

BuildCentrix

CONSTRUCTION IN THE CLOUD

Volume 4 / Number 2

Technical Debt: Avoiding the rabbit hole



www.buildcentrix.com

© Can Stock Photo / Goodluz



Technical Debt: Avoiding the rabbit hole

While every technology company might carry technical debt, those who fail to see the benefit of being cloud native versus relying on installed, os-reliant tech are at a higher risk of failure.

By / Jessica Kirby

Technical debt is the implied cost of future rework required when choosing an easy but limited solution for tech development instead of a more progressive and robust approach that could take more time. Analogous with monetary debt, if technical debt is not paid, it can accumulate “interest”, making it a lot harder to implement changes.

“I had a client call me because their legacy ERP system is no longer being supported and they have to be off it by the end of the month,” says James Beveridge, CEO, BuildCentrix (BCX). “You’re always running a risk with legacy software packages. In the short term, lack of bug fixes, innovation, and enhancements is extremely frustrating to users. In the long-term, the sudden shut down of these packages can seriously disrupt your business.”

When it comes to app or program development in the MEP industries, developers accumulate technical debt every time they build out a product that relies on legacy, installed, Windows-based operating systems.

“Every technology company will have technical debt that needs to be addressed,” Beveridge says. “Building on legacy softwares, even with new technology, you’re introducing enormous technical debt and risk. For example, if something changes or is deprecated in that old software package, your new build will fail.”

BCX recently had four contractors still using the company’s initial timecard iteration, which was developed 12 years ago.

Although BCX now offers new field and shop timecards with full ERP/payroll integration, it was extremely challenging to get those contractors to migrate off that old timecard, which BCX had to deprecate.

“When picking technology, you don’t want to revisit that choice often, as it can be very hard to migrate users once they make a choice,” Beveridge says. “That’s why it’s so important to pick the right solution that’s going to continue to innovate and not be tied to very specific operating systems.”

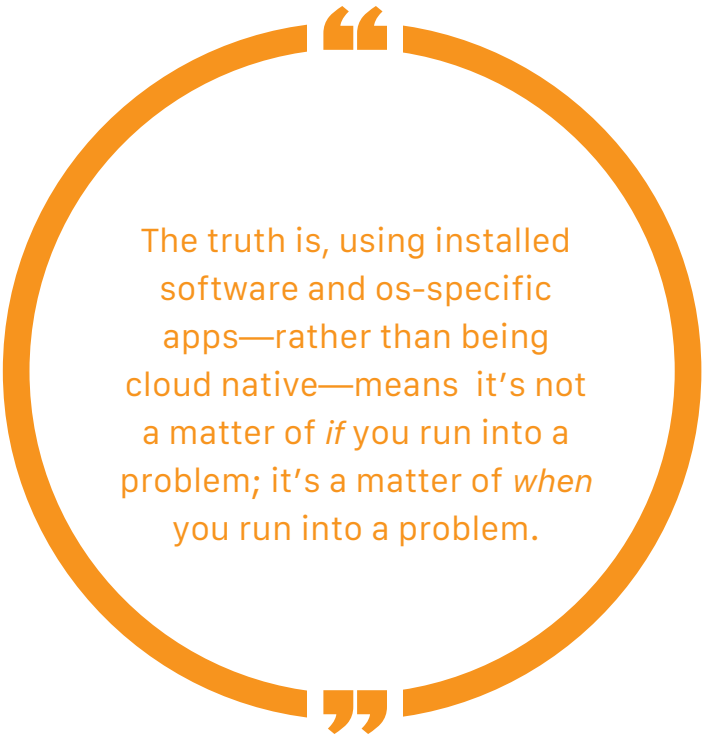
And it’s not just downloadable software that poses a risk. Any os-specific app lacks the flexibility of cloud native technology, and although apps and games are an industry historically earmarked for perpetual growth, change is in the air.

A study from AppFigures reports a sharp decline in apps and games released by both iOS and Android developers in 2022. Both the App Store and Google Play shipped far fewer apps than in previous years, with 1.2 million coming from Android and 400,000 from iOS.

Though the 1.6 million figure means nearly three applications were released every minute last year, the combined total shows a continuation of a years-long trend, culminating in a 12% decrease for 2022.

Not only that, but the app economy slowed for the first time in 2022 with a 2% drop in consumer spending to \$167 billion. An annual review of the app economy by mobile analytics firm *data.ai* found the drop comes after 19% year-over-year growth the year prior. At the same time, downloads grew by 11% year over year to 255 billion and hours spent in Android apps alone grew 9% to reach 4.1 trillion.

“For the first time, macroeconomic factors are dampening growth in mobile spend,” *data.ai* CEO Theodore Krantz confirmed in a statement. “Consumer spend is tightening while demand for mobile is the gold standard.”



The truth is, using installed software and os-specific apps—rather than being cloud native—means it’s not a matter of *if* you run into a problem; it’s a matter of *when* you run into a problem.

So, why the delay to jump on board full stack development and actually build a standalone product without software dependencies? “It can mean a larger up front investment of development time and cost,” Beveridge says, “which is to say making apps is a less expensive and less verbose approach.”

The truth is, using installed software and os-specific apps—rather than being cloud native—means it’s not a matter of *if* you run into a problem; it’s a matter of *when* you run into a problem.

“It’s 2023, and mobile devices are ubiquitous,” Beveridge says. “What companies don’t always want to do is support, manage, and pay for multiple individual app service—it can become untenable very quickly. Having a single cloud native solution means one subscription, one application to support technically.”

Visit BCX today for a free demo. ▪

BuildCentrix

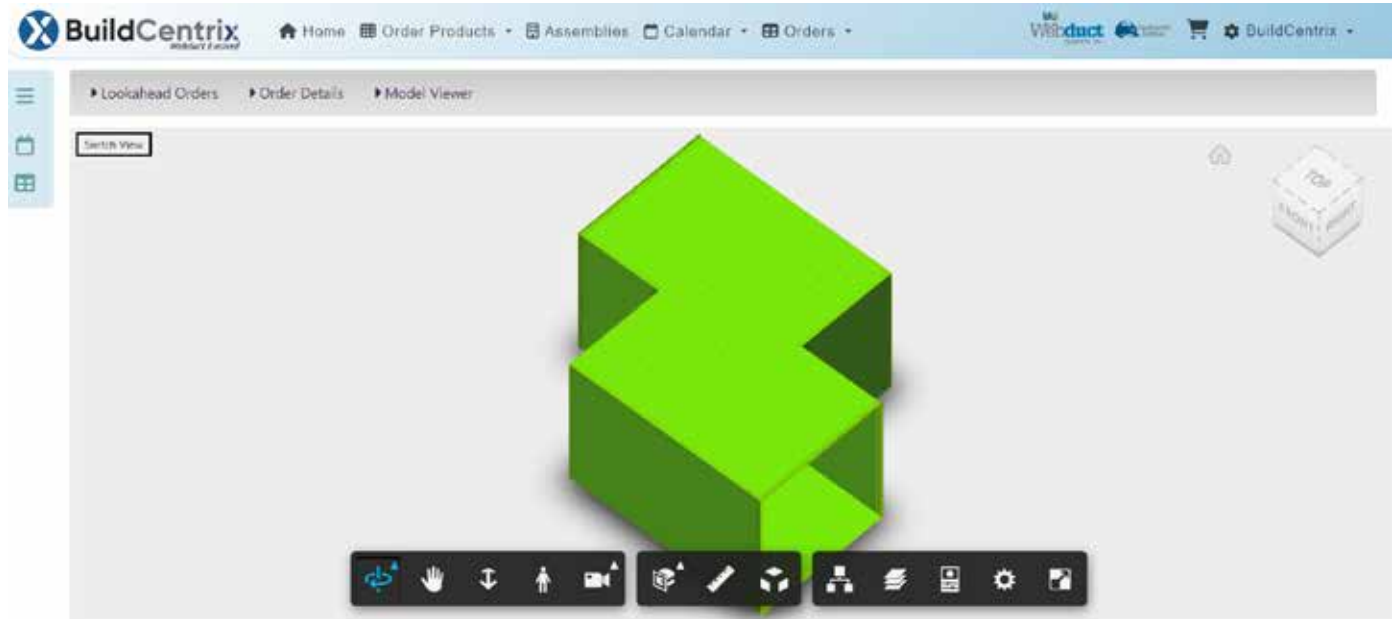
BCX comprises the following modules. While there is no requirement to use them all, they are available for contractors to grow into.

- Field ordering of sheet metal and piping and plumbing
- Machine integration
- CAM integration (Trimble, PractiCAM, CAMduct)
- Watts Orbital Welder
- Field timecards
- Shop timecards
- Labor reporting
- Payroll integration (all applicable payroll packages for contractors)
- ERP/accounting integration for jobs and labour codes
- Revit integration
- CAD integration
- Content generation (not dependent on old windows databases)
- Labor and material costing and pricing

BCX Spooling Project Nears Completion

Spooling—everyone has heard of it, but what is it really? In common parlance, it's taking something large (a model) and breaking it up into work packets or spools. This is often a time intensive exercise as, let's face it, the project schedule doesn't exist in the office with the detailers. You need input from the field.

BCX's new spooling workflow enables BCX to host the model and allows the field or shop to break it down into spools and work packets for fabrication. ■



New Truck and Loading Bay Management Tool in BCX

Orders will shortly be able to be assigned to contractors' loading bays and trucks to better manage logistics and shipping out of their manufacturing facilities. Currently, the BCX Delivery Calendar is an amazing tool to track the status of orders. Being able to assign orders to trucks and loading bays will take it to the next level and help connect the last mile of the fabrication process with the jobsite. ■

