



PRICING CARS RIGHT WITH APP MODERNIZATION

While much has been written and said about the digital revolution and the transformation of industries, a closer look at ground realities reveal that much of the action to date has been primarily in the front office. Most businesses, have been laser-focused on delivering modern marketplaces and mobile apps, among other things, to woo customers. But today there is a growing realization that transforming the customer-facing front of the business alone isn't going to help achieve modernization. Worse still, it isn't going to help organizations be truly future ready.

To plug this gap, organizations are now beginning to modernize business functions like supply chain and inventory management. But not all of them are in a place to make bold, net-new investments in technology systems to modernize their business functions for transforming the organization. Most of them are under pressure to keep costs low and use existing assets to their maximum extent before retiring them. A recent survey by Greyhound Research, a leading global analyst firm, confirms the same. The study estimates that over 60% organizations with revenues over USD 1 billion are being asked hard questions on outcomes and impact for proposals to invest in new technology systems vis-à-vis furthering legacy systems and modernizing them for incremental benefits. The latter allows room for the organization to test the benefits with modernized technology and process without having to invest significantly or risk inefficiencies arising from poor change management.

GEARING UP FOR LEGACY APP MODERNIZATION

In our experience at Infosys, while modernizing legacy systems and applications sounds ideal, it has to be planned with utmost care or organizations risk facing the following **challenges**:

- Inability to extract business rules out of legacy systems
- Failure to assess application code health and security vulnerabilities
- High levels of dependency on the application development team

Infosys helps clients solve such challenges through **automation** and by using in-house solutions like **Business Rule Extractor (BRE) and Migrators** that help navigate both the scale and complexity of client applications. We help clients use automation to reduce manual intervention and reverse engineering efforts which help reduce costs and gain consistent and better quality of code.

An **auto manufacturer** in North America wanted to modernize the **application used to set up the pricing and product configurations** of models and accessories. Given its legacy, the application to be modernized was complex, difficult to maintain, and **heavily dependent on mainframe databases**. This case was particularly peculiar given the pricing and configuration setup was mostly manual data entry maintained in legacy databases without any workflow mechanism, thereby giving **no insight or control over job execution**. With a focus on centralizing pricing rules as well as **preserving business logic** of the highly complex applications with dynamically changing rules, the client wanted a solution which would make the application more scalable, flexible, and modular.

ANALYZING 34 YEARS OF DATA

To architect the best possible solution for the client, the Infosys team studied and **captured all the pain points** of the existing system. The process led us to suggest modernization and automation of their Pricing and Product Configuration Application by re-engineering and transforming the entire application with the latest technology stack in a phased manner.

The next step was to **analyze 34 years of data using a scalable data** model with a Relational Database Management System to understand the future requirements and growth of the application. This helped decide the new layered architecture required by the application. Given the scale and complexity, the Infosys team architected a **distributed application using Oracle Database 11g**, enabling data to be accessed from local and remote databases instead of the existing system which was heavily reliant on mainframe-based databases. The application modernization engagement also included migrating the 34 years' worth of pricing data from the legacy system.

Other features included pricing rules governed by a **Blaze advisor rules engine**, which would give pricing advice based on several parameters. The new system also allowed for flexibility and improved control in the pricing of vehicles and **automated the vehicles re-pricing process**. Lastly, to integrate and sync the legacy system and the new distributed system, the Infosys team designed an **Adaptor Interface** between the two systems with Informatica Power center tool to perform ETL (Extract, Transformation, and Load).

Split **into two phases**, the application migration was started by setting up the new Java architecture, application, and database which was then followed by enabling the legacy applications to consume data from the new pricing source. The Infosys team created more than 90 programs in Phase 1 out of the 100-plus programs, and more than 100 programs in Phase 2 out of 900-plus programs.

The Infosys team helped deliver a **90% reduction in manual data entry** due to automation as well as **elimination of 90% of data errors** due to data quality checks. In addition, we delivered on the architectural goals of the modernization engagement, including **improved flexibility and agility** of the vehicle supply chain, automation of the manual processes and overcoming limitations of the legacy mainframe system. The team delivered an application that was based on industry standards, was scalable, reusable, and flexible according to future business needs, and most importantly, extensible to accommodate the incremental transformation of the features following migration from the legacy mainframe application.



PRICING CARS RIGHT WITH APP MODERNIZATION - THE FIVE KEY TAKEAWAYS

- 1 **Identify** the client's pain points to understand which legacy applications need modernization and how
- 2 **Analyze** data using data modeling methods to account for future requirements and growth of the application
- 3 **Use** a rules engine to ensure production in line with business rules and parameters
- 4 **Automate** manual processes to improve efficiencies and reduce cost
- 5 **Execute** modernization and transformation projects in phases to ensure minimal disruption and efficient change management

BIG LEARNING:

A slick customer-facing website or a mobile app that is unable to ensure the product is delivered on time and in good condition is a wasted effort on many levels. Some organizations are beginning to learn this on the back of poor customer satisfaction and loss of critical ground and business to the competition. But there's another category of organizations, those who well understand the need to modernize the supply chain but are stuck between the demands of the business and the realities of proving investment worthiness to the board and the management. Application modernization solutions can be an excellent fit for these organizations, which are looking to reap the advantages of a digital enterprise without having to go through the pains of a full-blown migration.

WE DID THIS FOR THEM. WE CAN DO IT FOR YOU.

To learn more about our application modernization solutions, reach out to us at askus@infosys.com

For more information, contact askus@infosys.com

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