

Pushing the Rational Bounds

Leveraging the Best of Human and Digital Worlds

Reading the winning essays of the past Peter Drucker Challenge, one can glean the following model emanating from the thoughts of Dr. Drucker himself.

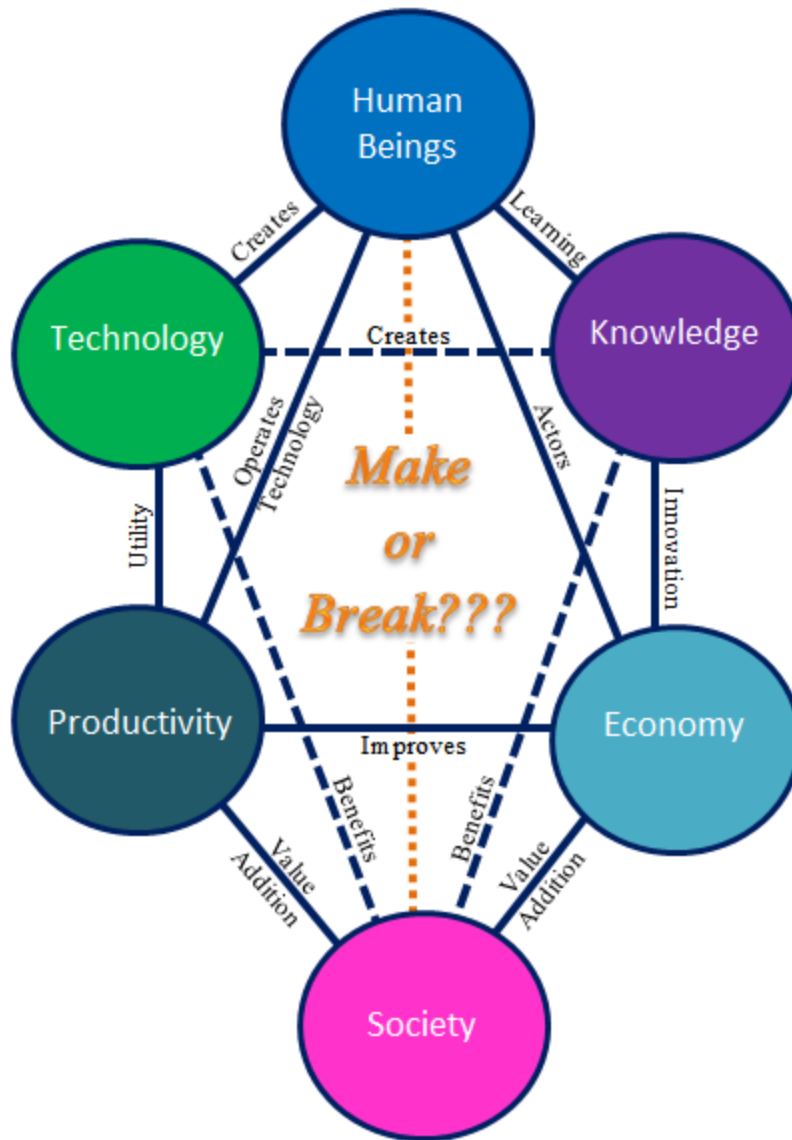


Figure 1. Peter Drucker Challenge Octahedron Model from Winning Essays

First and foremost in management, in order for one to be able to manage a corporation, an entrepreneurial venture or oneself, he/she should have a profound understanding of his/her place

in the grand scheme of things. This is the reason why I started with the model considering the aspects of management ecosystem we have to contend with.

Just like a corporation or entrepreneurial venture, managing oneself should also be strategic in approach. As such, to be able to manage oneself in the digital age, one has to first set his or her vision, mission and goals. The vision will set the direction to where one wants to go, the mission defines what one can do to achieve the vision and the goals are targets against which one's performance can be measured.

In my experience, setting a personal vision and putting it on paper really help especially when confronted with difficult personal or managerial decisions. As such, in this essay let us reflect on what our vision can be considering the digital age we are in and the model in Figure 1. Setting the vision also helps one to know himself/herself better. Isn't this familiar with Socrates' saying "*Know Thyself.*" or Dr. Drucker's (2005) statement "*To do those things well, you'll need to cultivate a deep understanding of yourself—not only what your strengths and weaknesses are but also how you learn, how you work with others, what your values are, and where you can make the greatest contribution.*"

Human beings whether we admit it or not, are complicated creatures. We have a collection of life experiences which helped shape us to become the persons we are. These experiences can be happy, sad, inspiring, frustrating and sometimes great influencers/inspirations come along the way.

An introspection of our humanity reveals that humans have innate powers that the strongest man may be weaker than the strongest beast in the wild, but the powers of our intellect pervades the course of history which so shaped our world. Therefore, Dr. Drucker is right with his management paradigm of putting humans at the pinnacle (though he used the word 'center' in his writings) because of his intellect as comparative advantage. This is somewhat a kind of strategic positioning with human beings at the top.

In the complexity of human beings we are, I would like to highlight two aspects of our humanity which can never be precisely captured by algorithms or mimicked by best available digital technology. These aspects are our *values* and *bounded rationality*. In this essay, I will focus on these two aspects for I believe these are fundamental to managing oneself within the purview of digital age.

We have come to know that our values can never be negotiated. We have also come to know, that our values define us of who we become as a person. These are concepts we have come to know and hold dear in our hearts. As such, we would never compromise on our values.

Our values greatly influence our decisions, not only personal but also managerial. The digital age altered some of our age-old values (such as patience) and shifted it towards the values for efficiency, accuracy and instantaneous response among others. We have come to appreciate

and develop preference for buying stuffs from a store which can deliver fast. We like to buy gadgets which are accurate to the smallest bit possible. We cannot wait until we get expeditiously the information we require. With these changes in values, we have learned to adapt in such environment be it among our circle of friends, civic societies or even in the workplace.

The digital technology induces our processes and our way of doing things towards efficiency. It therefore calls for optimizing our strengths by leveraging on the digital technology available. Unfolding examples of these are in hiring where internet platforms are being used to collect resume from applicants, conduct virtual interviews (via Skype) and communicate via email. This situation enables a company to source the best talent even those from remote places expeditiously and at low cost. In the future, hiring decisions may also be guided to a major extent by analyzing an applicant's social media presence using online software.

How then does this digital driving force towards efficiency impact the practice of management in superior-subordinate relationship?

As Dr. Drucker (2005) espouses, one has to make his/her boss effective by knowing him/her to be a reader, a writer or a listener. In addition to that, managers of this generation might also be drawing efficiency from being digital, i.e. the interplay of reading, writing, listening and seeing. This is particularly true in the engineering profession where digital 3D models are now being used prevalently to come up with optimal configurations without necessitating for expensive prototyping. The same is true in the medical field. The doctor and his/her assistants are now relying heavily on digital technology (e.g. 2D echo, colonoscopy, fiber optic sensors) for accurate diagnosis of illnesses and medical operations. These medical devices have digital features which enable the doctors probe body internals (e.g. blood vessels, colon) like never before. They can now visualize in real time what is happening inside the body by inserting fiber optic probes and these probes feed in digital images of body internals in a computer monitor. In this way, the doctors become effective by knowing exactly where to cut or remove the tumors or cholesterol blocking the arteries.

The use of computer, internet and local area networks is already prevalent in any workplace. Some companies even have "virtual teams." All these were created by collaborative digital platforms making work-related interactions more efficient and convenient like never before. As such, communication gaps or misunderstandings, if not eliminated, are kept to a minimum. In addition, there are already digitally enabled work processes in which dependencies among actors are well defined. In here, the actors can use the digital platform obtain inputs or necessary information from the client and submit deliverables via same platform at an instant.

In some ways, this unfolding trend redefines our traditional relationship responsibilities that while it retains the fundamental consideration of our values, performance modes and strengths, the digital tools find utmost utility in optimizing the outcomes of these relationships.

My second focus in this essay is on “*bounded rationality*.” In economics, there is this traditional notion of “*economic man*” who is said to be both “*economic*” and “*rational*.” It means that the economic man has relevant knowledge of his environment that though it may be incomplete, at the very least clear and voluminous. It is also assumed that he has organized stable set of preferences and has the ability to determine the optimal point for his preference (Simon 1955).

In the “*Models of My Life*,” Simon (1991) set his cognitive assumption for “*bounded rationality*.” In an earlier work, he described that behavior as “*intendedly rational, but only limitedly so*” (Simon 1957, p. xxiv). This does not mean that human beings are hyper-rational nor irrational but trying effectively to cope with incomplete complex situations.

This assertion impacts the sole comparative advantage of human beings over other creatures which is that of rationality, but a limited rationality. This therefore forces us to think how we can push that limits at the very least to approach the ideal model of “*economic man*.” With this in mind, digital technology comes into the fore. So then, this redounds to human and digital technology interaction leading to a shift in paradigm for managing oneself.

From the vantage of management, decision-making is the most impactful activity as it can make or break an individual’s or corporation’s welfare. In making decisions especially for critical issues, relevant and up to date information is necessary. This is where digital technology finds enormous utility.

Say for example, the internet to an optimal extent addresses information asymmetry. Information asymmetry is the advantage gained by one party which has more or better information over another party which does not have such information (‘Information asymmetry’ n.d.). In managing oneself, an individual can exploit the infinite number of information offered by the internet. But going back to the fundamental tenet posed by Dr. Drucker (2004), one must know the information he/she needs. This is where human and digital technology can exploit synergy. The human mind provides the judgement for the information need and to some extent the value of information. On the other hand, digital technology provides convenience and expedience of sorting out or retrieving information from the ‘cloud.’ This is substantiated in what Dr. Drucker (1967) said of the computer and certainly true of the internet, “*It extends our capacity more than any tool we have had for a long time, because of all the really unskilled jobs it can do. By taking over these jobs, it allows us – in fact, it compels us – to think through what we are doing.*”

Examples of this are informed buying decisions with real time comparison of prices and buyer testimonials in Amazon and eBay. Using these online purchasing platforms also added convenience and efficiency to buying. On employment decision, an applicant is now guided on what he/she is worth for and whether to take the offer by using the company or industry information in Glassdoor. Sometimes, high stake personal decisions can be guided by forums in

the internet (e.g. buying a car) and the professional forums can help knowledge workers in doing their tasks.

As Dr. Drucker (1967) said, “*Information, like electricity, is energy. Just as electrical energy is energy for mechanical tasks, information is energy for mental tasks.*” From the wider view of organizations, Chester Barnard (1938) said that organizations are held together by information rather than ownership or command. This is just how important information is in the grander scheme of things.

Human beings, as complex as we are, have many things going on in mind especially in making decisions. It is observable that human beings sometimes decide not on the basis of rational criteria but on some kind of intuition which is affected by the so-called cognitive distortions. According to Grohol (2013), cognitive distortions are means in which our mind convinces us of something to be true but not really true. This can have adverse effects on our decisions and if not well understood and addressed, may have catastrophic consequences. Cognitive distortions may also be brought about by the ambiguity faced during decision making. As prudence would dictate, we should know our tolerable level of ambiguity. But to help ease the interplay between cognitive distortion and ambiguity, digital technology can be leveraged on to lessen the associated risks.

In making decisions, especially for critical ones, an individual can use risk management tools similar to those used in the corporation though may be simpler at individual level. These tools can be the fishbone diagram or the decision tree, for example. There are available software to make optimal use of these decision tools. In addition, the internet offers a wide range of information which in multitude ways lessens ambiguity. Say for example, I am confronted with a situation where there are just so many ambiguities. What I can do is to look for similar or parallel situations in the internet. With search engines, I can do the searching at the click of a mouse. After the search, I have to sift through the information and assess which ones nearly resemble the situation at hand. Though the cloud and computer can store an enormous amount of data and can quickly do the searching task, the real value comes from the workings of the human brain which is the judgment for the value of information. In this case, the semblance of the described situation in the internet to that of the existing situation can be assessed. Looking at it from the perspective of Dr. Drucker, the decision tools mentioned coupled with the use of internet can help one to know what to do and what not to do.

Managing oneself becomes more critical when you are already managing a corporation or an entrepreneurial venture. In such instances, you will have to manage not just your tasks but also your interactions with your bosses, colleagues or subordinates. As you assume more responsibility, increased cognitive load come along your way. As defined, cognitive load is the total amount of mental effort expended in working memory (‘Cognitive load’ n.d.). As the research of Sutton & Rao (2014) at Stanford University suggests that for one to be effective, the cognitive load has to be lessened to an optimal level. This can be achieved by either transferring

low level tasks to digital tools or using the inherent features of digital tools to ease the amount of required mental tasks. For the former, it can be observed that many corporations now a days employ smart digital tools which in itself can operate without human intervention. For the latter, there are simulation tools available which can offer outcomes from wide range of scenarios. In this case, the manager or entrepreneur gains insights from the scenarios that come up and hence he/she can put in place sufficient measures to deal with the scenario if it happens. For mathematics enthusiasts, this poses an opportunity especially that this involves a lot of probability.

On the advice of Dr. Drucker (2005) for managing the second half of one's life he said, *"There is one requirement for managing the second half of one's life: to begin creating it long before one enters it."* In this digital generation, this wisdom holds true more than ever.

As an individual in my thirties and fully aware of my rational bounds, I am resolved to do as Dr. Drucker said to plan for the second half of my life this early. I may not be able to change the world entirely but at the very least I am certain that I can contribute something of great value for its furtherance. As lessons of economics would teach us, there is much value to gain from being different. Hence, my overarching principle now is to differentiate by leveraging on what digital technology has to offer.

As a person who has firm belief in the potent force of information to empower humanity, I am keen to make full use of the internet and the best available digital platform towards achieving this end. My interest on these aspects was roused while working as an engineer who needs to dispose judgements amidst ambiguity. In my work, digital technology such as computer, internet and software find utmost use. These tools enable us to find the optimal combination of parameters in coming up with a functional design of oil and petroleum refineries and chemical plants. The internet also enables us to search for information whenever confronted with problems in our design and these information are available in online forums free of charge. Furthermore, we also use software with built-in information gathered from actual field data and the resulting simulation accurately reflects the real operating facility.

It is foreseen that this trend for computer-aided endeavors (Computer Aided Design, Computer Aided Decision Making, etc.) will continue and be used heavily in the near future. But this aid from computer just pushes our bounded rationality to a greater extent optimal. The meaning making such as gaining insights and interpreting results can only be done by human minds and can be confirmed by actual human experiences accumulated over time. In addition, scientific or research findings are not static. What may be scientifically accepted today may just become a falsehood tomorrow. In this instance, human intervention is still needed in upgrading science and its associated applications particularly in digital technology. This upgrading encompasses the ever changing need for technology to counter cyber terrorism, hacking, proliferation of classified information among others.

This realm is what I want myself to be busy about when I reach 40. Maybe, I can write books on this topic or conduct trainings for university students or professionals. I can start-up entrepreneurial venture developing software which can help humans in their mental endeavors, i.e. pushing the rational bounds. This is my commitment so much so a personal vision which will be my guide in managing myself in the digital age.

In my view, pushing one's rational bounds is of paramount importance to managing oneself. This can be achieved by leveraging on digital technology wherein the workings of the brain coupled with digital tools create synergy beyond measure. Just imagine the magnitude of this synergy on a global scale which leads us back to time immemorial when the workings of man's "*limited rationality*" shaped the outcome of our fate. And what could be expected of our future with digitally enhanced rationality?

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