High-level solution architecture for digital transformation of a banking business:
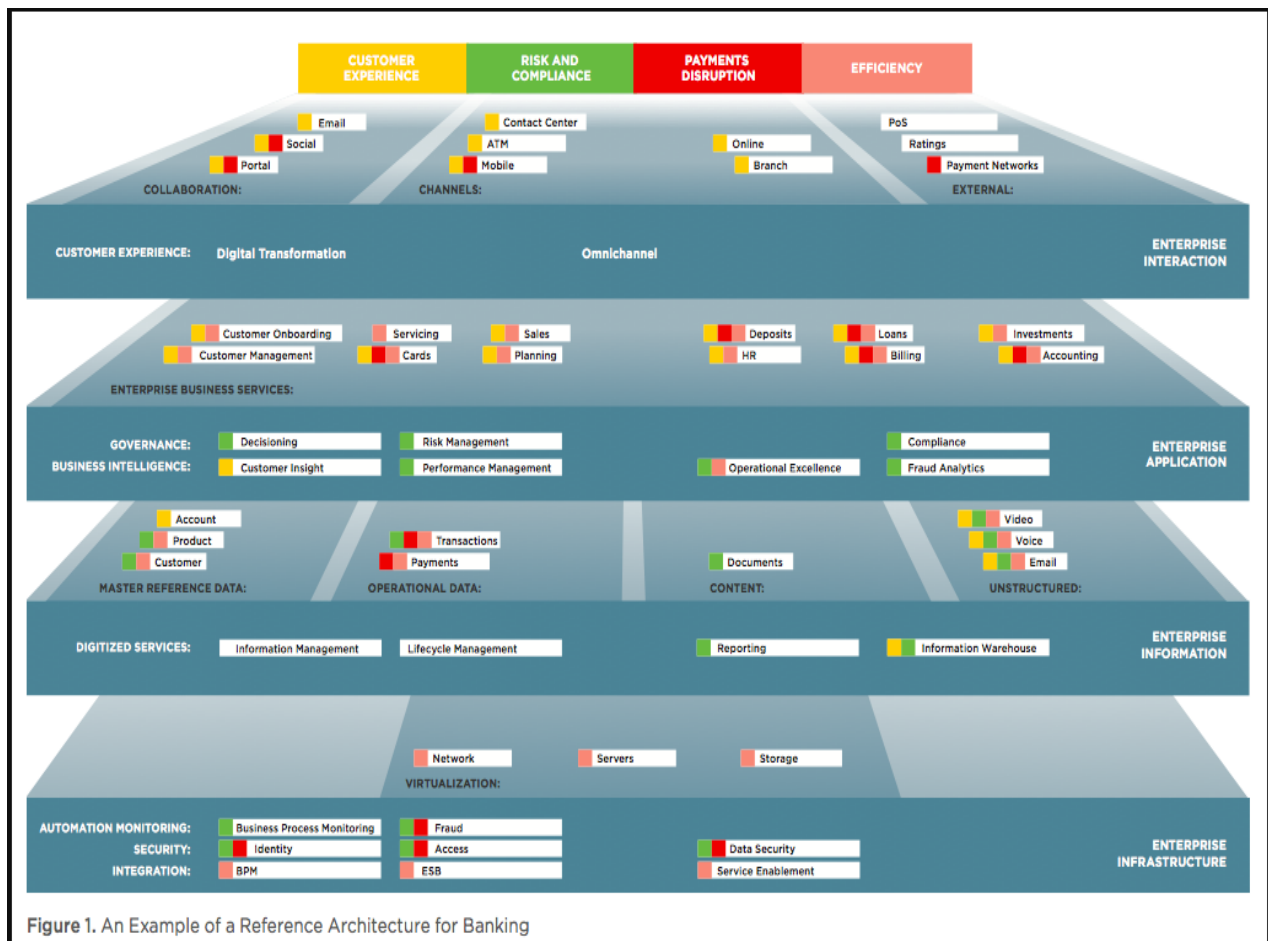

Figure 1. An Example of a Reference Architecture for Banking

1. Digital Platform: The foundation of the solution architecture for digital transformation of a banking business is a robust digital platform that integrates various systems and applications. The platform should provide seamless integration between core banking systems, customer-facing channels, and third-party applications. It should be built using modern architecture principles such as microservices, API-driven architecture, and event-driven architecture.
2. Customer Engagement: The customer engagement layer of the solution architecture should include various channels for customer interaction, such as mobile apps, web portals, chatbots, and social media. It should provide a unified view of the customer across all channels, allowing for personalized and consistent experiences.
3. Analytics and Insights: The analytics and insights layer of the solution architecture should provide real-time insights into customer behavior, preferences, and needs. It should include tools for data analysis, machine learning, and artificial intelligence to help banks identify trends, anticipate customer needs, and make data-driven decisions.
4. Security and Compliance: The security and compliance layer of the solution architecture should ensure the safety and security of customer data and comply with regulatory requirements. It should include measures such as data encryption, multi-factor authentication, and fraud detection.
5. Cloud Infrastructure: The cloud infrastructure layer of the solution architecture should provide a scalable and flexible environment for running digital applications and services. It should include cloud-based services such as database management, application hosting, and disaster recovery.
6. DevOps: The DevOps layer of the solution architecture should enable the development, deployment, and management of digital applications and services. It should include tools for continuous integration and continuous delivery, automation, and monitoring.
7. Partner Ecosystem: The partner ecosystem layer of the solution architecture should enable the bank to collaborate with fintechs and other third-party providers to bring innovative solutions to market quickly. It should include tools for API management, partner onboarding, and ecosystem governance.
8. Innovation and Experimentation: The innovation and experimentation layer of the solution architecture should foster a culture of innovation within the bank. It should include processes and tools for ideation, prototyping, and testing of new digital solutions and services.