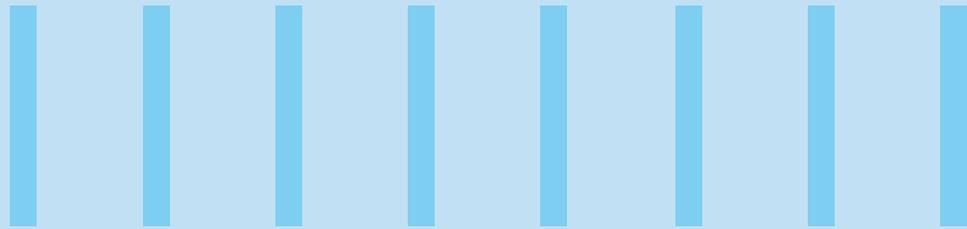




A FRAMEWORK TO EVOLVE AN AGING ECOMMERCE PLATFORM



Retail enterprises face a dilemma about how to evolve their existing eCommerce platforms. For brick-and-mortar retail enterprises, it is a technical as well as a business decision. These traditional retail businesses adopted eCommerce a decade ago and built this capability over a period of time.

A smart approach to this strategic decision needs to take into account that the future of retail will be characterized by several unpredictable disruptions and changes. It paves the way to develop a robust technical foundation and drive innovation rather than selecting just another eCommerce platform.

A key strategic business advantage of retail enterprises is their ability to evolve their business models quickly, reliably and effectively, without significant additional capital expenditure.

A starting point in the digital retail journey is making optimal use of the current eCommerce platform while envisioning the end state of the digital transformation. Retailers need to navigate the dynamic retail landscape and understand that boundaries of eCommerce and Commerce are blurring due to shifts in technology.

Take for instance, the in-store shopping experience, which is being augmented by Virtual Reality (VR)¹ or wearables technology through garments, either physically or digitally². The store visit is enriched by virtual aisles, 'magic mirror' technology enables shoppers to see how garments fit, and 3D images can be created and 'saved for later' to avoid the prohibitive cost of returns management.

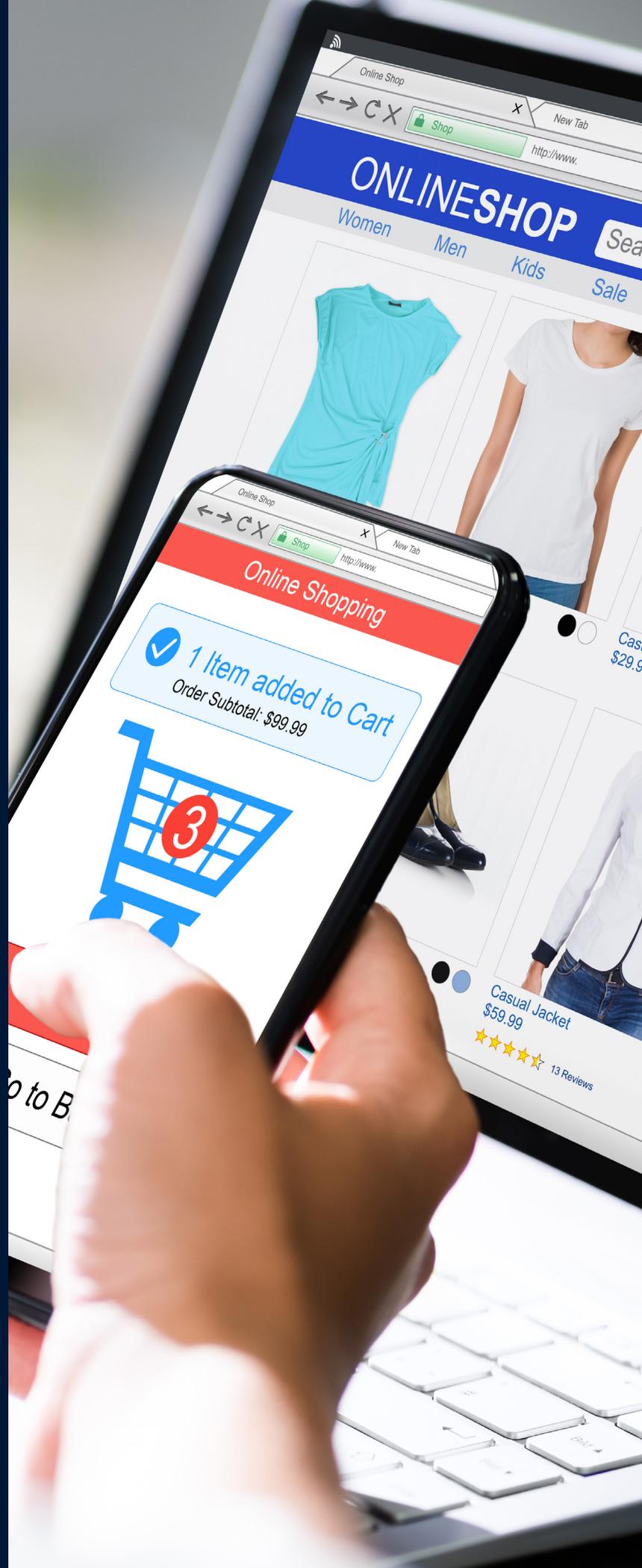
Digital consumers can be engaged with kiosks displaying information about products or the lifestyle associated with products, thereby offering an immersive experience. At the same time, online shopping can be enhanced by leveraging the capabilities of brick-and-mortar infrastructure.

For instance, physical measurements can be scanned in-store by special purpose equipment to enhance the accuracy in matching garment with the potential customer's body type and measurements. It opens several options for product recommendations, such as sharing 'virtual pictures' of customers wearing a new garment and exploring new, quasi-mass market, made-to-measure manufacturing approaches.

The moot question here goes beyond comparing the pros and cons of eCommerce platforms to identifying the key attributes of an enterprise architecture, thereby allowing a seamless integration between eCommerce and Commerce operations.

An effective approach allows retailers to first identify a set of guiding architecture principles and then list consequences to build a robust decision framework.

While each retailer has unique needs and local dynamics, let me illustrate foundational architecture principles and their consequences.



A set of guiding architecture principles to evolve an eCommerce platform.

AP 1. Architecture decisions should aim at minimizing technical constraints:

- **Consequence 1:** Strike a balance between the convenience of an out-of-the-box, comprehensive - yet constraining – eCommerce platform with future requirements.
- **Consequence 2:** Evaluate the lock-in factor of vendors (e.g. proprietary interfaces, lack of extensibility, hegemonic vendor strategy, proprietary languages, etc.).
- **Consequence 3:** Take control of your integration strategy and enabling interfaces (use open standards to mask product proprietary protocols).
- **Consequence 4:** Evaluate the extensibility and integration mechanisms of each eCommerce platform (e.g. mainstream mechanisms).

AP 2. Reduce friction in execution during the innovation journey:

- **Consequence 1:** Aim at achieving a loosely coupled architecture.
- **Consequence 2:** Preserve the ability to easily plug and play specialized modules (COTS or bespoke) to acquire or develop in the future.
- **Consequence 3:** Establish a lean, proactive architecture governance function to avoid architecture degradation.
- **Consequence 4:** Preserve a strong semantic in terms of each module's remit as well as overall functionality and interfaces.
- **Consequence 5:** Evaluate the need of introducing a new technology paradigm in the context of fragmentation of required skills (continue in mainstream mode).

AP3. Get more for less and reduce costs (total cost of operations and operational expenditure):

- **Consequence 1:** Leverage existing investments wherever possible. Remember, a silver bullet platform does not address execution issues of your business strategy.
- **Consequence 2:** Always maintain your enterprise architecture aligned to a semantically robust domain model (refactor it when feasible during transformation programs).
- **Consequence 3:** Evaluate open source platforms since they are less 'hegemonic' and more interoperable.
- **Consequence 4:** Adopt a cloud strategy after undertaking a SWOT analysis.

AP4: Evaluate an omni-channel architecture rather than an eCommerce platform:

- **Consequence 1:** eCommerce function is unlikely to be standalone in the future.
- **Consequence 2:** Unify all commerce function-enabling capabilities while providing well-defined variation points to cater for channel flexibility.
- **Consequence 3:** Build an end-to-end coherent data flow and use it as the fabric to achieve end-to-end, seamless business integration.
- **Consequence 4:** Preserve your ability to leverage eCommerce capabilities to digitize the shopping experience, in-store.
- **Consequence 5:** Collate customer data through each channel and consolidate it to execute a mutually reinforcing cross-channel communication strategy.

Conclusion

Retailers need to adopt a holistic view about eCommerce and Commerce capabilities to evolve legacy eCommerce platforms.

Our architecture principles help frame the decision.

Our recommendation: preserve your ability to wield control since your retail enterprise needs to evolve and innovate to retain your competitiveness.

About the Author

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Pierluca helps client CxOs shape and realize delivery and transformation objectives. Earlier, he served as Chief Digital Architect for HSBC and Group CTO for Prada.

Notes and References:

- 1- Indeed, this is already happening for instance with Audi. Cf. Inder Sidhu et al. "The Digital Revolution" (2016)
- 2- This is what "magic mirror" technology is promising to deliver, though not quite there yet in terms of realism.
- 3- Inder Sidhu with T.C. Doyle, The Digital Revolution. Pearson 2016

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