

Customer-Centric Digital Architecture

CoB Digital Enterprise Architecture Blueprint Series

Feb 2023



Background

- The City has embarked on a strategic shift to improve its online services and customer experience (CX).
- KPMG was engaged late 2022 to conduct a review on the Enterprise Architecture of the web service delivery channel, with a focus on the CRM platform.
- With the creation of Burlington Digital Services (BDS), the City is strategically positioned to enhance and expand its services to customers through digital channels which follow user friendly customer-centric principles.
- The City needs to have a big-picture Enterprise Architecture view that identifies and connects all the major digital solution components, so that we can proactively and strategically plan to align the digital investments, avoid duplicated and often conflicting efforts, enhance the City's agility to embrace change.



Expected Outcomes of the Customer-Centric Architecture

- Incorporate recommendations from the KPMG report with the City's viewpoint and strategic architectural directions
- Drive and enable the following business outcomes:
 - Reducing the complexity of the City's digital landscape, strategically streamlining the City's digital investment
 - Reducing enterprise risk through adoption of a common framework, standards, reusable components where feasible
 - Providing foundation for improving business capabilities
 - Opening to agility, flexibility and innovations so that the City can respond to ever-growing demand and expectations from the City's customers in this new digital-era and other disruptive factors that drive the City to change



Architecture Principles

1. Create technology space to support business innovation in a speedy and agile fashion
2. Establish shared digital platforms whenever possible to avoid building from scratch every time and to minimize technology variety
3. Encourage the use of open Application Programming Interface (API)s to increase system interoperability
4. Encourage loose-coupling application architecture design to increase application agility
5. Establish common data platforms across the lifecycle of solution delivery to harvest information and support business decision making



Pace-Layered Application Architecture

Establishes foundational common and reusable platforms, and in the meanwhile supports the unique needs and innovation demand from each business programs

- The “**systems of record**” layer which enables foundational business capabilities in which business leaders are happy to follow commonly accepted ways of doing things that are predictable and change relatively slowly, focusing on standardization and operational efficiency.
- The “**systems of differentiation**” layer which supports business capabilities that enable unique processes or municipal-specific capabilities.
- The “**systems of innovation**” layer that enables the attributes of the business in which people think of an early-stage concept and want to experiment with a proof of concept (POC) and go through several iterations quickly.



Pace-Layered Application Architecture

Systems of Innovation

We don't know exactly what we want, and we need to experiment

Systems of Differentiation

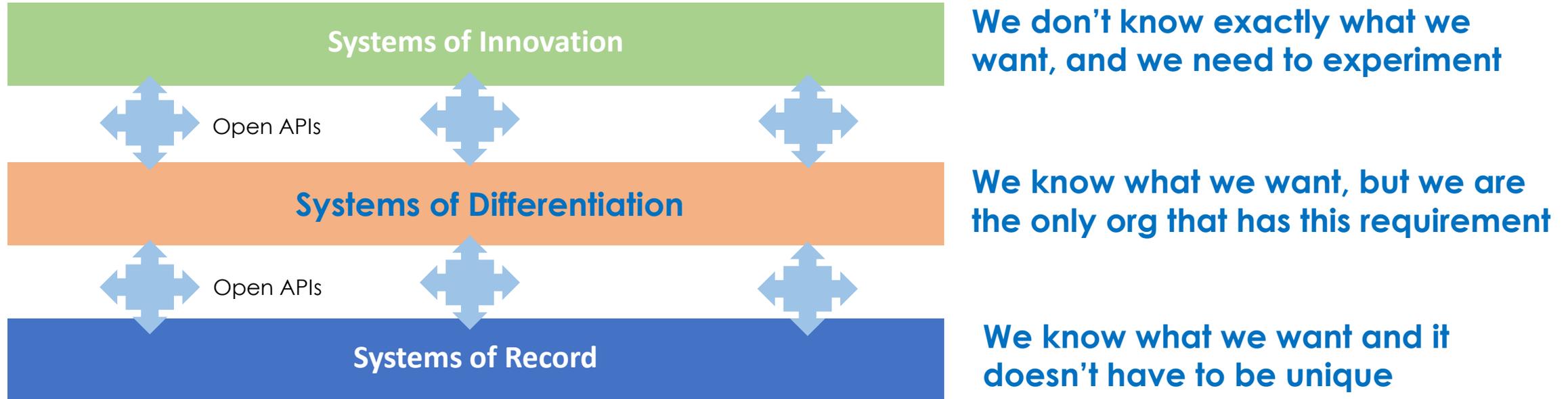
We know what we want, but we are the only org that has this requirement

Systems of Record

We know what we want and it doesn't have to be unique



Use open APIs to connect the three layers



What we will do on

Systems of Record

We know what we want and it doesn't have to be unique

- Standardization and consolidation
- Maintain, manage and evolve following classic IT approach - Mission IT
- Good candidate for commercial-off-the-shelf (COTS) platforms that support open APIs for integration
- Configuration not customization
- Does NOT mean “old”, could be very new, creative and cool!



What we will do on

Systems of Differentiation

We know what we want, but we are the only org that has this requirement

- Respect the uniqueness, less standardization and consolidation focus
- Decouple and peel off common functional components wherever possible, only leave “differentiation business core”
- Good candidate for line-of-business focused COTS products
- Potential candidate for low-code or no-code development platforms if no COTS found



What we will do on

Systems of Innovation

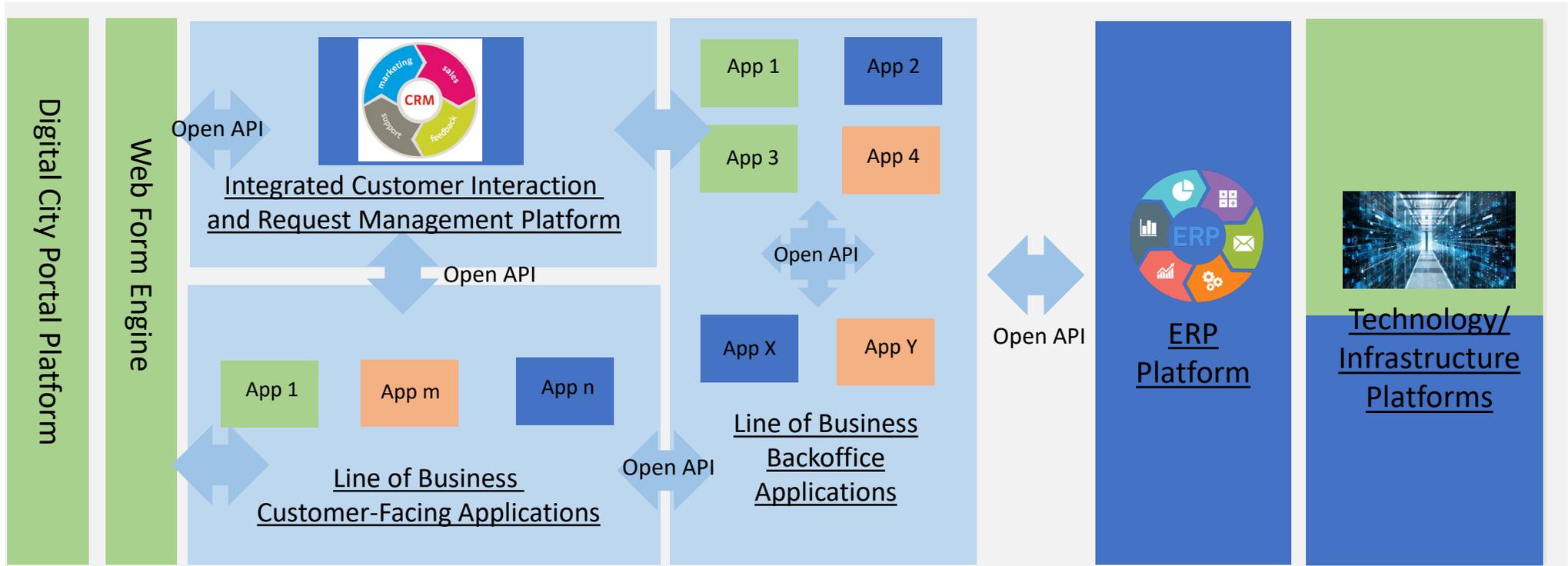
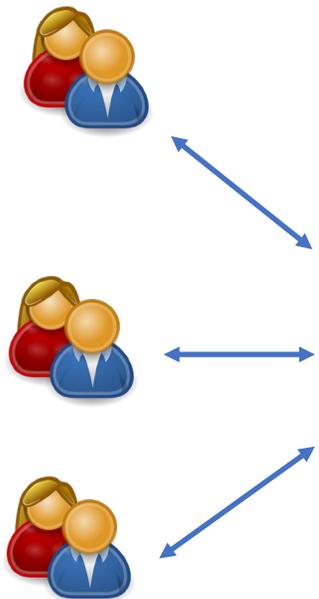
We don't know exactly what we want, and we need to experiment

- Good candidate for cutting edge practices such as starting small and do things incrementally, “fail fast”
- Create room for experimentation and innovation
- Good candidate for low-code or no-code development platforms
- The development platform can be standardized to ensure supportability and sustainability, supported by pre-vetted architecture patterns for quick speed to market
- Encourage “mini service components” for maximum agility



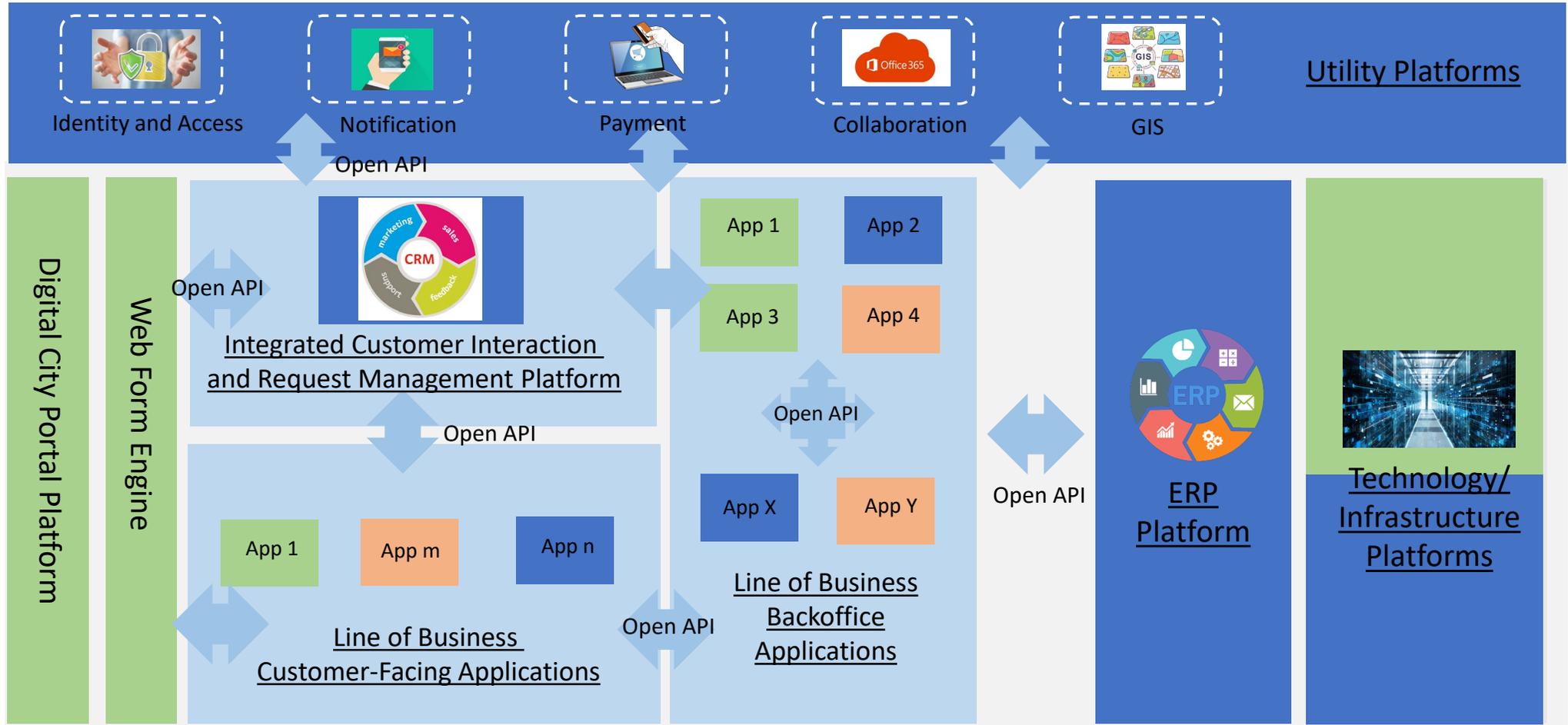
**Now, let's build our blueprint, overlaid
with pace layered application strategy...**





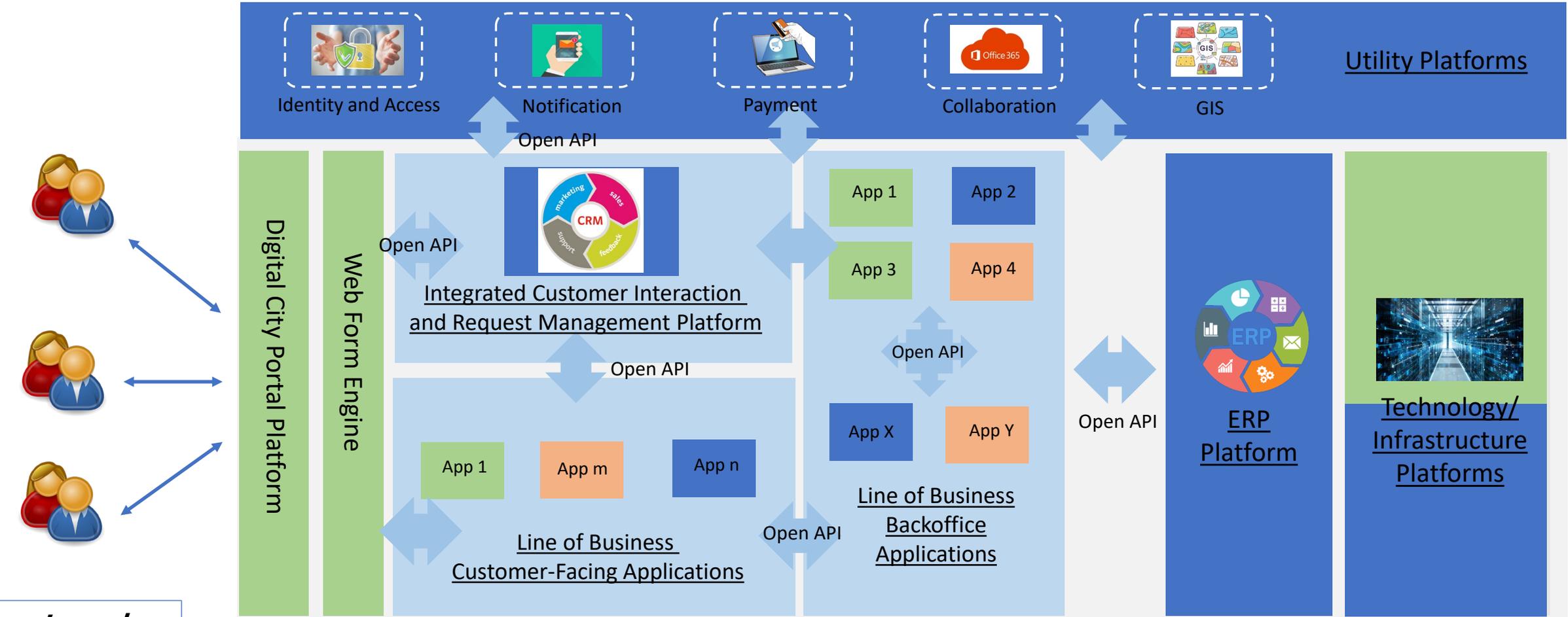
Legend

- Sys. of Innovation (Green box)
- Sys. of Differentiation (Orange box)
- Sys. of Record (Blue box)



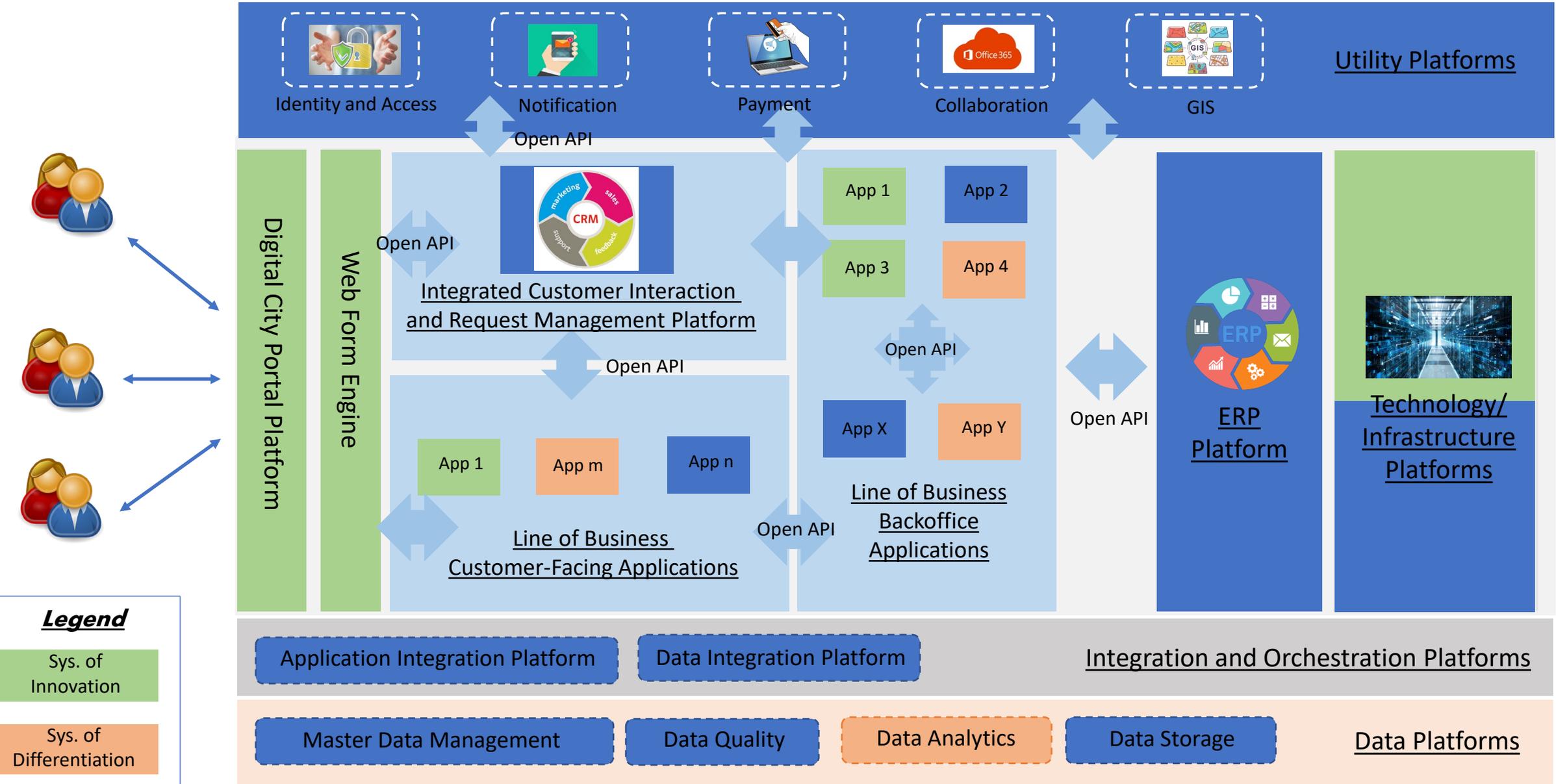
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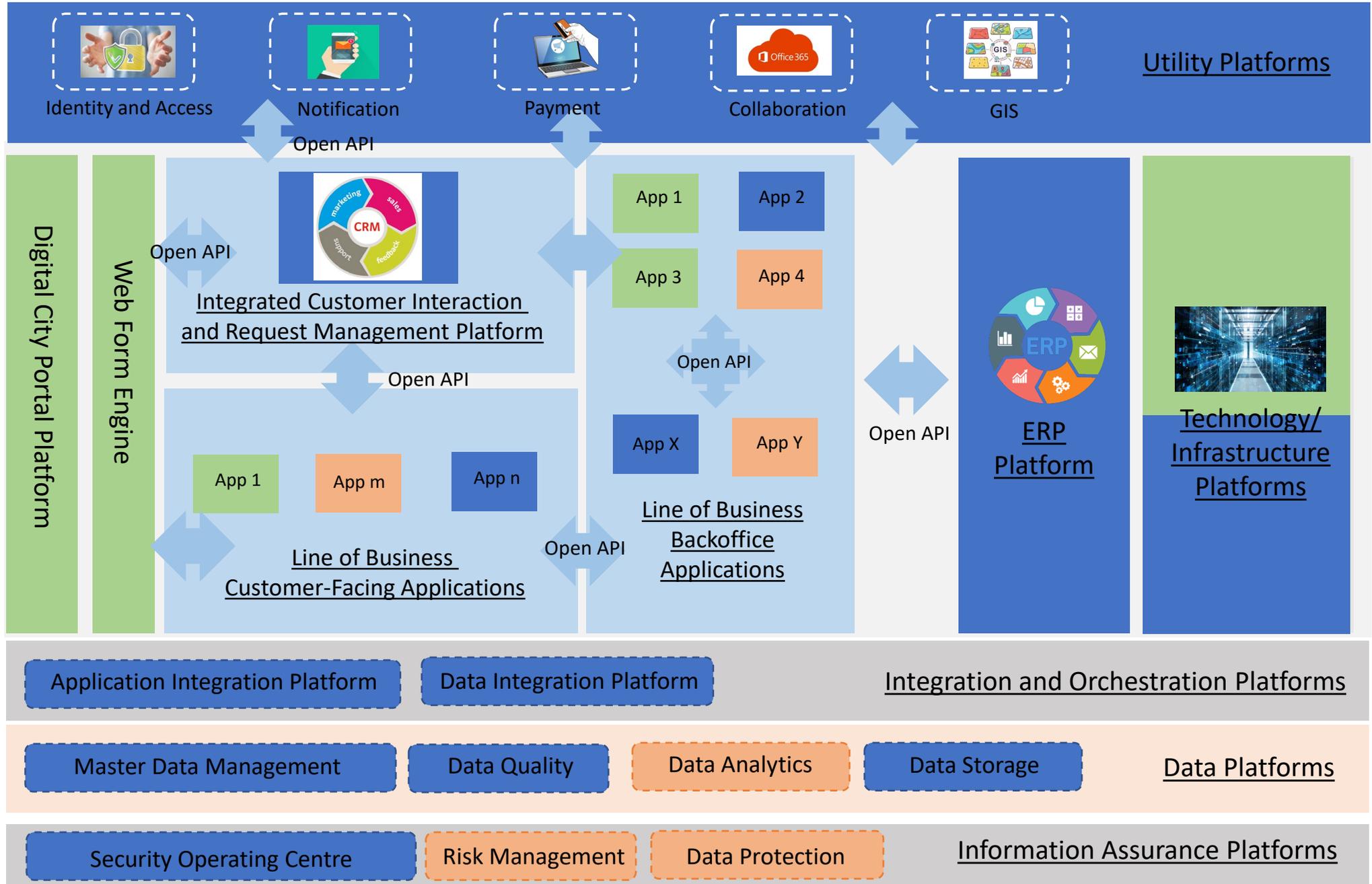
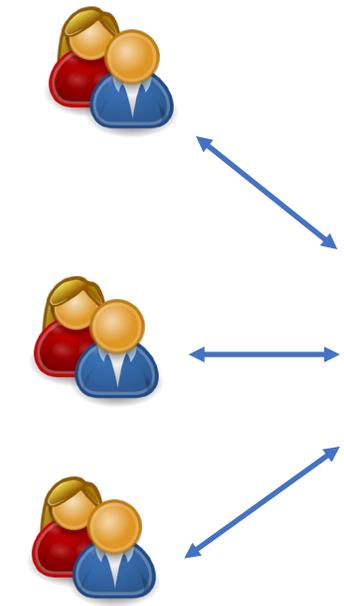
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