**#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**

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