nerej
CELEBRATING 55 YEARS

Question of the Month - How has construction been affected by technology innovation in the last 10 years?

November 08, 2012 - Spotlights

In 2002, George W. Bush was President, Utah hosted the Winter Olympics, gas was $1.45/gallon, and Blockbuster was a $5.5 billion company. It was the first full-year of Apple's iPod, global internet users totaled 569 million, cell phones didn't have digital dial-pads, and you may have texted your vote while American Idol's first season filled your large "tube" or projection television.

Over the last 10-years telecommunications has changed; Cingular joined AT&T (2006), Sprint bought Nextel (2011), and now T-Mobile and MetroPCS will merge. Devices began going far beyond just "pushing voice" and the phrase "there's an app for that" was coined with Apple's first iPhone (2007), followed by Android phones (2008) and iPads (2010).

Telecommunications and technology development has significantly affected the evolution of commerce and real estate. The internet now has 2.27 billion users, 900 million on Facebook since 2004 following LinkedIn (2003), which led to YouTube (2005) and Twitter (2006). The real-time data social media craze altered business marketing and reputation management.

The 2008 economic downturn also drastically affected businesses and employment. Budget-conscious consumers sparked deal-site trends, led by Groupon (2008), electronically distributing daily discounts to consumers from businesses. Likewise, a heavily driven lowest-bid development industry ignited.

In January 2002, Steven Kelly invested in a small telecommunications construction company. Despite the economic downturn Timberline Construction Corp. is now a valuable general Ccontractor established in ten sectors, while maintaining high-regard in wireless construction.

Wireless carrier competition has been fierce regarding devices, network-speed, and service-reach. Fast-complex data demands require constant updates and construction. DAS (Distributed Antenna System) installations have been necessary to eliminate interruption inside structures that tend to be high-traffic areas, such as the Central Artery Tunnel where Timberline installed a multi-carrier system.

All this data also requires storage advancements, making data center construction a critical industry sector. Timberline just completed The Forsyth Institute data center renovation and has worked with Verizon Wireless and Access Northeast to respond to evolving data center needs.

More compact technology, such as equipment and appliances, enables more spatial flexibility in construction planning for current trends, anticipated needs, and the unpredictable technological future. A globally competitive e-commerce shifted tangible in-store product demands; like the digital conversion of books, movies and music for purchase at websites like iTunes (2003).

Due to e-commerce offerings, warehouses are alternatives to storefront space and many stores are shrinking leased footprints to save money or develop additional locations to service demands for immediate convenience. Commercial property owners are subdividing spaces, like Connecticut's

23,000 s/f former Sears Timberline converted into the three-tenant Hamden Center.

How the past 10-years have redefined: space, size, geographical reach, convenience, ease-of-use, speed, and energy drives construction demands. Innovations allow faster production, as well as electronic communication and document sharing, creating expectations for even faster responses and more to be done in less time cheaper. Naturally, design-build construction is often an attractive option.

Staying current is mission critical for healthcare and academic institutions; Timberline recently completed multiple UMass Memorial Medical Center projects. Consumers also expect fitness facilities to offer the latest machines and amenities; this year Timberline built a high-end 45,000 s/f LA Fitness in Stoughton.

Timberline clients' and design team partners' responses to sustainability concerns have included wind-power considerations and solar panel installations, from Maine mountain tops powering radio towers to the roofs of regional supermarkets. Timberline has also completed projects to LEED standards including Starbucks locations and a New York gold-certified Hannaford Supermarket.

Although each began more than 10-years ago, LEED Certification and Building Information Modeling (BIM) were more developed and publicized the last 10-years. Yet these programs still need to become more time and cost efficient to rationalize investments for less complex projects.

Increased sustainable efforts are a result of environmental, cost, and "Global Warming" concerns. Many believe the frequency of recent "super-storms" Katrina, Irene and Sandy are evidence of climate changes. Following such storms, Timberline's 24-hour emergency response telecom teams work around the clock to resolve damages and restore service.

The next 10-years will bring political change, more dependency on even faster multi-functional compact technology, and a heightened focus on energy innovations. As the first of 78 million baby-boomers (born 1946-1964) reach social-security retirement this year, increasing demand for updated senior facilities is forecasted, especially those offering assisted-living healthcare.

In a rapidly evolving industry, Timberline's success is a reflection of staying humble, growing smart, increasing versatility, and recruiting talented people; while investing in technology, training, and marketing communications.