



Analysis

Conversations are the integration model for people, and now, systems.

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Jason English, Intellyx September 2021



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When customers and employees try to get something novel done within an app that depends upon back-end systems, the integration work of meeting that request can create real pain.

Integrating systems has been a problem since there was a second system.



Anyone who has ever witnessed an ETL exercise where data engineers must constantly 'extract, transfer and load' volumes of data to feed a decision support tool knows exactly the pain I'm talking about.

Accelerating work with processes and data anywhere

Businesses create automation across disparate systems through *integration*: extracting available services, processes and underlying data, in order to feed them into an application, which kicks off other processes and gives end users relevant information to do the work at hand.

Applications must integrate with many systems that are both on-site and in the cloud. In addition to fetching records from core applications and business process silos, they must share data through REST APIs, event buses and SaaS apps.

Fortunately, there are now plenty of mature integration tooling vendors that offer piping: adapters and platforms that allow systems to pass requests and data to each other. This has been a great boon for development teams -- as they can quickly assemble and connect sources of data that will feed their target application's functionality.

Though integration tools have removed much effort, they cause application consumers to expect faster integration and solutions delivery. This has drastically increased the workload of new and unique business processes for developers to build -- however, these tools require special skills and there is an ever-increasing backlog of integration tasks.



Even when using a low-code application builder, there is usually some integration understanding required to know which APIs are available to stitch together complex business processes. Therefore, the end customer will usually need to file an IT request ticket and line up in the queue to wait for a reasonably skilled technical resource to hook up APIs and enable the process.

Yes, we now have access to more integrated IT capabilities than ever, yet we still lack change-time integration between systems and the people who need them. Despite the hype, RPA bots also require programming changes, adding to the friction of backlogs and delays. Integration through programming can never keep up with changing priorities.

Wouldn't it be better if users could avoid integration and get what they want by just having a conversation with all of the underlying systems?

Try starting over with conversational Al

One way to construct business processes is through conversations that abstract away underlying integration concerns to instead focus on desired business outcomes. In essence, allowing people to ask systems for help, much like they ask people already.

Take for example a sales leader at a commercial insurance company. They want to take the friction out of renewals for their agents to increase recurring revenue.

Currently, each agent's renewal request goes up the chain, requiring lookups in Salesforce, emails to finance and support, lookups of current policy information from a partner's SaaS tool and new options from a marketplace. Then, quoting, invoicing and revenue recognition in SAP, preparing the package, mailing the policy and so on.

The insurance agency might build all of these integration steps into a custom app by extracting processes and data and stitching it together using a builder, but if some aspect of the business process changes or hits a roadblock, feature and support requests will start flowing in from frustrated agents.

In a conversational AI approach like **Krista**, the agent might instead ask Krista through chat or Slack "Which clients are eligible for renewal?" and get back a list of valid customers. Then Krista asks: "Would you like me to prepare quotes for them?" The AI has already learned from previous conversations which systems to ask for data, how to call

the right APIs, and who to pull into the conversation for approvals.

Abstracting the integration

Conversational automation isn't the same as automation via integration. Using natural language, users just describe what they want.

The big deal here is that the conversation itself abstracts the user's business logic from the integration work and data extraction that happens across all of these systems. Business users build automation through this conversation, with the responses to options being used as machine learning data to better train the AI to improve that automation over time.

Now, the underlying systems and integration haven't magically disappeared -- there will still be code and piping to maintain in the enterprise. By simply writing adapters for the conversational AI, an agreement of protocols and labels allow discourse between people and apps on one side, and systems and responding people on the other side.

Do the adaptation once, and once that system is abstracted, it can be described and invoked endlessly by the automation in the context of any conversation. If something changes after the abstraction, the conversational Al might ask for guidance or confirmation again to proceed with automation, but you should never need to revisit any of those systems to regain context since the writing of the business logic and integration are separate exercises.

The Intellyx Take

Most business processes that are conducted through human conversations have a parallel in conversations between people and systems in the digital world.

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. Leveraging conversation as the means of creating these processes empowers a business to change its automation as fast as people who sense the impact of change can describe the need.

When you want to make a business decision and automate a response based on current data, you don't want to extract a copy of all the data you might need to make that decision. Nor do you want to start coding or modifying RPA bots with more if/then/else statements in their automation.

Conversational AI will not need to be perfect to take the integration pain away from automation, it will simply need enough human interaction and guidance to continually improve the experience.

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