

Maverick Research: Preservation of Human Functions in the Age of AI

Published 8 May 2023 - ID G00776866 - 27 min read

By Analyst(s): Christian Titze

Initiatives: [Supply Chain Technology Strategy and Selection](#); [Supply Chain Transformation](#)

Humans strive for automation, making new things possible and life easier, and freeing our time for more valuable tasks. Along with benefits, AI also comes with danger. If approached consciously, we can be prepared to prevent possible demotion of humanity and make optimal use of modern technology.

Overview

Specific Maverick Caution

This Maverick research breaks new ground by applying a system of measure to the attempt of automating a series of human functions. It presents a hierarchical system of measures based on the concept of the human body as a universal template for the analysis of any natural or technological system. Based on the presented framework, more detailed strategies for solving specific practical problems need to be developed. Its findings and advice should therefore be treated with caution.

Maverick Findings

- Human nature strives for automation to make new things possible and life easier, and to free ourselves for more valuable and appropriate tasks. However, machines and systems exist to help us; we do not live to serve them or to become like them.
- The natural system of human functions, with their intrinsic qualities and hierarchy, is reflected in a 12-layer framework. This could act as a reference to make a conscious decision about which functions we transfer to machines, which ones we leave to ourselves, and for which ones we create symbiotic relationships.
- This framework allows us to properly leverage today's emerging technologies, preventing the possible degradation of humanity, ensuring optimal use, and predicting and framing in what way and how far we allow it to impact our lives.

Maverick Recommendations

- Prioritize automation efforts toward the lower, often less complex, human functions with machines to lighten the work for humans, freeing them from monotonous, repetitive jobs and allowing a focus for higher and larger-scale tasks.
- Preserve human values by understanding the mechanics and dynamics of value creation and keeping the right order of functions “light” (human) and “dark” (machine), not mixing them up. Therefore, the superiority of the machine is a dangerous illusion — although occasionally turning into reality — leading to possible loss of authority over (ethical) decision-making processes and limitation of human potential and machine capabilities.
- Recognize that the main danger of what is happening is that part of humanity is actively promoting automation-at-core and automation-at-scale. While it is impossible to humanize a machine or system, machines mimicking humans is a very real possibility that is coming into reality today.

Maverick Research

Gartner Maverick* research delivers breakthrough, disruptive and sometimes contradictory ideas that challenge conventional thinking. Formed in our research incubator, it is designed to explore alternative opportunities and risks that could influence your strategy.

Analysis

What You Really Need to Know — Human and Machine

The Human Body as Universal System of Measure

Our body contains the full range of human functions. It is also the first to show signs of automation: We perform many natural functions automatically, without thinking and often not even being aware of them, simply by instinct. As a result, the body can serve as a universal system of measure, a type of system of record (see [Use Pace Layers to Align Your Application Strategy With Your Business Strategy](#)).

Birth of the Machine — From Matter to Spirit

In contrast to a human, the machine first manifested itself in the form of material devices that automate the three lower material values: product, service and trade. Then humans used the lowest of them — automated logistics of information (automated trade [AT]) — to automate their abstract values. This is how information systems appeared: storage of information (Sol), transfer of information (Tol) and process of information (Pol). The last of these gradually developed into AI, which can be called the spirit of the machine (see [Innovation Insight for Artificial Intelligence Foundation Models](#)).

Machines Taking Over Lower Human Functions

The values produced by humans and machines differ significantly from each other in the prioritization of their basic functions. As a result, the natural values created by humans appear more alive. However, the machine's task is to significantly lighten the work of humans and free them from hard and monotonous labor, allowing for higher and larger-scale tasks.

The Priority of Higher Functions Belongs to the Humans

The six higher functions, corresponding to the upper range of the body from the top of the head to the waist inclusive, can only be performed by the human. Being a spiritual being, humans reside inside the body and own it, but they do not belong to it. Whatever higher functions humans may embody in the machine can never be compared with their own. This applies even to the two lower functions — realization and management — which imply creativity as the creation of something new and the ability to make decisions in certain circumstances to implement the plan. The ability to perform these functions similarly to humans is not achievable for machines.

Humans belong to the spiritual sphere, while the machine is a construction of the material plane, and therefore is limited by definition. When humans create the lower values of automated product (AP), automated service (AS) and AT they should already have an idea of their abstract values, which belong to the upper range of the body. After all, as creators of machines, humans must constantly confirm and affirm their right as a spirit to influence matter and their right as a representative of light to influence dark. If they retain their higher functions and values for themselves, humans will retain the right to govern and control the machines and will not allow themselves to become its servant (see [Quick Answer: What CSCOs Should Know About ChatGPT's Capabilities and Pitfalls](#)).

The Superiority of the Machine as Dangerous Illusion

It is impossible to raise the value produced by machines to the level of the higher human values. But, it is possible to create their semblance, which humans can unconsciously take as an ideal and submit to it, becoming similar to the machine. This means humans can create illusions and believe that the machine is superior to a human in their higher functions and values. As a result, humans can perform their higher functions and values in a machine way.

In modern times, the concept that humans are like machines is already being cultivated (see [Emerging Technologies: AI Roadmap for Smart Robots – Journey to a Super Intelligent Humanoid Robot](#)). But that ignores the fact that humans are first a spiritual being created by god, who owns the material body but does not belong to it. The dominance of the materialistic approach in all spheres of life contributes to the likening of humans to the machine. If a human accepts the supremacy of matter over spirit and dark over light, then the automation of values will contribute to the development of the machine and hinder the development of humans.

The Necessity of Subjective Governance and Control

A deeper problem exists with how AI algorithms are built. Relying on large amounts of data without reference to eternal truths is dangerous. AI's ability to unpredictably generate false information means that its conclusions can only be used where the results are evaluated and controlled by a human, and where humans can correct errors (see [Hype Cycle for Data Science and Machine Learning, 2022](#)). So governance becomes a core aspect.

In the relationship between human and machine, machines must always remain in the role of servant. By no means should humans be controlled by a machine, since they are its source and creator. By affirming this truth, we establish the main law of automation that should not be violated. Its violation could threaten humans with loss of freedom and personal degradation.

Clear Design Patterns for Machines

Only a clear classification will make it possible to create machines that are pure in design and functionality. Only machines that are pure in their design and functionality can be useful to humans and remain completely under their control while delivering business value (see [Emerging Tech: Quantifying the Business Value of Smart Robots](#)). Deviations will mean that zones in their functionality will be incomprehensible to humans. This will lead to incomplete understanding and loss of control over them.

Preservation of Human Values

The machine can only manifest human values with functions reversed — the dark order where matter dominates over spirit. Humans, on the other hand, have a choice — create their values both in a light order and in a dark one, like the machine. The ignorance of the light order of functions, primarily for humans, has led to humans behaving like machines — to manifest a dark, or automated, order of functions and not natural ones. Accordingly, their values also became dark and inanimate. While it is impossible to humanize the machine, making humans machinelike is a very real possibility that is coming to closer realization.

The Framework of Principles and Capabilities

Automation makes new things possible and life easier so we can achieve more and free our time for higher-value tasks. However, along with the benefits of AI comes the dangers. There is already an obvious impact on the loss of human functions and values that only humans can create (as evidenced by the recent examples of ChatGPT). But to preserve human values we first need to know their full hierarchical structure and how automated functions can differ from them (see [Maverick* Research: Learn the 'Body Language' of Supply Chain Technology](#)). Then we can decide where, when and how we can use machines and systems to support us.

In this research, we recognize the nature and values of higher human functions — such as analytical thinking — in the era of rapidly evolving information technology, particularly AI. Where is the border that delineates where to automate without danger? There is already a threat of losing selected higher human functions and the values that only a human is capable of producing and preserving.

This conceptual framework is built on an understanding of the fundamental characteristics of the human body as a universal and holistic system that can be used as a measure for analysis. Based on this measure, practical solutions and strategies for specific applications can be developed. One example is a systematization of all possible solutions for process automation (see Note 1).

Bottom line for humans in the age of AI: *Know the true meaning of your functions and the values you produce. Know the difference between human and machine values. Do not underestimate yourself and do not allow the machines to rule.*

Automation Issues

The idea of automation as a replacement of human functions with smart machines and robots is being actively promoted everywhere. The goal of this automation is to break the dependence on the human factor to improve:

- Quality of products and services
- Efficiency and profitability of organizations of all size, industry or geography

Much of what was once done by humans is now being done by machines — with better quality, greater precision and many times faster, more secure and at lower cost (see [Hyper-Automation Is Changing Factory Workers' Jobs, and IT Will Help With the Transition](#)).

Along with these positive factors, humans as a labor force cease to be competitive in the traditional sense (manual labor, basic, repetitive tasks). For many people, the tendency to somehow devalue humans and keep the value of machines in high regard is becoming obvious (see [Top Strategic Technology Trends for 2023: Adaptive AI](#)).

If humanity continues the chosen course of movement, it is apparent that the value of humans themselves will constantly and steadily decline. In many areas humans may someday become completely unnecessary to each other, and most importantly, machines will not need them either.

And it's not just low-skill jobs. AI, with its machine learning (ML) and data science technologies, threatens and may force many professionals in diverse roles out of a job in the coming years. For answers to their questions or the optimal solution to a problem, customers/users will no longer turn to humans, but turn instead to AI: This will become standard (see [ChatGPT Research Highlights](#)). Decision making must be governed by humans, ensuring the decisions are beneficial to humanity and human ethics.

It seems that the **devaluation of a human being** is a problem on the scale of humanity, so it can be solved only at this level. We have a choice of who to turn to: a human or a smart machine. Of course, we could see this as complementing, augmenting and enriching what we can do and provide as humans. If there are machines that help us, we need to give them a place in our life with clear governance to avoid causing issues for humanity. It is necessary to precisely determine the places for humans and machines. Placement must be promising for the development of humans and should not force us to abandon the convenience of using machines.

The problem of a **sensible automation of human functions** requires that we know their full range to make machine-based functions where it is possible and meaningful. In addition to the similarities of human and machine functions, we also need to know their differences.

Human and Machine Functions

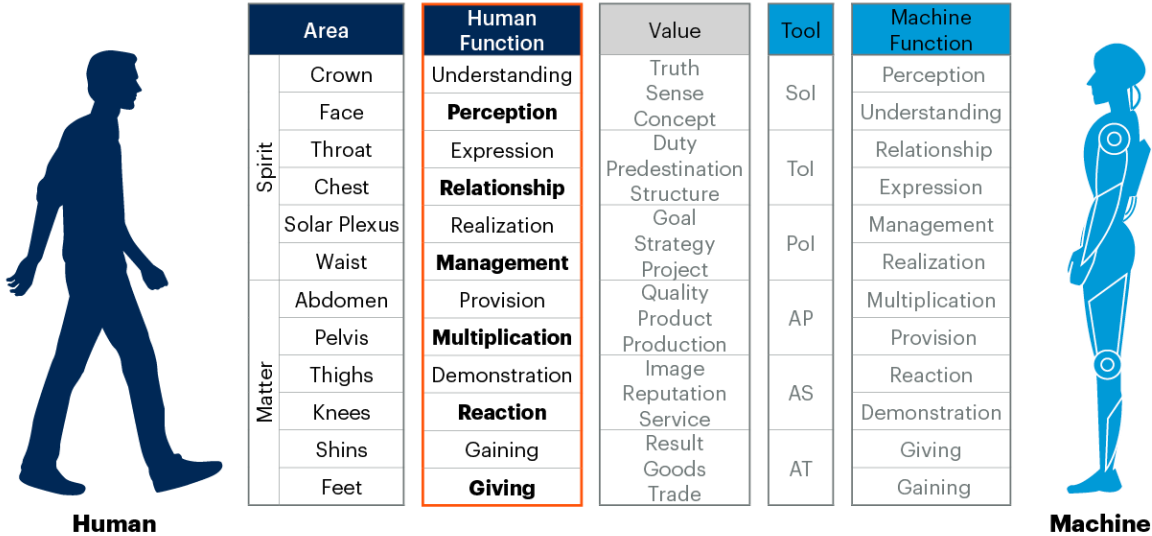
To determine the range of human functions and distinguish their qualities, an analytical approach based on the natural hierarchy of the functional levels of the human body could be used. ¹ Special position of the human body – its verticality or upright walking – is important. The position of our body clearly demonstrates levels that functionally differ from each other. Their sequence is not random, but verified by nature and is universal for every human. In addition to the universality of this sequence of functions, its hierarchical order and completeness are also important. These functions encompass the entire range of human capabilities and responsibilities, from understanding to giving (see Note 2).

Now let's initially categorize the 12 functions (see Figure 1):

- The six upper functions, from understanding down to management, are immaterial or abstract. They relate to the actions of individuals as a soul and subtle, or nonmaterial, spheres of their existence. This is what we mean by “spirit.”
- The six lower functions, from provision down to giving, are inert or material. They remember influences of the soul in the form of certain actions worked out to automation, for example, driving a truck or playing an instrument. This is what we mean by “matter.”

Figure 1: The 12 Human Functions

The 12 Human Functions



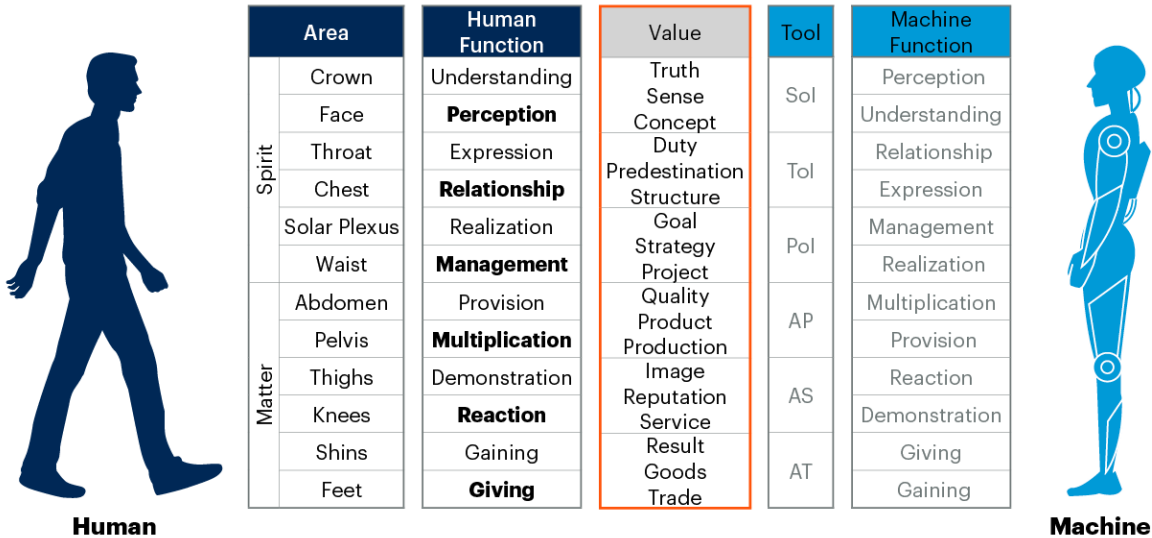
Source: Gartner
Note: Functions are marked light and dark based on class.
AP = automated product; AS = automated service; AT = automated trade;
Pol = processing of information; Sol = storage of information; Tol = transfer of information
776866_C

From Functions to Values

In addition to the scale of 12 human functions, we also have a parallel scale of six human values (see Figure 2). Each value corresponds to two functions, representing two principles of radiating (the light) and absorbing (the dark). In each pair of functions involved in value creation, the upper function is active and is aimed at emanation, or influence on the environment of an individual as a spiritual being. Therefore, we will refer to it as “light.” The lower function is passive and is aimed at absorbing influence from the outside, therefore we will refer to it as “dark” for the purpose of this framework.

Figure 2: The Six Values and Their Principles

The Six Values and Their Principles



Source: Gartner
Note: Functions are marked light and dark based on class.
AP = automated product; AS = automated service; AT = automated trade;
Pol = processing of information; Sol = storage of information; Tol = transfer of information
776866_C

So, let’s look for examples to make that more actionable:

- In the function of understanding, individuals move their attention to the object of knowledge and actively influence what is understood by dividing it into parts. Through perception, individuals absorb the influence of the objects surrounding them. Using these two functions, individuals understand the sense as a value or formulate a concept from what they understood.
- Through the expression function, individuals emanate the affirmation of how everything should be in accordance with the higher truth. In this way they influence their environment. Individuals then put themselves into a relationship for what has been expressed. These functions together create the value of duty, by fulfilling which one individual enters into a relationship with another person: Together they form a structure in which everyone fulfills their predestination. The same is true for all other functions and values.

Note that the triple names for each human value indicated in Figure 2 mean the following:

- The first is the initial and simplest state of the value
- The second is more solid
- The third is the most mature and complex

Knowing which of the three names of the same value will be more appropriate in a particular case depends on the nature of the problem being asked and solved. As a result, everything that individuals create in their activity belongs to one of the six types of values. The three upper ones belong to the abstract sphere and to a greater extent manifest the spirit of humans. The three lower ones are immersed in the material world and correspond to their body. Keep this in mind as it will be useful to clarify the classification solutions for automation.

Classification of Solutions

Three Types of Machines (Lower Matter)

Of the six natural human values, the three lower ones — production, service and trade — relate to the material world and are completely subordinate to humans as a sentient being. Consequently, they are the first ones looking to be automated. We can now clarify the concept of the machine as a technical device that performs actions for the production of the three lower types of values. Accordingly, we can distinguish **three types of automation related to material processes and machines** (see Note 3):

- Automated product (AP)
- Automated service (AS)
- Automated trade (AT)

An important feature of the values produced by machines is that their two basic functions, in contrast to the functions of human values, are flipped.

When a human value is subjected to automation by machines, its functions are flipped. In natural values the light function is the leading one, and the dark one is the follower. However, in automated values the order is inverted and the dark function becomes the lead, and the light function becomes the follower.

The following describes the relations of automated machines with respect to the functions and values discussed (see Figure 3):

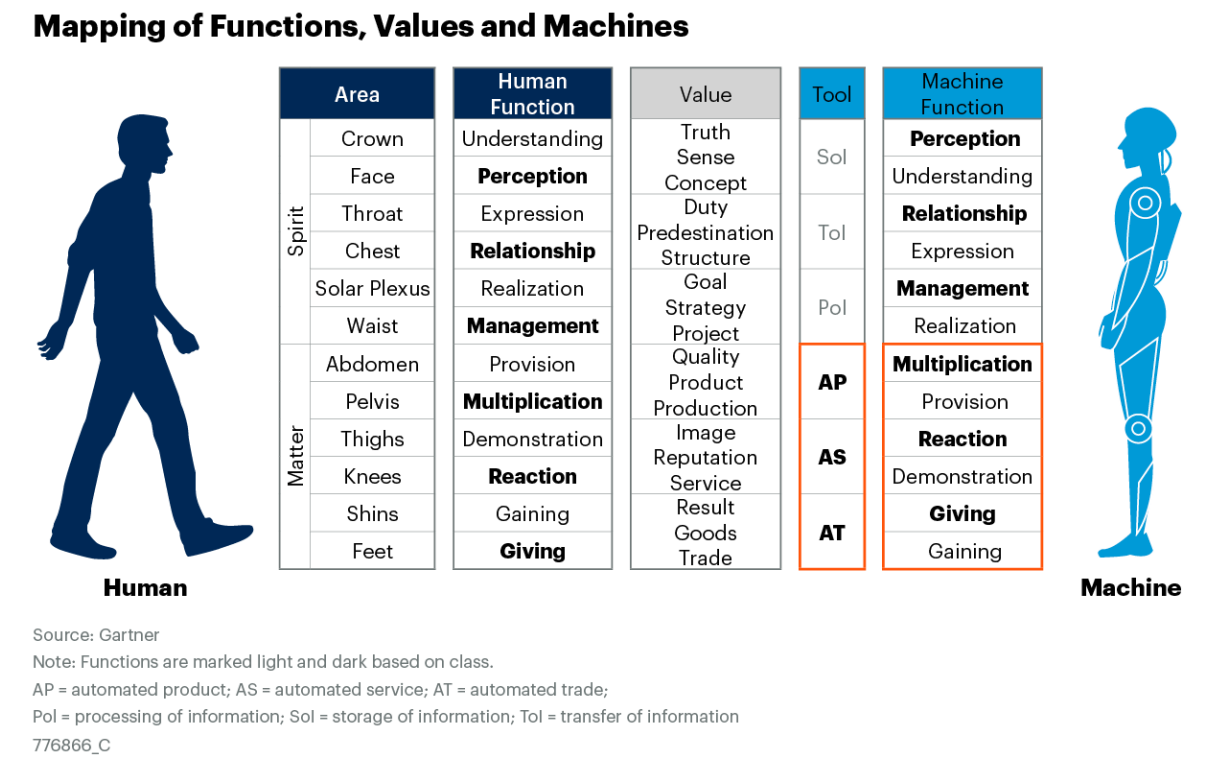
- **AP** is a machine that serves as an extension of the human body and must first perform multiple, repetitive actions. The order of its functions is opposite to the product's human value, which first should provide individuals with something necessary and second provide it to them multiple times. For example, an ordinary screwdriver as a human value is an extension of the human body and, first, provides the process of screwing and unscrewing. Second, it must serve its user multiple times. An automatic wrench gun, on the contrary, must first multiply rotational movements with a certain force, and second, provide its user either with screwing in screws, drilling holes or cutting material — that changes depending on the user's needs.
- **AS** is no longer an extension of a human body, but works more autonomously than AP. It only provides individuals with a service and must first comfortably react to them. AS must demonstrate what it was created for. In contrast to this, in human service the function of demonstrating skills is the leading function. Reacting to the client is the driven function. For a service provided by a human, for example brewing coffee, the function of demonstrating the coffee brewing skill is the leading one. Reacting to the client is the following function. In a coffee machine, however, the function of comfortable reaction to the client's actions is the leading one, since it relates to the necessary settings and determines the main value of the machine. The function of demonstrating coffee brewing is the follower, which is standard.
- **AT** is a machine that works even more autonomously from the user. It represents more of an automated infrastructure and is a transition from a machine to a system that manages commodity, financial or information flows. In it, the leading function is giving and the driven one is gaining. This is in contrast to the human trade, where the leading function is gaining and the driven one is giving.

In trade transactions, the participants agree first on what each of them will gain, and then what each of them will have to give for that. Business contracts are built on this standard. If we are talking about, for example, a system of water supply, energy supply or commodity supply, then the focus lies on what it supplies or gives, and only then what it gains from the user as payment.

Leveraging the presented concept, it is easy to understand the difference between automation:

- AP – multiplies
- AS – reacts
- AT – gives away (i.e., delivers and transports)

Figure 3: Mapping of Functions, Values and Machines



Three Types of Information Systems (the Higher Spirit)

The feature of the lowest AT machine is that it organizes movement and exchange, such as logistics of material and nonmaterial, or information, resources. If the AP, AS and AT can be called machines, and AT already represents the transition from a machine to a system, then the automated value of information logistics can be called a system that opens humanity’s window into an alternative, or virtual, world. We will single out such machines that provide the logistics of information in a special category and call them “information systems.”

Information systems are no longer the material body, but the spirit of a machine, a counterpart of the human spirit or an inverted (virtual) form of abstract values produced by man. According to the principle of fractality, the virtual world is represented by the same order of human functions and values as the human world, and should be subordinate to it.

The three abstract values of the virtual world are:

- Truth/sense/concept
- Duty/predestination/structure
- Goal/strategy/project

They correspond to three types of information systems – those that **store, transfer** and **process** information (see Table 1).

Table 1: Abstract Human Values

Abstract Human Values	Information Systems
Understanding Sense	Storage of information (Sol)
Building Structure	Transfer of information (Tol)
Realizing Goals	Processing of information (Pol)

Source: Gartner

Human understanding is the ability of the human mind to assert the eternal truths existing above humans. Its counterpart in information systems is computer memory capable of storing huge amounts of information. Human perception is the ability of the mind to grasp subtle impressions through the five senses. Its counterpart in information systems is data input and output devices and algorithms (see Table 2).

Table 2: Human Sense and Concept

Human Sense and Concept	Information Registration and Storage
Understanding of Higher Truth	Computer memory
Perception of Reality in Light of What Was Understood	Data input and output

Source: Gartner

In the early days of the computer age, computer memory – the value of Sol – was small as opposed to the massive size of its body. Then the memory capacity began to grow rapidly and the body would shrink. This happened through the improvement of information systems in two functions: data encryption (packing and unpacking of data) and data routing. Together they created the value of Tol which, in the natural reality of a human, corresponds to the value of building relationships (to live up to one’s predestination) and its functions of expression and following.

Table 3: Building Relationships

Building Relationships	Transfer of Information
Expression of How Things Should Be	Packing and unpacking of data
Relating Oneself to How Things Should Be	Data routing

Source: Gartner

As we can see, the Tol grows out of Sol. In fact, if the Sol system is a computer (server), then together with the Tol system they form an information and communication network, or a system of unified networks for storing and transmitting information – the internet.

The further development of information technology has led to the manifestation and maturation of the value of Pol, up to its most perfect form – AI. By comparing Pol with the natural values of a human, it becomes clear that it corresponds to the goal/strategy/project value and its function’s realization and management. Management of information means its ordering through the use of various algorithms. An algorithm is similar to a human strategy. It is a set of precisely defined rules for solving a certain class of problems or a set of instructions that describe the procedure for solving the corresponding problem by software or hardware means (see Table 4).

Table 4: Strategies for Achieving Goals/Project Management

Strategy for Achieving Goals/Project Management	Processing of Information – Analytics and AI/ML
Realization of Goals	Developing algorithms
Management of Resources	Applying algorithms

Source: Gartner

Information systems and abstract human values are similar because they are formed from the same functions, but the functions of the information systems, like other types of machines, are inverted relative to humans:

- Individuals are aware of the higher truths and in their light perceive the world around them, i.e., the function of perception is subordinated to understanding. Information systems perceive data and use memory to store it – storage is subordinate and serves data input and output.
- Individuals formulate and express what is proper and follow it, while observing the set priorities. Information systems use standards for packing and unpacking data to ensure successful data transfer.
- Individuals develop a strategy for realizing the intended goal by splitting the main task into separate subtasks, then manage the resources for their implementation. A counterpart of a strategy in information systems are algorithms that perform the tasks of information processing. The goal or idea realized depends on the chosen algorithm: Different versions of the same goal or idea will be realized according to the algorithm applied.

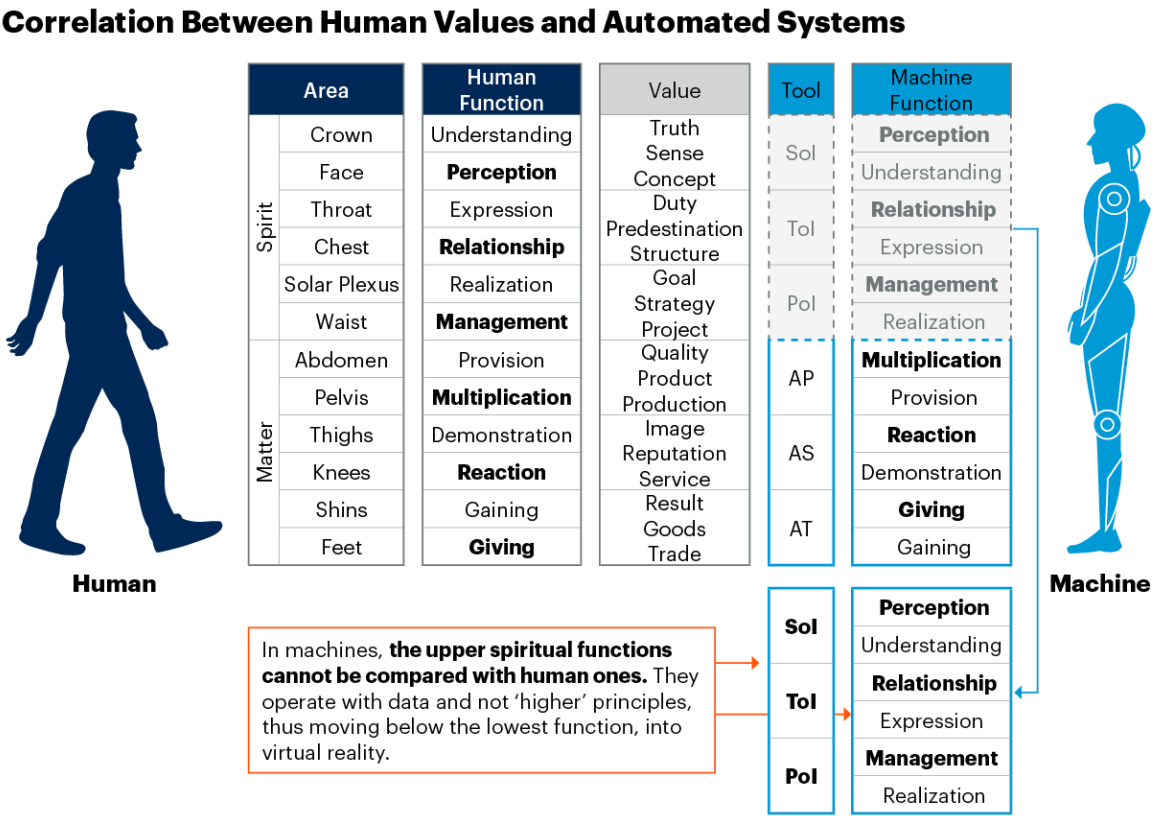
With the suggested approach, it is easy to understand the differences among Sol, Tol and Pol by focusing on the leading function of each:

- Sol — storage perceives
- Tol — transfer follows
- Pol — processing manages

Correlation of Machines and Systems and Their Implications

It is possible to solve the problem of compiling a complete and accurate classification of all possible types of technical solutions for automation. Solving the problem will allow the diagnosing of any newly developed technical solution and finding its place among the existing solutions. It will also enable a clear understanding of its functionality and proper characteristics, and identify cases of deviation from the characteristics inherent in the corresponding type. As a result, Sol, Tol and Pol together successively manifest AI, and in combination with the automated systems of AP, AS and AT they form a complete range of automated human values (see Figure 4).

Figure 4: Correlation Between Human Values and Automated Systems



Source: Gartner
Note: Functions are marked light and dark based on class.
AP = automated product; AS = automated service; AT = automated trade;
Pol = processing of information; Sol = storage of information; Tol = transfer of information
776866_C

The boundaries of the human world are set by the height of the body. We use our body as an instrument to manifest our functions and values, which we can feel directly through the sensations at one level or another. Solutions for automating the logistics of material resources (AT) appear as the automated lowest human value. AT turns into information systems when it comes to the intangible resource of information, which can also be treated as a commodity. Therefore, information systems create a virtual world of information that is located in an imaginary sphere, outside of the range felt by a human.

Outside means either above or below the range of human life. The place above the human world is for eternal truths and laws of the universe, perceived by the mind as a cognition tool. Accordingly, the place of information or facts is under the human world – under the feet of a human, as demonstrated in Figure 4.

That leads us to the following implications:

- Humans use their mind to realize higher truths and to understand facts/information. Because we have no other tool for this, potential danger exists that we will not be able to distinguish between information (facts) and higher truths (see [Innovation Insight for Generative AI](#)). This could lead us to put the world of information above ourselves.
- It is important to separate truths and information on opposite sides of the human world. Truths are above the human world, as higher laws. Information is below it, as footprints or traces of what has happened in the human world (see Figure 4). The light of truths is what one must rely on in his understanding as a spiritual being. Countless multitudes of facts is what information systems work with.
- If humanity places the information world under itself, people will feel the need for the world of higher truths, or suprahuman laws of the universe above them. In contrast, if humanity places the information world above itself, access to higher truths will be blocked and replaced with information content that is easily manageable from outside (see Note 4).
- Humans need to distinguish between the knowledge of truth as the capabilities of the human mind and information management as a computer functionality. If they do not make the distinction, then the gigantic capacity of modern computers' for storing and processing information does not leave humans any chance for survival (see [Emerging Tech: Critical Insights on Quantum Computing](#)). This situation could lead to a catastrophic and degrading choice for the vast majority of people, but beneficial for those who control the information field.

The Maverick research program is part of Gartner Futures Lab — Gartner's home for unconventional, speculative and futuristic research.

Evidence

¹ [LiveDevice](#) For the natural hierarchy of the functional levels of the human body, the so-called LiveDevice (LD) concept by Oleg Bokachov is leveraged. It denotes our body as an optimal and universal living tool for interacting with the environment.

This Maverick research breaks new ground by applying a system of measure to the attempt of automating a series of human functions. It represents the second value in the pictured six-value framework, meaning the rightful structure of how relationships between human and machine should be established. It is the foundation for building the actual strategy — the third value in the six-value framework — of when, where, what and how to automate the project.

Note 1: Capability and Solution Matrix

Figure 5 provides a landscape of all possible solution types for process automation.

Figure 5: Capability and Solution Matrix

Capability and Solution Matrix

▲ Should Be Automated ▼ Should Not Be Automated ■ Automated to Some Extent

Tool Value	AT «gives» «gains»	AS «reacts» «demonstrates»	AP «multiplies» «provides»	Pol «manages» «realizes»	Tol «relates» «expresses»	Sol «perceives» «understands»
Truth, Sense, Concept	■ Gives or gains senses	▼ Reacts to senses and demonstrates them	▼ Multiplies senses and provides them	▼ Manages senses and realizes them	▼ Follows Senses and expresses them	▼ Perceives senses and understands them
Duty, Predestination, Structure	▲ Gives or gains structure	■ Reacts to structure and demonstrates it	▼ Multiplies structure and provides it	▼ Manages structure and realizes it	▼ Follows Structure and expresses it	▼ Perceives structure and understands it
Goal, Strategy, Project	▲ Gives or gains strategies	▲ Reacts to strategies and demonstrates them	■ Multiplies strategies and provides them	▼ Manages strategies and realizes them	▼ Follows Strategies and expresses them	▼ Perceives strategies and understands them
Quality, Product, Production	▲ Gives or gains products	▲ Reacts to products and demonstrates them	▲ Multiplies products and provides them	■ Manages products and realizes them	▼ Follows Products and expresses them	▼ Perceives products and understands them
Image, Reputation, Service	▲ Gives or gains services	▲ Reacts to services and demonstrates them	▲ Multiplies services and provides them	▲ Manages services and realizes them	■ Follows Services and expresses them	▼ Perceives services and understands them
Result, Goods, Trade	▲ Gives or gains result	▲ Reacts to result and demonstrates it	▲ Multiplies result and provides it	▲ Manages result and realizes it	▲ Follows Result and expresses it	■ Perceives result and understands it

Source: Gartner

AP = automated product; AS = automated service; AT = automated trade;

Pol = processing of information; Sol = storage of information; Tol = transfer of information

776866_C

Gartner

Note 2: 12 Human Functions and Their Characteristics

The following identifies the 12 human functions and their characteristics: ¹

1. Crown = Distinguishing, comparing with a measure — a standard, ability to learn and change behavioral patterns; choose from existing ones or develop a new best solution based on systematic knowledge
2. Face = Detection of external influences of the subtle and gross planes; anticipation or prediction of changes based on memory; finding solutions based on a direct perception experience

3. Throat = Meaning encoding with forms of expression and decoding expression forms for exchanging information with the external environment and describing the internal states
4. Chest = Natural interaction with other individuals through self-identification and identifying other individuals
5. Solar plexus = Goal setting, desire, inspiration and willpower effort at self-realization (also known as “the human”)
6. Waist = Task organizing; development of relevant skills for task management and solving emerging issues
7. Abdomen = Developing a lifestyle and harmonious behavior that brings happiness; immersion in coarse and subtle physical phenomena
8. Pelvis = Production of everything essential for survival; distribution, reproduction and excretion (elimination) of waste products
9. Thighs = Creating a manifested form of the product and its promotion through social structures for the purpose of distribution
10. Knees = Presentation and popularization of the product with the public through the image created by the flow of events and actions in the environment
11. Shins = Creating and maintaining partnership relations; building a network of product distribution
12. Feet = Processes of interaction and exchange of values with the environment, preservation of activity trails in the external environment and the subject detection by the traces left behind

Note 3: System of Automated Trade

By “trade” we mean all the countable tangible (goods) and intangible (information) assets that are being left for an individual as a difference, or net profit, from the interaction of the gaining and giving functions. Gaining something useful for oneself from the environment and giving back to the environment of what it demands in return.

Note 4: Information Placement

The generation of information is the prerequisite for understanding. Whether this is conscious (e.g., book, fact knowledge) or unconscious information (feeling, intuition) is irrelevant. For example, the human body constantly receives information about gravity. It is used to distinguish top from bottom, estimate how far one can jump, or the weight of an object. This is information. Knowing about the nature of gravity (e.g., a bending of spacetime) is understanding. But it does not mean that we understand the universal law that is the cause of gravity. Instead we gather knowledge about virtual constructs such as “bending of space and time,” which we can neither understand nor experience. It conceals the fact that we do not know the universal law behind gravity. This is what we mean by “placing information over the head, which will block our access to higher truths and replace them with information content that is easily manageable from outside.”

© 2023 Gartner, Inc. and/or its affiliates. All rights reserved. Gartner is a registered trademark of Gartner, Inc. and its affiliates. This publication may not be reproduced or distributed in any form without Gartner's prior written permission. It consists of the opinions of Gartner's research organization, which should not be construed as statements of fact. While the information contained in this publication has been obtained from sources believed to be reliable, Gartner disclaims all warranties as to the accuracy, completeness or adequacy of such information. Although Gartner research may address legal and financial issues, Gartner does not provide legal or investment advice and its research should not be construed or used as such. Your access and use of this publication are governed by [Gartner's Usage Policy](#). Gartner prides itself on its reputation for independence and objectivity. Its research is produced independently by its research organization without input or influence from any third party. For further information, see "[Guiding Principles on Independence and Objectivity](#)." Gartner research may not be used as input into or for the training or development of generative artificial intelligence, machine learning, algorithms, software, or related technologies.

Table 1: Abstract Human Values

Abstract Human Values	Information Systems
Understanding Sense	Storage of information (Sol)
Building Structure	Transfer of information (Tol)
Realizing Goals	Processing of information (Pol)

Source: Gartner

Table 2: Human Sense and Concept

Human Sense and Concept	Information Registration and Storage
Understanding of Higher Truth	Computer memory
Perception of Reality in Light of What Was Understood	Data input and output

Source: Gartner

Table 3: Building Relationships

Building Relationships	Transfer of Information
Expression of How Things Should Be	Packing and unpacking of data
Relating Oneself to How Things Should Be	Data routing

Source: Gartner

Table 4: Strategies for Achieving Goals/Project Management

Strategy for Achieving Goals/Project Management	Processing of Information – Analytics and AI/ML
Realization of Goals	Developing algorithms
Management of Resources	Applying algorithms

Source: Gartner