MODERN SOLUTION PLATFORM FOR RAPID AGILE DIGITAL TRANSFORMATION

xAQUA ® Enterprise Solution Platform (ESP)

Abstract

The 21st Century digital transformation is focused on rapid delivery of agile business values to the customers through digital transformation enabled by modern technology platform that are built with Smart Technologies, Integrated Solution and Automated Delivery. This paper discusses the key challenges associated to the agile digital transformation and xFusion's xAQUA ® Enterprise Solution Platform (ESP) providers a modern solution platform for rapid agile digital transformation.

FUSION
TECHNOLOGIES

Introduction

The 21st century digital transformation is more focused on continually improving customer experience to excel in the marketplace. Jeff Bezos, CEO of Amazon says, **"You need to be obsessed with your 'always dissatisfied' customers"**

Use of smart technologies to continually innovate customer experience by rapidly delivering business values with evolving customer expectations is the key to excel in the 21st century digital marketplace. Also, as mentioned in a recent Forrester Report,

"Reinvent Your Business with Technology... or Fade to Black"

Central to this perspective is the **rapid delivery of agile business values** to customers through digital transformation enabled by modern technology platform, built with the following three key ingredients.

Key Ingredients:

Smart Technology
Use of smart technologies to enable rapid iterative delivery of agile adaptive business services that can be can be built, deployed, managed and monitored efficiently and independently.

Integrated Solution
Business driven integrated and interoperable technology capabilities and solution patterns that can respond to changes quickly and efficiently.

Automated Delivery
End to end automation of delivery pipeline tasks from build to operate to enable rapid agile delivery of business services to the end users.

But what are the key value drivers of the digital services platform for the success of its digital transformation vision?

The Key Value Drivers

Following are the key value drivers of the digital services platform for the success of the digital transformation vision

01 Customer Engagement and Collaboration
Continuously delivering services with evolving customer expectations

02 Improved Efficiency, Effectiveness and Quality of Services to Customers
Opportunity for continuous innovation and improvement of customer experience through rapid agile delivery of business services.

03 Cost Savings
Substantial reduction of capital and operational expenses

04 Risk Reduction
Substantial reduction in related security risks modernization and compliance

05 Faster Time to Market
Rapid zero touch/low touch development and agile delivery of business services

06 Growth Creation
Creation of new business services by composing and reusing existing services and ability to rapidly build new services from scratch

07 Maximize Investment in Business Value Creation
Minimizing investment in technology debts and maximizing investment on business innovation and value creation.

Challenges

But the iterative transformation of large scale legacy systems and rapidly delivering agile business values comes with its own challenges:

Too Many Ingredients and Confusing Choices

There are too many choices for tools and technologies that can be used for establishing modern digital services platform specifically in the Open Source software world and may lead to very confusing choices. This also requires the team to have expertise in large set of diversified technologies and deep understanding of the integration and interoperability amongst those tools.

Many Cooks, Many Recipes

Agile development of digital services often involves multiple vendor teams to build the digital services in parallel. This is like inviting multiple cooks to the kitchen – each with their own recipes and ingredients of their choice. They may cook their own items to their own taste those may not be served together failing to deliver the business values.

Lack of architecture and technology standards definition and technology management process may allow different agile teams use their own tools, technologies and solution patterns that may lead to technology proliferation and an un manageable state of solution, architecture and technology that will fail to attain the business goals and objectives.

Open Source gone wild

Absence of technology management, governance and control may allow different teams using different tools of their choice. Over a period, the uncontrolled use of tools and technologies may cause serious interoperability issues amongst the tools and may cause the version control and build, test and deployment process extremely complex.

Maintaining Business Continuity during Modernization

For iterative modernization, it's very critical to manage different business priorities for different partners and suppliers during the iterative modernization. Not every partner will start using the new digital services once released. It's very critical to have transition state architecture defined for each incremental milestone to maintain the business continuity.
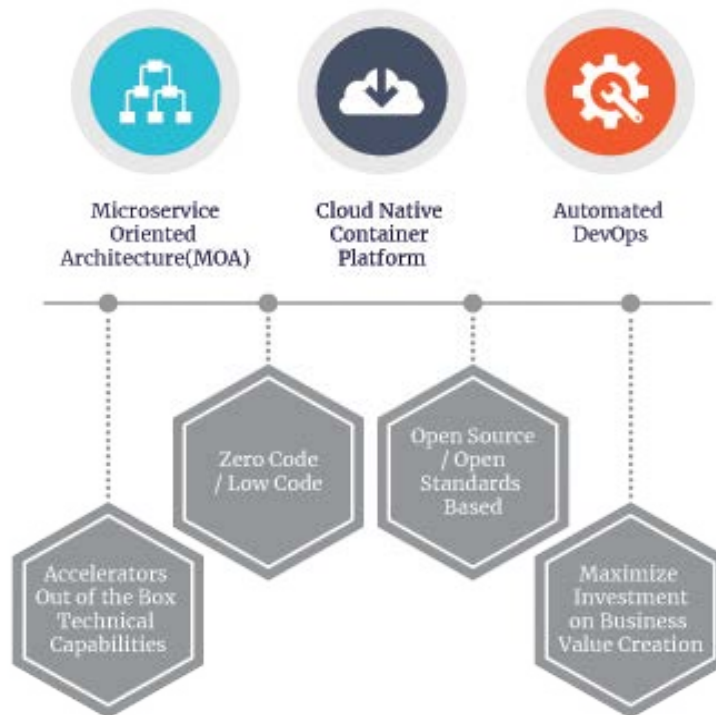
Frontloaded with Technical Debts

Agile project roadmap often includes frontloaded milestones for various technical debts such as establishing the infrastructure, technical analysis and design etc. that may cause inflated timeline for delivering business values.

xAQUA® Enterprise Solution Platform (ESP)

xAQUA ® ESP is a 4th generation Enterprise Solution Platform that allows rapid implementation of Cloud-Enabled, Container based Microservices Applications using zero touch/low touch Integration Oriented Development (IOD) and API First Approach.

xAQUA ® ESP is powered by its highly-automated xAQUA ® Agile DevOps (ADOP) that implements the Platform as Code and allows automated deployment of the platform components in various SDLC environments in minutes and the built-in automated CI/CD pipeline enables Continuous Integration and delivery (CI/CD) of Minimum Viable Products (MVP) through the CI/CD pipeline.

With xAQUA ESP, the customers can build flexible and composable microservice based applications in weeks at significantly lower cost, risk and reduced IT complexity.

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xAQUA ® ESP – Key Ingredients

xAQUA ESP is built with the following three key ingredients that enables rapid delivery of agile values to the customers.

Smart Technology – best of the breed modern open source technologies and open standards that brings end to end technical capabilities for large scale complex modernization.

Integrated Solution – Microservice Oriented Architecture, delivering the promises of SOA through API First approach

Automated DevOps – capabilities for rapid delivery of cloud native composable microservices applications through automated CI/CD pipeline using Cloud First and DevOps First approach

xAQUA ® ESP – Features

01 Microservice Oriented Architecture (MOA): *Delivering the promises of SOA*
We have connected all the dots using best of the breed open source software and open standards. Technical capabilities required for complex enterprise applications are integrated and ready for rapid

02 Agile: Iterative and Incremental
xAQUA ESP's solution architecture and patterns enables incremental and iterative delivery of digital services as microservices that can be built, deployed, managed and monitored independently.

03 Enterprise Solution Platform in a Box
xAQUA ® ESP solution architecture and pattern leverage API First approach, delivering composable business processes/ applications that can respond to changes quickly and efficiently.

04 Integrated DevOps
Ingrained DevOps First approach provides out of the box automated DevOps for agile delivery of digital services, including Automated Platform Deployment and easy customizable automated CI/CD platform.

05 Bundled Accelerators
The xAQUA ® ESP comes with inbuilt technical capabilities that can be readily used for implementing business services. This saves up-to 30% of the project cost and time to deliver business values to the customers.

06 Progressive Web Applications (PWA)
PWAs are the key for Omnichannel delivery of digital experience to your customers. Rapidly develop PWAs with xAQUA ESP using open standards such as JSON, Angular, Facebook React, HTML5, CSS3, Bootstrap etc.

07 Cloud Native and Cloud Neutral
Born in the cloud era. xAQUA ESP allows creating cloud native and cloud neutral microservices applications that can run in premise and any public/private cloud infrastructure.
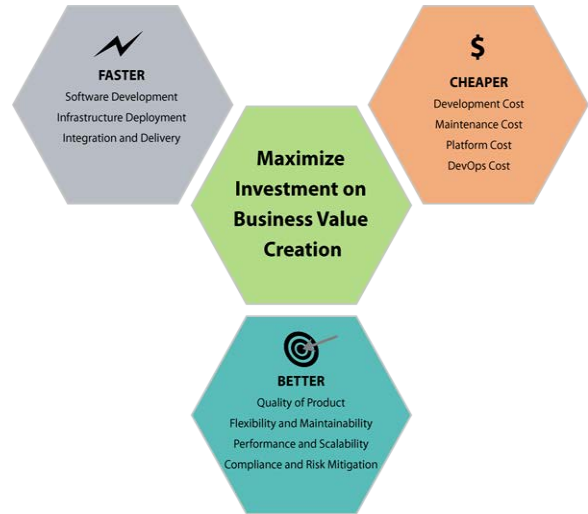
08 Container Architecture
xAQUA ESP allows you to build containerized microservices that can be built, deployed, managed and monitored independently using Docker and Kubernetes.

09 Zero Touch/Low Touch Development
Deliver business services with rapid zero touch/low touch development with rapid, configuration driven and Integration Oriented Development that require little or no custom development using platform technologies such as C# .NET or JAVA - **JSON, REST, SWAGGER** and **JavaScript** are the new normal!

Why xAQUA ® – Enterprise Solution Platform (ESP)?

Because

- **It's Faster, Better and Cheaper**
- **Allows maximizing the investment on business value creation**

FASTER
Software Development
Infrastructure Deployment
Integration and Delivery

Maximize Investment on Business Value Creation

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CHEAPER
Development Cost
Maintenance Cost
Platform Cost
DevOps Cost

BETTER
Quality of Product
Flexibility and Maintainability
Performance and Scalability
Compliance and Risk Mitigation

About xFusion Technologies, Inc.

xFusion Technologies, Inc. is a State of California Incorporation, head quartered in Rancho Cordova, California, with offshore enters in Kolkata and Pune, India. xFusion is an expertise-based organization that specializes in serving various Public and Private sector organizations. xFusion offers a full spectrum of IT services in the areas of Enterprise Architecture, Legacy Systems Modernization, Custom Product Development, Outsourced Product Development, and Data Engineering. xFusion's xAQUA.io provides Platform Automation Functions as a Service (FaaS).

xAQUA.io

General Platform Automation Functions as a Service (GPAFaaS)

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