**#448 Trends Involving what “used to be technology” - Converging/interacting**

Issue on 9/17/2019 -updated for 2020 from 2018 - I listed AI initially as #1 un-intentionally but since have clear, it belongs there, because of importance and reach! Especially now matched with # 7 & # 10

 1.-Artificial Intelligence extending to Advanced AI, especially when integrated with others Below…” deep learning” in all professions. Depth/use exploding. Also dangerous

 2.-3 D printing – well beyond mechanical/mineral…living beings…art… in space??

 3.-Driverless cars ….. Captain-less ships…etc.!! taxis gone??

 4.-inplants and wearables

 5.-” Digital Wallets” person to person?? ATM’s?? Branches??

 6.-Robotics -same as AI -include “advanced” and integrated…collaborative???

 7.-Virtual Reality -even in pieces is massive

 9.- Drones…. disposable

 10.- Augmented Reality- already with us and accepted [Madden diagrams in NFL]-supported now by fast moving eye-ware

 11.-CRISPR plus derivatives/patented ones beyond research…commercial???

 12.-“Analytics” or “Big Data” [not a technology but a process of many names]

 13.- Machine learning, including deep learning & re-enforced learning…express check-outs??

 14.- Block chain including all the many “cryptocurrencies” built on it, and other” systems or processes”, showing up now in many professions.

 15.- Digitalization [ also not a technology - a very non-standard process…for some a “glittering Generality” still. Depends on who/where you’re talking

 16.- Biometric and health care- Actually trends, way beyond early announcement

 17.- The internet of things – actually another “trend” …huge…

 18.- Cloud technology – SAME as last two

 19.- Mobile internet – More and more of the above is now available on “your hand held… “which cascades way beyond just the younger holders!!

 20.- Quantum computing – maybe still not for general use, @ least for most of us but soon???

 21.-DNA Data storage possibilities, sequencing

 22.- Pockets of ignorance, or dis-belief. Also perhaps not a “trend”, but a condition or situation. Perhaps in some ”governmental” entities. Also “educational” organizations

 surprisingly

 23.- 5G acceptance/use

 24.- also, like #23, the difficulty of cross functional/discipline collaboration, within organizations, and within professions.

 25.- security. Once thought of as “guards” or locked cabinets. Still there!! Security issues and possible future new threats is massive

 26.- Genomics – Faster processing speed impact on agriculture, fossil fuels, life expectancy

 27.- The basic work force for 2025 – new expectations and skills…real training/practice. Needed, bur most importantly, new management and new leadership required first.

 28. Web 3.0…needs some more wondering/preparing

 N.- There are likely more than 28, or will be!.

**It’s plenty enough for now. An adequate grasp of these, and applying those perspectives in any situation or organization, [ with an emerging non-optional set of 7 leadership capacities, below, which are much more essential today!!], We must Include with these 7, extensive comfort/skill with “Big Data”/ analytics, & ”Digitalization” above , making a total of 9 more recent focus points for many emerging leaders. Well beyond many today, in my opinion.!!**

 **A.- Critical Thinking, with…..**

 **B.- The adaptability of Internal consulting, with**

 **C.- Collaboration across functional lines, with**

 **D.- A capacity for complex communication, to Executive Coach and individually mentor.**

 **E.- Innovation/creativity with**

 **F.- Personal productivity & accountability, perhaps, in spite of, the above**

 **G.- Personal understanding and engagement with actual “real” [ marketplace] customers**

**Who can do all this? Who hasn’t started yet?? This document was done first, for inclusion in my Leadership Learning Forum Process [LLFP] several years ago. It’s grown in importance, changes by client, profession, & time. Many are ”common” already. Their integration/overlap is crucial & can occur explosively unexpected!! The biggest issue might be the ”un-intended consequences” of some of the above interactions, with the rest listed above and those to come…reaching into other seemingly settled situations. In this combined/integrated sense they impact a whole new concentric circle of areas, “jobs”, career planning etc. ……. e.g. “the need for continual learning/pondering” for lots of existing and emerging leaders, especially of the emerging “ethical” issues embedded!! None of the above is intended as a replacement…but as an enhancement…as a foundation for your continued growth! Also, much of the list doesn’t really *improve* quality! Only maintains. Humans improve. Finally, much of the list highlights the discussion evolving about the danger to “middle skilled” careers**

copywrite 2019-2020 TDG, Inc. all rights reserved - 448- 9/17/19