IBM

A digitally integrated approach to building schools

Tatweer Building Company is helping the Kingdom of Saudi Arabia achieve its Vision 2030

by Leah Valentine

5-minute read

In April 2016, the Kingdom of Saudi Arabia unveiled its Vision 2030—a strategic plan aimed at reducing oil dependency and developing the public sector. For Tatweer Building Company (TBC), the new plan heralded an uptick in work.

Established in 2013, TBC is a publicly funded project management organization that focuses on building and maintaining schools throughout Saudi Arabia. As such, TBC is involved in a wide variety of transactions—for example, obtaining permits, procuring materials and hiring subcontractors.

In the past, keeping track of the many different systems required to manage complex building projects

was a challenge. Meshari Almutairi, Development Supervisor at TBC, explains: "We used legacy programs for our business, which was difficult for the staff because there were no integrations between them. For example, construction used one system and finance used a different one. Everything had to be connected manually."

TBC sought a way to connect all the disparate systems together, while

also incorporating some degree of automation into its many business processes. The organization found what it needed with IBM Cloud Pak® for Integration and IBM Cloud Pak for Business Automation, both of which use Red Hat® OpenShift®. This is the first deployment of IBM Cloud Pak for Business Automation on RedHat OpenShift in the kingdom.

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Meshari Almutairi, Development Supervisor, Tatweer Building Company

Rolling out new business processes now takes

1/3

as much time as before

Answering business questions now requires

99%

less time

Integrating and automating

TBC engaged IBM Expert Labs and IBM Business Partner Wipro (external link) to help develop the solution architecture. Wipro offers a full range of services to companies seeking to modernize their infrastructures. The solution the team designed for TBC includes an upgraded user interface (UI) featuring a full-service portal, along with an application layer and a containerized integration layer. The solution is available on desktop and mobile devices for both internal and external users.

The IBM Cloud Pak for Integration platform plays a key role in the new solution, providing TBC with specialized capabilities and AI-powered, automated deployment of integrations

to connect a wide variety of business-critical applications. Among those integrations is one between Oracle ERP and Oracle Primavera solutions— two systems that do not integrate automatically. Using the IBM Cloud Pak for Integration solution, the team was able to create a custom integration

between TBC's two Oracle systems in just three months.

The team also used the IBM® Operational Decision Manager, IBM FileNet® Content Manager and IBM Business Automation Workflow components of IBM Cloud Pak for

Business Automation to automate some of TBC's key business tasks. The solution's portal, for example, uses IBM Cloud Pak for Business Automation products to simplify the way building licenses are granted. In the past, obtaining a license to build a new school was a complicated, multi-step process that required a great deal of paperwork.

Now, thanks to a comprehensive and dynamic set of business rules embedded in the new UI, the entire process is automated. Users simply enter the proposed dimensions for a new school and the portal automatically generates a list of the tasks and materials the project will require: everything from how many sinks to install to which permits are needed. Users work their way through the list, using the portal to connect to suppliers and contractors. Once all tasks are completed, the proposal is automatically submitted to the government for licensing approval.

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From vision to reality

The new portal has been a game-changer for TBC, dramatically reducing the amount of time and effort required to build new schools. But there's more to it than that. With the integrations that lie behind and beyond the portal, the company's development team has significantly reduced the amount of time it spends creating custom integrations, and business users are no longer forced to search through multiple interfaces to find answers to their questions.

"The IBM solution helps make it easy for us to find the information we need," says Almutairi. "Before, if an executive asked for something, it sometimes took us three months to find what we needed. Now, it takes less than an hour."

Using the unique capabilities of IBM Cloud Pak for Integration, TBC has also changed the way it integrates with banks, adding both security and reliability. In the past, finalizing financials could be stressful for vendors. It took a minimum of three days, and paperwork was often lost. Today, vendors can finalize their financials in real time.

With the digital integration and automation changing the way TBC does business, Almutairi and his development team are looking into new services to roll out to users. "It used to take six months to roll out a new service. Now it takes about two months, which means we can do a lot more. That gives us a lot more opportunities to help make Vision 2030 a reality," he concludes.

About Tatweer Building Company

As a government company owned by Saudi Arabia's Public Investment Fund, TBC (external link) builds and maintains schools all over the kingdom. This includes over 600 buildings, serving more than 289,000 students. TBC is headquartered in Riyadh.

Solution components

- IBM® Business Automation Workflow
- IBM Cloud Pak® for Business Automation
- IBM Cloud Pak for Integration
- IBM Expert Labs
- IBM FileNet® Content Manager
- IBM Operational Decision Manager

About Wipro

IBM Business Partner Wipro (external link) is a global technology and consulting firm that provides a variety of IT modernization and management services to customers all over the world. Established in 1945 and headquartered in Bengaluru, India, Wipro boasts more than 220,000 employees across six continents.