



**HighTech**  
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## Part One. 5G: A Dynamic, Flexible Future Network

In this High Tech Forum podcast edition, High Tech Forum founder **Richard Bennett** talks with Rysavy Research founder **Peter Rysavy** about 5G, spectrum, and how consumers will benefit from wireless network innovation.

In this discussion, Rysavy explains that 5G will have immensely more capacity than today's networks. He explains that future mobile broadband could be a wireline replacement. He notes that the 5G network is "being redesigned from the ground up," will support a larger range of applications vital for the Internet of Things, and will "permeate our lives and economy."

Due to increased network capacity, lower delay, and higher data speeds provided by 5G technology, Rysavy explains that the cost per gigabyte of data will gradually decrease over time and may provide consumers with the opportunity to cut the cord to cable TV and wired broadband connections. In favor of wireless connections. Rysavy declares this will be a "significant change to how we consume entertainment," with future television and broadband cord cutting due to mobile improvements.

Bennett and Rysavy continue their conversation by discussing the upcoming spectrum incentive action, the types of spectrum Verizon and AT&T are expected to look for in the auction, and what two companies are expected to build out spectrum for a high capacity network. Rysavy believes the lower frequency spectrum may not be as valuable as originally thought.

Make sure to listen to the podcast to hear the full discussion about what Rysavy calls a "flexible, dynamic network" and much more.

## Part Two. The Future of Wi-Fi

Ever wonder if Wi-Fi will always be around? Or what the future of mobile will hold?

High Tech Forum founder Richard Bennett resumes his discussion with Rysavy Research founder and wireless engineer Peter Rysavy about the excitement around the coming 5G network and the future of Wi-Fi.

Bennett devised the first standard for the modern, scalable Ethernet and contributed essential parts of the current Wi-Fi standards. Therefore, the discussion around the future of Wi-Fi is particularly interesting. Bennett and Rysavy discuss how Wi-Fi will continue to provide consumers tremendous utility going forward. They argue that Wi-Fi will not fade, even after the widespread deployment of 5G networks.

Rysavy notes, "5G will not be a rip-and-replace network over 4G LTE." The 5G systems will be designed to integrate and cooperate with existing LTE systems and LTE will be around for a long time. "It is hard to convey just how excited the engineering community is about 5G," Bennett comments.

Wireless networking truly is transformational. The network will be a viable alternative to the wireline network.

Rysavy advises that good authentication and encryption of communication will help to secure future internet networks; however, the biggest risk is in the internet protocols, which were never designed for the range of applications available today. And the only way to fix this is to redesign the internet to be more secure.