THE PROS (AND CONS?) OF 5G NETWORKS By JAMES CARLINI

2020 was supposed to be an important year for those involved in network infrastructure and broadband connectivity. 2020 was supposed to be the year when we all would be using 5G networks for our various communications devices and applications.

We are coming up to the year 2020 pretty fast and the rollout of 5G Networks is far from being a ubiquitous service across the country. Some cities have it implemented and running on a limited basis, but it is a far cry from being pervasivly installed.

If we look at the need for upgrading other layers of our infrastructure in the "Platform for Commerce" (See CHART 1), many would overlook the network infrastructure layer. It is too important to overlook based on all the critical needs being created by a deep dependence on broadband communications, video streaming and mission-critical applications.

CHART 1 - THE PLATFORM FOR COMMERCE

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LAVED	LEVEL	DOMAINANT INITIAL DRIVED OF INADLENATIVE TO I
LAYER	LEVEL	DOMINANT INITIAL DRIVER OF IMPLEMENTATION IMPORTANCE
		INFORTANCE
SPACE	8	JUST BEGINNING TO BE BUILT (Space shuttles, space station,
(INTERPLANETARY)		satellite
(FUTURE)		networks) (Future: mid-21 st century, 22nd century?
		US, RUSSIA, JAPAN, CHINA?)
BROADBAND	7B	CHINA, JAPAN, S. KOREA,
CONNECTIVITY NETWORK	(wireless)	NETHERLANDS, US
(CYBERINFRASTRUCTURE)	7A	(beginning 21st Century, IBCs, IIPs & IRECs)
	(wired)	
AIRPORTS	6	EUROPE, UNITED STATES (mid-20th Century)
POWER (GRIDS,	5B (Nuclear)	UNITED STATES (beginning/mid-20th Century)
NUCLEAR POWER, OIL)	5A	
	(everything	
	else)	
TELEPHONE NETWORK	4	UNITED STATES (beginning/mid-20 th Century)
(ANALOG VOICE ONLY)		
RAILROADS	3	UNITED STATES
		(mid-1800s)
ROADS/BRIDGES	2	ROMAN EMPIRE (500BC-476AD)
PORTS/ DOCKS/ WATER	1	PHOENICIANS (1200BC-900BC)
		EGYPTIANS (3000BC-1400BC)

Why are some viewing 5G technology as some doom-and-gloom health issue?

As I have observed in my book, LOCATION LOCATION CONNECTIVITY, "Economic development equals broadband connectivity and broadband connectivity equals Jobs."

We need Broadband Connectivity today, if we want to remain viable into tomorrow, and 5G networks are the major vehicle to take us to that viability.

5G Networks are a paradigm shift in the fabric of network infrastructure and will provide all new capabilities and high network speeds. These new features, and combinations of new applications, will become the catalyst for local and regional economic growth. The financial world is predicting it will create all new types of industries and jobs. It will be a catalyst for a new economy.

The United States needs to have a state-of-the-art infrastructure, a strong "Platform for Commerce", in order to compete globally with other countries. Old infrastructure can negatively impact our productivity and competitiveness.

The concept of "The Platform for Commerce," which I originally developed in a whitepaper for the U.S. Department of Homeland Security on "Intelligent Infrastructure," has now been adopted and referred to by the U.S. ARMY Corps of Engineers in their publications on Infrastructure. They refer to it as "the business definition of Infrastructure and economic growth."

5G Networks will be a necessary part of that "Platform for Commerce" if businesses and municipalities want to compete in the 21st Century.

In a recent interview on the Illinois Channel, I mentioned several reasons why it is important for the United States should move forward (https://www.youtube.com/watch?v=kklzeaWeyhQ)

One of the issues brought up in the interview and later in the comments section was that 5G networks are bad for the environment and toxic to anyone close to them. There is a claim that the microwave emission and radiation are more than humans can stand.

To those skeptics I would ask, "Why would ANYONE install something that would harm someone and open themselves up for one or several class-action lawsuits in the litigious society we live in today?"

That makes no sense. If there are any issues with radiation, they should all be mitigated by protective shielding on antennae and devices so that they become harmless. This network overhaul needs to take place and it needs to be done right.

The new network capability will *CREATE* jobs. Stop bleating, the sky is falling, when you do NOT know the total story.

Network Infrastructure is part of the total *Platform for Commerce* (See diagram 1) that ALL of us depend on to create and sustain jobs. If that infrastructure is obsolete, you will not see ANY real job creation and companies will actually move out of areas that cannot support their broadband requirements.

We need to update our infrastructure on all levels in order to compete globally as well as attract and maintain corporate employers within the region. The network infrastructure cannot be overlooked.

Those criticizing the network upgrade should use some Common Sense! Read this financial perspective –

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SETTING THE RECORD STRAIGHT

It is good to question the capabilities and liabilities of any emerging technology as long as that skepticism is well-founded. Just going against something based on incomplete information or false conclusions is a waste of time that is non-productive.

When it comes to 5G Networks, we do not have the time to waste in getting it fully functional within the fabric of the infrastructure. If there are serious health problems based on radiation emissions, you would think that someone has already done the due diligence on that area of concern.

I just do not see the executive wisdom in any of the major companies looking at launching this next-generation network, if it will become the basis of multiple class-action suits in the courts.

5G Networks? Full speed ahead.