



Reimagine and Go – The New IT Delivery Model

RFG Perspective: The sudden jolt delivered to the global economy by the COVID-19 crisis demands a change to the business model, which in turn will require a new set of enterprise applications. To reach this goal, we believe business and IT executives must “Reimagine and Go.” That is, enterprises need to create a new vision of their businesses that map to the New Normal we will be living in once the shelter-in-place lockdowns end. Then they must deliver the applications and processes that support the new business models as soon as possible this year. Development cycles are compressing, moving from months to weeks. Business and IT executives need to accelerate digital transformations, re-imagining what once were multi-year, multi-phase digital business transformations as single-phase transformational solutions that will become operational in 2020.

For a good number of businesses, “business” as we have known it is dead.

We will not be going back to business-as-usual once the lockdowns are over. After months of working at home, people’s fear of co-mingling, of crowding together, and of shaking hands, will take a long time to dissipate – if ever.

Businesses need to acclimate to the New Normal and utilize business models that are attractive to their customers. That may represent adopting new user interfaces (UIs) or distribution channels. And some business executives will need to do more – because they feel pressure to change the entire order-to-cash process, and to redesign their supply chains.

Thus, due to the New Normal environment for business, enterprises need to quickly reimagine and deliver new business models. RFG is referring to this overhaul as a “**Reimagine and Go**” process.

The word “Reimagine” means that we realize many business conditions have changed in recent months -- and we understand that companies need to adapt to survive and grow in 2020, 2021 – and beyond. *The word “Go”* means that the digital business transformation needs to happen quickly – not over multiple years or multiple phases, but rather in months and more directly.

There are two key components to this “Reimaging and Go” strategy: Businesses need to develop new processes, while DevOps teams must find ways to deliver new applications rapidly, so that organizations can begin competing for business in the New Normal environment.

The Application Delivery Models

There are three different approaches to creating a new business model:

1. **Greenfield** development
2. **Enhance existing** legacy solutions
3. **Build independent** solutions– and migrate

The “greenfield” option implies starting from scratch and throwing away what currently exists. In contrast, the enhancement methodology tightly integrates new functionality into the existing software stacks. It’s worth noting that large integration projects are problematic for large



enterprises. For large enterprises, these two approaches – rewriting and integrating – are both prone to failure due to changing requirements, delayed time to market, or integration challenges and complexities.

The best, and perhaps only, way to rapidly and successfully get to a next-generation transformed environment is not to launch an integration project at all. Rather, the best approach is to build or acquire a new set of independent applications that incorporate enterprise architecture principles designed for customer-centric environments that loosely link to the legacy environment through APIs or other simple connections.

Reimagine: The Independent Solution

There are a few reasons why an independent solution succeeds while the other options fail.

Let's look at why the first two options fail. Greenfield solutions are an attempt to rebuild the organization, which means writing off a sunk software investment cost that can run into the billions of dollars for large enterprises. Replacing that much code results in a long, costly development cycle, including redefining requirements and processes.

While the vision of creating a modern organization and getting rid of old baggage is a great idea, the reality is it is not practical. This is why these projects tend to be abandoned over time, especially when new management takes charge.

Enhancing existing legacy systems to support a new business model requires major upgrades. These upgrades are not only complicated by themselves, but also add to the complexity of existing systems, which in themselves are complex patchwork quilts.

The House Extension Analogy

Imagine the requirement to add an in-law apartment to an existing house. One has two choices: attached (i.e., enhancement to existing) or detached (i.e., independent). Adding an attached unit will require ripping up some existing walls and infrastructure and possibly upgrading circuits, and possibly wells and/or septic systems in addition to the construction of the new apartment.

By contrast, building an independent unit with a connecting walkway to the main house is a simpler task that can be built much more quickly. When it comes to enhancing existing legacy systems, odds are that there are not good design blueprints and documents. Moreover, it is likely there are not good APIs in some or most of the old systems, which means that creating and testing interfaces to the legacy applications will add another level of difficulty to the project.

On the other hand, building an independent solution that interfaces with the legacy systems through simple APIs is less complicated and be delivered in a quicker timeframe. The way to vision the new applications is to think of these applications as belonging to an outside organization, and not part of the company. In this way, the interfaces will be kept clean. In a similar vein, the same approach applies to the data for the new workloads. Create new databases



rather than go through the traditional ETL process for extracting, cleaning and transforming data. One bank found that it was able to build a new digital bank as an alternative to updating its older applications. Instead of moving the data over to the new digital bank, the bank paid customers to “join” the new bank by signing themselves up. This approach was not only cleaner than re-integrating its older operations, but it had far fewer errors – and avoided annoying its longtime customers.

Reimagine: Enterprise Architecture Principles

Historically companies create an architecture that is product-centric. To be competitive in today’s environment the architectural mindset needs to be turned on its head and become customer-centric. Buyers nowadays have numerous options to choose from and they can afford to be selective. Thus, it is imperative for an organization to develop its new application architecture with customer satisfaction as a core principle in the new application’s design. This means that the new platform is designed to be a marketing platform as much as it is intended to be a sales or distribution platform.

As a result of the new orientation, we see the following enterprise architecture principles applying to all reimagined applications:

- **Mobile first** – It should be assumed that the primary user device is a mobile platform with a smartphone form factor. All types of user platforms should be planned for but the primary design should be around the smartphone.
- **Use of APIs and messaging standards** – The new code needs to stand alone with clean interfaces and messaging standards. This will simplify and accelerate development and speed to market. Tightly integrating the code or building in tight dependencies will slow development and make the code harder to fix. Moreover, componentization will allow for reuse, which enables more applications to move into production faster.
- **Build, buy, git or partner** – IT should take advantage of existing elements wherever possible. Some of these may be code building blocks that are openly available on such open-source repositories as Github or Gitlab. Build, if needed, but otherwise go for open source code, SaaS, business partner components or vendor software. Use in-house data centers, private clouds or public ones. The use of existing building blocks helps to get the job done sooner. The NIH – not invented here – syndrome should be history.
- **KYC** – Customers and prospects want to be recognized by seeing their preferences supported. They are looking for a highly personalized set of interactions, which call for advanced analytics (AI and ML) and **new databases** to be designed to recognize and respond to customer dynamic (e.g., geolocation) and static facts including family relationships.
- **Fraud** - Users expect the organization to recognize fraud, notify them of any suspicious activities, and not be responsible for any illegitimate transactions.



- **Chat** – Advanced chat functionality, including actual human contact and advanced AI/ML features, will be necessary to provide strong customer support so that customers will not abandon the transaction.
- **Inquiry** – Not only should inquiry be expected but from a capacity, performance and volume perspective designers and developers should expect more inquiry transactions than any other type of transaction.
- **Touchless entry** – Concerns about the coronavirus have people looking for ways to interact with the applications without having to physically touch any devices of any kind. Support for multiple methods of input will be viewed quite positively by users and consumers accessing the application.
- **Strong IAM features** – People want to feel protected, so they expect strong identity, access and authentication management features to be supported by the new applications.
- **Security and compliance** – New applications will need to support CCPA, GDPR, HIPAA, and PCI regulations as well as any other applicable regulations for the organization’s industry – and for all regions where they will run.
- **Performance** – Regardless of the load on the system users expect their transactions to be executed within two seconds maximum (Note: less than one second is even better, with sub-second response time). Otherwise they are likely to abandon the application.
- **Scalability** – If users love the new application, they will use them to the point where scalability is a requirement. Otherwise latency at some point would become problematic, causing users to abandon the application. Thus, architects should incorporate hybrid cloud infrastructure into its original design.

Summary

For **Reimagine and Go**, a review and triage process will come first – followed by the decision to accelerate the development of the most important new applications. Parallel development that does not depend upon the legacy applications will be the most effective approach to Reimagining and Go. New development should also leverage software automation for rapid development, while using APIs to connect with older functionality. Orchestrating containers that bring the applications to the data – avoiding latency for time-consuming data access – will be far more effective than extracting and moving data across the network. Selecting the set of applications and business processes to be accelerated will be the key differentiator for enterprises that move quickly to cope with the New Normal business environment worldwide.

RFG POV: An agile “Reimagine and Go” approach to Application Development and DevSecOps will help enterprises reach their reinvention goals faster – and with fewer mission-paralyzing errors. Moreover, “boiling the ocean” of enterprise data with extensive ETL processes is to be avoided; otherwise the project will bog down waiting for the databases to be populated. Thus, to cope with agility demanded by the New Normal business environment, business and IT executives must move rapidly to gain corporate buy-in and then execute a “Reimagine and Go” methodology with an eye to the clock – additional functionality can always be added in over time.



Additional relevant research and consulting services are available. Interested readers should contact Client Services to arrange further discussion or interview with Mr. Cal Braunstein, CEO and Executive Director of Research. Jean Bozman, President of Cloud Architects Advisors, contributed to this research report.