Less is More:
Apps Are Not The Path to Digital Transformation

Technology that understands people.™

Krista

Digital Transformation
Doesn't Require Building More Apps

Abstract

Conventional software development is time-consuming and cannot keep pace with the mounting requirements of constant digital transformation. Low code app platforms promise to simplify and speed up the software development process to create more apps faster but more apps cause more problems. Gartner expects the low-code development technologies market to grow 23% in 2021, so it seems many are happily creating more apps for their users to deal with.

However, the truth is that businesses are groaning under the burgeoning apps in the workplace. An enterprise uses 397 apps on average, each with its separate user interface and functional features. Our current app overload is adding to workflow chaos, eroding productivity, and causing employee burnout.

- **Digital transformation is about optimizing processes not creating task-based applications**

- **Gartner expects the low-code development technologies market to grow 23% in 2021**

- **More apps cause more downstream problems and increase overall costs**

About **The Author**

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John has invested himself in pushing the leading edge of technology transformation to deliver business outcomes and is a highly respected technologist who moves others to action.

John is a proven technology leader with 28 patents awarded or in process in database, distributed computing, virtual/cloud management, multi-channel web application portals, Service Virtualization (LISA), and the industry's most advanced mobile security. Today, John is CEO of Krista Software and has conceived a whole new way to automate business processes and deliver digital capabilities.

Conventional software development cannot keep pace with the dynamics of a constantly changing business. Low-code application platforms (LCAP) promise to fulfill digital business requirements by creating apps faster, and Gartner expects this market **to grow 23% in 2021**. But more UI-based apps push constraints downstream on people, increase costs, and make transformation more challenging. More apps aren't the answer.

The current environment makes sense until you dig deeper into the consequences. Automation projects are boardroom and C-level initiatives. They often provide same-year ROI when properly scoped and delivered. Despite difficulty accomplishing digital transformation, almost every organization is trying to achieve it.

Ironically, businesses are already overwhelmed with the burgeoning list of apps in the workplace. **An enterprise uses 397 apps on average**. These apps have separate user interfaces and terminology, functional features, license costs, and/or a development team with a backlog of change and support requests. More apps increase costs and frustrate employees. The average employee trying to manage processes through all of these apps switches between 35 job-critical applications more than 1,100 times every day.

- The Average Enterprise Uses **397** Different Apps
- Employees Switch **1,100** Times Between **35** Job-Critical Apps

People are constantly receiving emails from other people or apps to move processes along. This causes endless context switching and often feels like their work is chaotic. These extremes are leading causes of employee burnout and contributes to employee turnover. Employers need to find new ways to orchestrate their people and technology for more efficient digital operations.

Digital transformation is using technology to drive outcomes such that people do less of the work required to operate the business. Business processes necessarily span multiple departments, employees, backend systems, and often even customers.

The UI-based "app" for every task in a process is not a suitable model for delivering faster throughput. In fact, more apps create more steps, and more steps create more constraints -- making goals harder to reach.

It's time to reconsider how you deliver digital capabilities. If you provide capabilities using a standard framework that users already know and understand, you can get away from the UI-per-app quagmire. If you simplify the corporate desktop while improving your level of automation, you will lower your TCO and technical debt.

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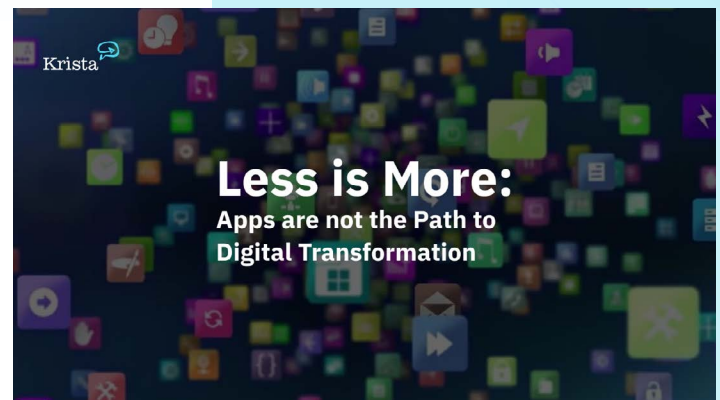
The Problem With App-Based Delivery And LCAP

While low code application platforms are part of the growing trend towards democratization of technology, these solutions have some inherent drawbacks. Low-code apps might make sense for non-strategic, departmental requirements. However, integrating processes across multiple point apps becomes complicated when you deliver end-to-end solutions across separate parts of the business. Many times, app to app integration is left up to users to perform. Users "swivel chair" to copy data from one app to another, and then another. Or, as often, one user accesses one app, then emails an associate in a different department who has access to the next app in the process, and so on.

The fundamental problem with custom apps (even if developed with a low code application platform) is they typically focus on a narrow set of tasks and therefore do not reduce complexity but only add to it. Let's say you want to perform a new sales function that requires access to your CRM and inventory management systems. The typical IT motion is to build a new app for that. Linking two heterogeneous systems is a hard development challenge, even if you build it with an LCAP. But the challenges don't stop with the initial development. The business now has:

☞ **Yet another app UI that requires employee training.**

☞ **Yet another surface area to secure user rights, privileges, and data.**

☞ **Yet another app with its own maintenance and support backlog.**

☞ **Yet another development team on staff to implement practically any change required of this app.**

Enterprises keep adding apps without retiring existing ones and find themselves with nearly 400 apps to support and maintain. Your app proliferation will continue until you take a different approach to simplify the corporate desktop and only involve employees when needed.

Developing more and more apps using LCAPs devolves into an environment where IT pushes more UI-based apps onto its businesspeople to perform tasks. IT then expects those people to achieve business outcomes by sorting out all the required steps and rules on their own by figuring out the people and systems required. IT thinks "my work here is done" while the business thinks, "I have more to deal with now than ever."

App-based Process Example

A hospital system here in Dallas exhibits this issue perfectly. Among the dozens of disparate systems their nursing staff must support, two applications are related to patient medications. The first application tells the nurses which drugs to give each patient at which times; the second application requires the nurses to report what drugs were administered to their patients and at what times. IT fulfilled its obligation, right? A system to inform nurses what to do and a system to describe what they did.

How Do The Nurses See This "Solution"?

They write times and room numbers on their hands and wrists. The nurses remain worried they will miss a patient dosing by not refreshing the first system frequently enough to recall who needs what medicine – they might forget given patient face time and dozens of other screens they are staring at constantly. After administering medications, they must rekey 100% of the information from system one into system two (which uses different terms and codes than system one!) for system two to have its required inputs. Their time is wasted with every dosage. This process doesn't sound like a solution to me at all.

The fact is: businesses don't want more UI-siloed apps. They want more capabilities that they can compose into human-focused, outcome-oriented automations.

Those nurses need their Apple Watch to receive a message 10 minutes, then 5 minutes, and the exact time to administer medication. If they don't confirm, it needs to escalate to another nurse or group of nurses automatically. When a nurse does administer, they simply need to say, "I gave Mrs. Smith her medicine," while in her room. They don't need to know there are two different backend systems supporting their jobs.

Task Automation is Not Digital Transformation

Applications are not scoped to complete an entire business process to optimize an outcome. Applications are typically scoped to complete tasks. Business outcomes are a series of tasks among people and systems spanning multiple departments. Creating an app for each task causes app proliferation that I spoke about earlier. More apps create downstream problems and increase costs.

Take our sales example from above. The CEO's business objectives are to lower inventory levels and to increase cash flow. She can achieve these via more accurate and timely forecast data and optimized collections. Her sales organizations use CRM and order management systems (often under duress as a 'compliance' initiative). However, tasks in accounting and supply chain systems are part of the sales process, too. Sales needs to collect revenue and depends on accounting to manage receivables. Sales also depends on supply chain and inventory management systems so they can sell available inventory. All of these systems contribute to objectives but are maintained and supported in different organizational and system silos. It takes all of the systems working together to produce the desired effect--lower inventory levels and more cash flow.

## Transform Your Business with Digital Conversations

Instead of maintaining separate apps and their UIs for various tasks and training users to navigate through countless disparate apps, you should simplify the process to mimic a conversation among people and systems. Your employees already know how to converse in this method. Experienced employees can articulate your business process across organizational silos and apps. They know which data resides in which app and where that data needs to be input next. Then, they can describe who the next person is in the process and articulate what steps that person needs to take next. Often, this step-to-step communication happens over email, text, Slack, or similar collaboration tools.

Your business process outcomes are conversations between people and systems.

App development teams should set a new strategic initiative: for every new UI we expect users to access, IT should retire at least three existing UIs. If you trade three UIs for one, you decrease unnecessary steps in business processes, lower support and maintenance costs, and increase productivity.

IT should deliver digital capabilities into a flexible platform designed to empower people, use AI, and enable change as "more of the same" and not "yet another UI." Krista is the platform for transforming business processes into new digital capabilities that your employees immediately understand.
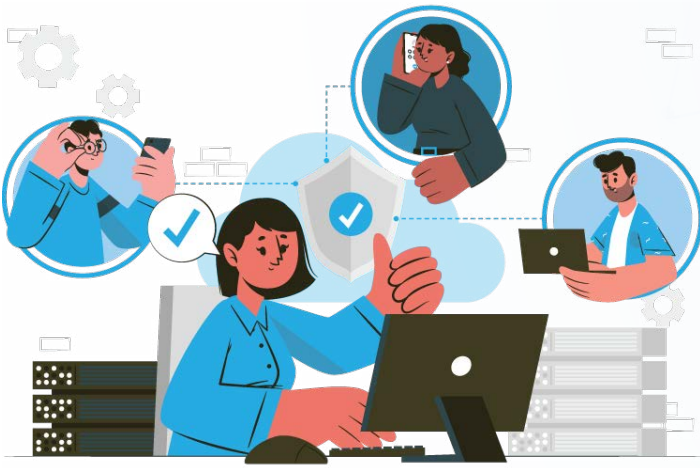
Krista provides a unique, "nothing like code" platform to orchestrate people, systems, and artificial intelligence. Krista personifies backend systems to create a "conversation." Conversations are the app. The conversations between your people and systems enable subject matter experts (SMEs) to do most of the building and modifying of automation instead of writing requirements or change requests. IT owns and administers your Krista environment to maintain security and governance.

Krista enables you to add new business capabilities and retire apps quickly. Remember our 3:1 trade initiative? Krista makes this possible. Krista leverages backend system capabilities without confusing users with screens, APIs, WSDLs, or any other technical barrier. She becomes the interface in conversational workflows that look and feel like texting conversations. So, instead of users switching from a CRM, an expense management system, an order management system, a collections system, and an inventory management system, you simplify the corporate desktop by deploying Krista for your field sales operations. Krista interfaces with all those backend systems and offers an easy way for users to complete and improve processes independent of brittle task-based applications.

By streamlining the desktop in contextual conversations versus task-based applications, you shift the complexity of achieving business outcomes from your users to Krista's Intelligent Automation platform. Work becomes less tedious and chaotic for your people, therefore reducing the chance of employee burn out. With less stress, they are available for more meaningful work.

Now that your users are not tied directly to your systems, those systems are decoupled from processes and can be updated or replaced with nearly no user impact. From our previous example, if Krista is automating sales operations, you could upgrade or replace the CRM system without breaking conversational workflows. Krista removes inherent app-based constraints and provides an easy way to interchange and modify processes.

Over time, Krista logs data about your conversations and prepares you to make better decisions when you are ready to deploy machine learning models. The value of leveraging AI cannot be over-estimated, but the challenges cause most to underutilize the technology. Krista is how your company will operate like it's on autopilot. While not the scope of this paper, please look at our company resources page for more on how Krista builds and integrates ML in ways you've never seen before.

Transformation with Measurable Results

Enterprises achieve their digital transformation goals with Krista. They quickly build and maintain higher levels of automation at 90% less cost vs. alternatives.

We don't have a single customer that trains their people on how to use Krista or the automation therein. Krista guides the conversation to its outcomes, so training costs of IT systems are nearly eliminated altogether with Krista. Krista makes people happier. They would rather converse about improving customer experiences or internal processes than learning dozens of apps.

Krista decouples your business people from the backend IT systems of record. This allows both processes of the business and the IT systems themselves to evolve on their own separate paths. The business isn't going through "cut overs" and IT isn't being stopped from making good enterprise IT decisions because the business can't handle the change right now.

"Most automation projects don't fail in the initial build but in their inability to keep up with the changes required to support real-world business dynamics." – *Jason English, Intellyx*

"Krista AI enables us scale, find the right opportunities, and increase and maintain higher margins." – *Billy Birdzell, Horatius Group*

"Krista is a great partner. If you're trying to bring disparate teams and systems under a single conversation, it can definitely connect the dots and make life easier." – *Rajeev Gupta, Cowbell Cyber*

"...During this time of transformation, we focused on building efficiencies in everything we do, and one of the primary areas was around our customer experience lifecycle. We would not have been able to transform and improve our customer experience without Krista. "– *Chad Holmes, Kivu Consulting*

Invitation

Krista is not a new idea. It's the age-old idea of human collaboration applied not just to people but to systems and AI as well. It's time to adopt "Technology that understands people.™"

I invite you to consider Krista to empower your digital transformation journey. You will find her a unique and effective partner.

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About the Author

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