

# ARTIFICIAL INTELLIGENCE AND THE FUTURE OF THE WORKPLACE



## SEVEN PRINCIPLES FOR HEALTHY AI DEPLOYMENT BY WALLACE HENLEY

### Introduction

“Artificial intelligence is on the verge of penetrating every major industry from healthcare to advertising, transportation, finance, legal, and now inside the workplace,” says Jeanne Meister, founding partner of Future Workplace LLC, New York.<sup>1</sup>

This “penetration” is so intense that Mark Carney, governor of the Bank of England, fears that widespread automation, displacing greater number of human employees, could ultimately lead to Marx and Engels again becoming “relevant.”<sup>2</sup>

According to Carney, “If you substitute platforms for textile mills, machine learning for steam engines, Twitter

for the telegraph, you have exactly the same dynamics as existed 150 years ago—when Marx was scribbling *The Communist Manifesto*, ... There is a disconnect in expectations.” More than “90 percent of citizens don’t think their jobs will be affected by automation, but a similar percentage of CEOs think the opposite” with regard to “the number of jobs that will be materially affected.”

“The signs are everywhere,” Carney continued, pointing to contemporary examples. Humans are increasingly irrelevant, noted Carney, in law firms where AI machines “comb through documents and read evidence,” as well as banks utilizing “a combination of artificial intelligence and big data to computerize customer service departments.”

A Stanford University research team concludes that artificial intelligence “now seems poised to automate many tasks once thought to be out of reach, from driving cars to making medical recommendations and beyond.”<sup>3</sup>

Cyber-futurist Ray Kurzweil believes that by 2029 there will be “almost no human employment in production, agriculture, and transformation.” Education will be the “largest profession,” and there will be “many more lawyers than doctors.”<sup>4</sup>

Yet not all the data are grim. A report by the International Bar Association (IBA) Global Employment Institute notes that some studies show that jobs eliminated by AI “will be compensated for, more or less, by newly created jobs.” A German study, for example, suggests that automation will result in 390,000 new jobs in the “third sector” (low paid jobs) over a ten-year period.<sup>5</sup> In fact, the IBA report quotes findings that the creation of “one high-tech job will create between 2.5 to 4.4 other jobs in the local area, mostly in low-skilled and medium-skilled in-person services.”<sup>6</sup> These non-routine manual occupations are service jobs, such as janitors, gardeners, manicurists or home health aides.

Louis Monier, founder of the AltaVista search engine, actually sees benefit in the loss of jobs. Monier has no ethical qualms about it, he told an interviewer for *Tech Republic*. The employment that AI will destroy are the jobs people would not choose “because of passion or a sense of mission,” but are simply means of “putting food on the table.” The jobs that will outlast the AI onslaught “will be either creative, or require a human touch,” enabling workers “to decouple making a living from a job.”<sup>7</sup>

Ironically, the IBA finds that just about every job “where an employee sits in front of a computer screen and processes and interprets data is at high risk.”<sup>8</sup> These are jobs that require checking, analyzing, and processing data—all of which will be done eventually by artificial intelligence. It’s no surprise that the “greatest boom” in employment in the decade ahead will be in the IT service sector.<sup>9</sup> Yet the IBA report anticipates that from 2017-2027, some seven million jobs will be eliminated because of AI, and two million created, leaving a job deficit of five million. The “integration” of five million people looking for jobs into the new labor configuration resulting from AI “is the greatest challenge for governments, employee representatives, and companies.”<sup>10</sup>

Much has been written about the quantitative benefits of AI—greater productivity, reduction of conflict between workers, elimination of costly benefit packages, absenteeism, turn-over, to name a few. But what about the qualitative? We are not speaking here merely of enhanced quality in products and services, but the impact of AI on

corporate culture, and the quality of the workplace itself for the humans who remain.

And what about those men and women who see their work, not merely as an occupation, but as a God-given vocation? Will the AI “invasion” of the workplace deprive individuals of their purpose and push them out of what

they feel to be their places of ministry?

As advanced societies rush on the journey of AI development and expanded use, there

are important principles that can help companies maintain the vital balances that help make AI a tool rather than a master. Here we consider seven principles for healthy deployment of AI in the workplace:

## Principles for Healthy AI – A Christian Perspective

### *Immanence must not displace Transcendence.*

The transcendent and the immanent must be seen as a linkage, not as two separate, competing dimensions. Martin Luther’s reforms led ultimately to a fresh understanding of the importance of the transcendence-immanence union. Luther’s thought spurred other sixteenth century reformers “to recover the Biblical doctrine of work.”<sup>11</sup>

However, artificial intelligence is being developed in an era of the fading of the sense of the Transcendent. As in the Ages of Enlightenment and Reason, the boundaries provided by a healthy regard for Transcendent Authority are giving way to the onslaughts of utilitarianism on one hand, and idealistic romanticism on the other.

As the world of work becomes increasingly a cyber-domain it is vital to maintain the link between spiritual values and technological complexity. To separate divine revelation from human inventiveness is to walk on the precipice of a perilous divide. The transcendent and the immanent must be seen as a linkage, not as two separate, competing dimensions. Martin Luther’s reforms led ultimately to a fresh understanding of the importance of the transcendence-immanence union, and ultimately to the possibility of recovering a biblical vision for work and the workplace.

### *Information must not trump wisdom*

“Get wisdom,” the admonition of Proverbs 4:5-9, has been replaced by “get data” in the cyber-dominated world of work and relationship. This is driven partly by two factors forced upon businesses and the people who lead and operate them by the internet: (1) the enormity of data, and

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(2), the speed with which it comes. Such phenomena have significant impact on decision-making.

The author served on the White House staff during the Watergate scandal that led to Richard Nixon resigning the presidency. Sometime later, I visited with a former colleague, Charles Colson, not long after he had become a Christian. In fact, the meeting occurred in the prison where Colson, a former senior member of Nixon's staff, was serving time for Watergate-related convictions. When asked why Watergate happened, Colson responded, "We didn't take time to reflect."

Desktop computers were not pervasive in 1972, and the internet didn't exist. Yet the pressure of political expediency created a philosophy of "act, then think," rather than contemplating actions in light of principle and potential outcomes.

AI machines can accumulate data, and even perform reasoning functions. However, decisions require more than that. *Chokmah*, one of the Hebrew words translated "wisdom" in the Old Testament, refers to that which is learned in the whole range of human experience. It infers an enhancement of human intuition, based on previous experiences.

*Sophia*, a classic Greek word for "wisdom," carries the idea of the good judgment that enables individuals to know how to control circumstances. Coupled with "discernment," the capability of recognizing nuanced motivations behind behaviors and circumstances, the decision-making process may not be speedy, but it draws from more than mere data (though there's no denying the importance of ample information).

AI data-processing is characterized by accuracy and speed. However, it must not be a substitute in the workplace for humanity in decision-making. People do more than process information; they link data with personal experience, taking information to a depth machines cannot replicate.

The machine can muster the data, but it is the wisdom of a human being that can ultimately comprehend what to do with the information. Herzfeld observed that "As we see more and more tasks accomplished by computers, we could easily begin to think of both our tasks and our purposes solely in terms of the mechanical, the computable, setting our minds on information rather than wisdom, pacing ourselves at the computer's speed rather than taking time to ponder, reflect, and contemplate."<sup>12</sup>

## THE RISE OF SOULLESS AI WITHIN THE WORKPLACE, WITHOUT THE RESTRAINTS AND EDIFYING VISION OF THE TRANSCENDENT CAN ROB WORKERS OF THEIR SENSE OF PURPOSE AND THE WORKPLACE OF ITS SANCTITY.

### ***Functional necessity must not determine delegation of decision-making***

Herzfeld points out that "increasingly complex" technological systems demand decisions "in a time frame that is not optimal for human beings." She believes that "such a scenario would almost certainly result in the removal of the human being from the decision-making loop."<sup>13</sup>

This would have negative outcomes. Exclusion of humans from decision-making means people would "become slaves to our machines, acting on their behest and not our own." To quote Joseph Weizenbaum,

"What could be more obvious than the fact that, whatever intelligence a computer can muster, however it may be acquired, it must always and necessarily be absolutely alien to any and all authentic human concerns? The very question, 'What does a judge (or a psychiatrist) know that we cannot tell a computer?' is a monstrous obscenity. That it has to

be put in print at all, even for the purpose of exposing its morbidity, is a sign of the madness of our times."<sup>14</sup>

Proverbs 11:14 says that "Where there is no guidance the people fall, but

in abundance of counselors there is victory." Travis Henry, a senior vice president at Hewlett Packard Enterprise, notes a major concern with regard to AI exposed in this ancient principle:

"There is a vital human element with a moral framework in the 'many counselors' concept. Artificial intelligence, however, multiplies on itself via self-learning algorithms in an amoral framework. AI is, in effect, its own counselor. The question becomes how, when, where does the human element insert itself into the AI as self-learning replicates through the network based on cold data. For example, in AI-guided healthcare decisions, death can become an objective outcome based on algorithms and probabilities with the 'inherent value of life' created by a moral construct."<sup>15</sup>

### ***Capability must not overwhelm calling***

Martin Luther, and John Calvin especially, enlarged the understanding of work as a calling of God, and the workplace as the field of ministry where that "vocation" is carried out. Calvin saw all spheres of human endeavor as arenas for the exercise of calling. However, the rise of soulless AI

within the workplace, without the restraints and edifying vision of the Transcendent can rob workers of their sense of purpose and the workplace of its sanctity.

Future workplace expert Jeanne Meister sees a direct impact by AI on a corporate culture that embraces the idea of vocation, and not merely occupation. “For many, work is more than a job; it’s a higher calling, ... So it is important that the company communicate a common purpose, be it through corporate philanthropy or service to the community.”<sup>16</sup>

### ***The human must not be absorbed into the machine***

The dream of immortality has seeped into the cyber-world. Kurzweil, for example, thinks, that by the end of the twenty-first century, humans will be able to upload their brains into computers. There would even be an automatic update with every advance of computer technology, assuring us a kind of eternal life. “Our immortality will be a matter of being sufficiently careful to make frequent backups.”<sup>17</sup>

While that future “paradise” is still in the future, there is already the danger of human beings being swallowed up in the computerized workplace. There, cyber-development becomes more important than human resource development.

### ***Idealism must not cloud reality***

Western thought and civilization have passed through the Classical Age, into the Age of Barbarism, into the Medieval period, Renaissance, Enlightenment, Age of Reason, Romanticism, Modernism, and Postmodernism. Some would say we are now in a period of post-post modernism in which there is a strange union of the technological and the mystic-spiritual.

Romantic idealism is a new danger haunting the development and deployment of artificial intelligence. Weizenbaum provides an example of this, when he says that “the computer programmer is a creator of universes for which he alone is the lawgiver...”<sup>18</sup> Intended or not, Weizenbaum warns against the *hubris* that clouds outcomes in the minds of many who develop and program artificial intelligence machines.

Herzfeld, quoting Dreyfus, opined that “Wishful thinking has probably always complicated our relations with

technology ... However, it is safe to assert that before the computer, and before the bomb, the complications weren’t as dangerous as they are today. Nor was the wishful thinking as fantastic.”<sup>19</sup>

But it was perhaps French theologian-philosopher-lawyer Jacques Ellul who best captured the subtle portents of the technology that is producing AI not only for jobs, but for all fields of human endeavor. Writing in 1990, Ellul expressed concern for the “optimism” of technicians who are driven by “an absolute belief in unlimited progress.” In the face of every problem, they live by a faith creed that “technical progress will deal with it.” This, says Ellul, is “an absolute form of the technological bluff.”<sup>20</sup> The “bluff,” of course, is in the failure of the article of faith. In the case of the workplace the stunning “technical progress” of AI has dealt with the consequences of “unlimited progress,”

but, in the process, has created new problems. The hope is that in the quest for solutions to those difficulties, there will be an advance of learning that will benefit those hurt the most. However, this will

never happen if there is not a realistic assessment of the negative impacts that must be resolved.

### ***Human telos (ultimate purpose) must not be sublimated to cyber expediency and utility***

God’s initial call on the human being is expressed in Genesis 1:27-28:

“God created man in His own image, in the image of God He created Him; male and female He created them. God blessed them; and God said to them, “Be fruitful and multiply, and fill the earth, and subdue it...”

Genesis 2:15 reveals how the human is to carry out the assignment. “Then the Lord took the man and put him into the Garden of Eden *to cultivate it and keep it*” (Italics added). Thus the “Dominion Mandate” of Genesis 1:27-28 is not about exploitation and mastery, but about the care expressed in the ideas of “cultivating” and “keeping.” Further, the Garden of Eden is the prime Old Testament type of the Kingdom of God. The world will return to that pristine state when Christ returns at the end of finite time (*kronos*) and the world undergoes a restoration to its original, “mint” condition. (Acts 3:19-21)

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In Luke 19, Jesus gives His followers the parable of a man who has come to establish a new kingdom. The man gives resources to his servants, and tells them “occupy until I come.” The literal reading of Jesus’ parabolic statement is that the man is commanding and equipping his servants to use the resources to “do business” until the return of the owner of the property.

The bottom line is that the human, the *Imago Dei*, is not to turn over his or her authority to the machine, *imago hominis*. And because work is inherent in the original purpose of the human being, work must not be abandoned to the machine.

The Bible’s consistent message, from Genesis across to the New Testament, is that human *telos* is vocation, not merely occupation. The “Dominion Mandate” is given to the human *before* the fall. Thus the “work” is fulfilling, giving satisfaction through the positive use of the gifts God has put in us all. It is *after* the fall into sin that “work” becomes “labor” and the “sweat of the brow.” Even then, however, human vocation carried out with the Kingdom in view, no matter how “sweaty,” is holy, purposeful and satisfying.

All this is not to say that artificial intelligence is not to be utilized in the workplace. There is nothing gained in becoming Luddites whose aim is to smash the machinery. It is to say, however, that the “dominion” must not be

turned over to the machine. Weizenbaum warns that computerization has “reduced reason itself to only its role in the domination of things, man, and finally, nature.”<sup>21</sup> *Imago Dei* must never allow *imago hominis* to be master in the workplace, or any other sphere of human relationship and endeavor.

## About the Author



**Wallace Henley** is senior associate pastor at Houston’s Second Baptist Church, and chair of the Belhaven University Master of Ministry Leadership Degree program. He is a former White House and Congressional aide, and

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## NOTES

<sup>1</sup> Jeanne Meister, “The Future of Work: How Artificial Intelligence Will Transform the Employee Experience,” *Forbes* (November 9, 2017). Accessed April 4, 2018 at

<https://www.forbes.com/sites/jeannemeister/2017/11/09/the-future-of-work-how-artificial-intelligence-will-transform-the-employee-experience/#67ec0a0e23c9>.

<sup>2</sup> “Expert: Rise of Robots Could Lead Humans to Communism,” *Ibex News* (April 15, 2018), accessed April 16, 2018 at <http://ibexnews24.com/2018/04/expert-rise-of-robots-could-lead-humans-to-communism/>.

<sup>3</sup> Phillipe Aghion, Benjamin F. Jones & Charles I. Jones, “Artificial Intelligence and Economic Growth,” NBER Working Paper (October 10, 2017), accessed April 16, 2018 at <https://web.stanford.edu/~chadj/AI.pdf>.

<sup>4</sup> Ray Kurzweil, *The Age of Spiritual Machines: When Computers Exceed Human Intelligence* (New York, Penguin Books, 2000).

<sup>5</sup> *Artificial Intelligence and Robotics and Their Impact on the Workplace* (IBA Global Employment Institute, April, 2017).

<sup>6</sup> *Ibid.*, 31.

<sup>7</sup> Matt Asay, “AI pioneer: AI will definitely kill jobs, but that’s okay,” *Tech Republic* (May 11, 2017), accessed April 17, 2018 at <https://www.techrepublic.com/article/ai-pioneer-ai-will-definitely-kill-jobs-but-thats-ok/>.

<sup>8</sup> *Ibid.*

<sup>9</sup> *Ibid.*, 33.

<sup>10</sup> *Ibid.*, 38.

<sup>11</sup> Hugh Welchel, “How the Protestant Work Ethics Has Affected Vocation,” *The Institute for Faith, Work, and Economics* (April 23, 2012), Accessed April 4, 2018 at <https://tifwe.org/how-the-protestant-work-ethic-has-affected-vocation/>.

<sup>12</sup> Noreen L. Herzfeld, *Artificial Intelligence and the Human Spirit* (Minneapolis: Fortress Press, 2002), 79-80.

<sup>13</sup> *Ibid.*

<sup>14</sup> *Ibid.*

<sup>15</sup> Personal communication with Wallace Henley. Travis Henley, whose career in the cyber industry spans almost two decades, is the son of Wallace Henley.

<sup>16</sup> Adam Van Brimmer, “The Future Workplace Experience: A Q&A with Jeanne Meister and Kevin Mulcahy,” *Society for Human Resource Management* (October 28, 2016), accessed April 16, 2018 at <https://www.shrm.org/hr-today/news/hr-magazine/1116/pages/the-future-workplace-experience-qa-with-jeanne-meister-and-kevin-mulcahy.aspx>.

<sup>17</sup> Herzfeld, 72.

<sup>18</sup> Kurzweil, Kindle edition, 1631

<sup>19</sup> Herzfeld, 73.

<sup>20</sup> Jacques Ellul, *The Technological Bluff*, trans., Geoffrey Bromiley (Grand Rapids: William B. Eerdmans Publishing Company, 1990), 21

<sup>21</sup> Herzfeld, 80.