



THE TIPPING POINT: Economic Drivers of Emergent Technology

We're about to undergo another revolution in the 3d imaging industry. Most of the major hardware and/or software manufactures have already announced new products, or are about to. Leica's partnership with Autodesk and their new BLK360 is as revolutionary as FARO's initial release of the 120 several years back. Their price point and transportability will lead to further democratization of laser scanning.

FARO and Trimble will be releasing new scanners as well, and there is a host of other smaller companies looking for a seat at the table. In fact, Trimble is acquiring just about every possible enterprise in imaging, 3d, and FM solutions at an astounding pace. They're also completely bypassing the service provider's network and going directly to end users to offer services. Autodesk is constantly changing their distribution methods and, more importantly, their sales channel marketing is also able to pursue end users directly.

So, what are the *economic drivers* for these manufacturers that will ensure their future success and foster even greater developments in technology? If asked, they'd tell you it's their fantastic marketing or sensational sales teams. Some might suggest it's a result of their industry-changing products. Personally, I'd call bullshit and tell you it has nothing to do with them, but has far more to do with the current and

trending marketplace. Specifically, it's being driven by the following factors:

- The lack of qualified trade labor on a national basis for the amount of new construction and renovation. Without the talent to employ (due to a lack of interest in the building trades by younger generations) there's a shift toward Virtual Design and Construction (VDC) and Building Information Modeling (BIM). VDC is not a new methodology, but it hasn't been adopted to the degree it should have because people are slow to change.
- Now that the *actual* unemployment rate in commercial/industrial construction is 1-2%, the need to develop compensatory strategies is necessary. Enter VDC/BIM. Enter new hardware/software. VDC/BIM implementation will lead to greater prefabrication – and that is economically only possible by moving to 3d technology.
- There is far less union/trade influence on medium and small projects today than ever before in our history. This allows a less restrictive construct plan which opens the door to adopting new procedures and processes, which includes 3d modeling.
- Love him or hate him, “Trump-Construct” has brought a resurgence in current owner confidence

in creating a business-friendly marketplace. Owner's confidence is, for the most part, very strong—and that typically leads to more investment. If “Trump-Construct” pushes the repair of the aging infrastructure, we'll see more 3d imaging employed—opportunity that was previously unrecognized and untapped.

- Old guys *don't* rule. While we've had 3d technology around for years, we've seen slow adoption because the old guys just don't like change. That trend has shifted in the last few years, as the industry ages and young people have made their way into management. Raised and educated in a new technology age, they have every expectation of working in a 3d world.
- Laser scanning adoption. Although still in the early stages, it has enjoyed a significant increase as software manufacturers have simplified integration of the point cloud.

I'm incredibly confident that we're on the forefront of seeing these emergent technologies make significant impact on the industry, and that there's a sensational growth curve/adoption rate yet ahead. ■

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