FashionMart Strengths and Areas for Improvement

Part 3: Evaluating FashionMart's data architecture: Strengths and areas for improvement

Assessing FashionMart's EDA by identifying its strengths and areas for improvement across key architectural components in accordance with *the lab instructions in Part 3.*

1. Strengths

	EDA Component	Strength	Description	Impact
1	Data Integration	Integrated POS and CRM pipelines	CRM data is integrated in the warehouses to enrich the repositories that serve analytics	Unified customer view enables *targeted marketing* and leads to *higher customer lifetime value* (CLV)
2	Data Processing	Simplified batch ETL pipelines	Less complexity in data engineering and operations.	- Low initial set up cost - But limited value added and high operational cost due to lack of automation and proper dataOps implementation.
3	Analytics	Mature BI reporting	The BI reporting tools and supporting infrastructures show a strong capability in data analysis and reporting.	- Enable data-driven decisions and dashboarding that provide operational and strategic insights. - Lower costs and reduce uncertainties while focusing on clients needs.
4	Data Governance, Security and Privacy	Compliance to standards and enforcement of basic security measures	Strong encryption and basic RBAC provide the basis for an effective data security plan. Compliance to major global	Enough to establish minimum guarantees to customers and auditors.

			and sectorial standards and regulations.	

2. Areas for improvement

		Area for improvement	**Description**	**Impact**
1	Data Integration	Physical and online store data are siloed	Data from all sources need to be combined to gain a unique view of the customer and the organization.	Fragmented view of the customer journey leading to inferior
2	Data Processing	Limited real-time insights	Data delivered mostly in batches with delays that may not satisfy certain stakeholders.	- Reactive customer service due to data latency. - Long decision making cycles in a fast paced environment and missing opportunity for real-time analytics. - Limited monitoring capabilities leading to lower reliability and safety
3	Data Governance, Security and Privacy	Manual governance with basic tools Lack of monitoring	Manual processes affect the ability of the business to comply with the standards and regulations relative to their industry and their customer's needs.	- Risk of inconsistencies and error prone security operations. - Increase cybersecurity risks and impact of disruption. - Increased compliance risk with costly potential fines and reputational damages. - Poor data trust leading to decision paralysis and missed growth opportunities.
4	Personalization and Engagement	Minimal personalization	Loyalty programs are best implemented with a holistic	Limited personalization leads to lower conversion rates and inefficient ad spends

		despite loyalty programs initiatives	view of the customer journey and in real-time.	
5	Data Storage and Pipelines	Limited scalability and Technical debt	On-premise data bases and systems are not scalable and require additional maintenance compared to cloud infrastructure. They constitute a performance bottleneck	- Limits expansion capabilities to new markets by reducing the agility of the business - Higher marginal cost of on-premise data infrastructure upgrades - Higher operational costs and employee dissatisfaction. - System reliability is lowered by lack of automation and legacy systems increasing risk in business continuity