is worth it and should be done early. It is the one intrinsic motivator that seems to have immediate value to others. Employers will pay premiums to get highly competent workers with the right skills, and knowledge workers prefer working with competent rather than incompetent colleagues. This gives knowledge workers with competence in the right skills considerable leverage to get their other deeper needs met.

Unfortunately, once competence in the right skills is built, many knowledge workers focus too much on leveraging it to maximize their income and incentive bonuses. But this can have the unintended effect of hurting their intrinsic motivation and reducing their productivity long-term.

Knowledge workers should still seek respectable monetary compensation but focus more on incentives that satisfies their deeper needs, like getting more purpose-driven projects and autonomy at work. This will make them more productive and ensure they are still in high demand long-term.

Savvy managers should welcome requests for more intrinsic motivators by high-potential knowledge workers. An investment in their intrinsic motivations is effectively an investment in their future productivity and loyalty. As Peter Drucker eloquently states, “knowledge-worker productivity requires that the knowledge worker is both seen and treated as an ‘asset’ rather than a ‘cost.’ It requires that knowledge workers want to work for the organization in preference to all other opportunities.”\textsuperscript{6}

**How Technology Fits In**

The downsides of technology also need to be addressed.

As mentioned earlier, I learned early in my career how technology can automate my skills and make them obsolete. This motivated me to research and learn that skills involving social and

\begin{footnotes}
\item\textsuperscript{5} Ryan, Richard and Edward L. Deci (2000) “Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being
\item\textsuperscript{6} Drucker, Peter (1999) “Knowledge-Worker Productivity: The Biggest Challenge” California Management Review
\end{footnotes}
creative intelligence are the least automatable.\textsuperscript{7} Knowledge workers should focus on building these skills.

Further, I found that the distractions and filters that hurt my productivity most were best dealt with through the more mindful use of technology. Technology that is inherently too distracting or overly filtered should be avoided and not mindlessly adopted due to peer pressure or fear of missing out. Further, technology products that are adopted should have their settings optimized to limit needless distractions and filters.

For example, I reduced distractions from my work email by having Microsoft Outlook presort emails from mailing lists I had to follow but not read immediately. This cut my email alerts in half, while keeping the more urgent ones in place. My focus improved as a result, and I did not miss anything pressing.

Management is well positioned to help with this optimization process. It can research and pre-optimize technology products’ default settings to minimize needless distractions and filters. This would let the employees that stick with defaults benefit from having pre-optimized ones, while allowing others to change them as they see fit.

\textbf{Towards Drucker’s Vision for Knowledge Workers}

My experience since college has changed my views and led me to reach new conclusions.

Economic incentives and technology have been treated as a cure-all for productivity, but this has distracted us from their downsides. Specifically, modern technology can create too many needless distractions and filters, while also causing anxiety over job loss due to automation. Further, economic incentives can backfire and hurt a knowledge workers’ intrinsic motivation when misused.

The excess focus on economic incentives and technology has also caused neglect for the deeper needs of knowledge workers. These deeper needs include finding purpose, having autonomy, feeling competent, and being part of a community. Satisfying these needs will make knowledge workers more productive and fulfilled.

Peter Drucker’s vision for the 21\textsuperscript{st} century is within our reach. But economic incentives and technology are not enough—we must focus on knowledge workers’ deeper needs.

\textsuperscript{7} Frey, Carl Benedikt and Michael A. Osborne “The Future of Employment: How Susceptible are Jobs to Computerization”