



Data and AI Maturity Model for B2C Composable Commerce

	Data Integration and Accessibility	Event-Driven Architecture & Real-Time Data	Customer Insights and Analytics	AI-Driven Personalization	AI-Powered Search and Discovery	Operational Efficiency through AI	Data Governance and Compliance	Innovation and Experimentation
0 Ad Hoc	Data is scattered across multiple systems with minimal integration. Business decisions rely on fragmented insights, leading to inefficiencies and missed opportunities.	Data processing is manual, reactive, and delayed, leading to lost opportunities during key customer interactions.	The business collects customer data but lacks the ability to turn it into actionable insights.	The business offers a one-size-fits-all experience with no personalization. Customers receive generalized product recommendations and content.	Search functionality is basic and keyword-driven, often frustrating customers with irrelevant results.	Operations are highly manual, leading to inefficiencies and high operational costs.	The business has no formal policies for handling customer data, exposing it to regulatory and reputational risks.	There is no formal approach to innovation or AI experimentation, limiting the ability to adapt to market changes.
1 Basic	Key systems like eCommerce, CRM, and marketing platforms are connected, but data is still fragmented. Manual workarounds are common, making it difficult to deliver consistent experiences.	Simple triggers drive basic events, such as abandoned cart emails, but data is processed in batches, limiting responsiveness.	Basic reports on sales and engagement are generated, but insights are limited and typically used for historical analysis rather than driving forward-looking strategies.	Limited personalization, such as simple product suggestions based on browsing or purchase history. Experiences are fragmented and often inaccurate.	Search is powered by static rules and algorithms. Some product recommendations are integrated, but they lack context or personalization.	Rule-based automation is implemented for repetitive tasks, but the business still relies heavily on manual processes for core operations.	Data governance is established to meet basic regulatory compliance (e.g., GDPR, CCPA), but gaps exist across various systems, increasing the risk of non-compliance.	AI experimentation is limited to isolated use cases, such as personalized recommendations or chatbots, but lacks a strategic framework
2 Managed	Core commerce systems are integrated through APIs, providing more consistent data access. Cross-channel visibility is improving, but real-time access is limited, slowing decision-making.	Event triggers operate in real-time across select touchpoints (e.g., promotions, inventory updates), but only within specific systems.	The business uses structured customer segmentation and behavioral insights to inform decision-making. Analytics are used regularly, but they remain reactive rather than proactive.	Personalization is delivered across key online touchpoints, leveraging AI models trained on customer behavior data. The business can offer more relevant product recommendations but struggles with consistency across channels.	AI-driven search improves accuracy by understanding customer intent and preferences. Search results are increasingly relevant, leading to higher customer engagement.	AI-driven automation begins to streamline specific processes, such as inventory management and customer service, improving efficiency and response times.	Data governance practices are standardized across core systems. Regular audits ensure compliance, but the approach is still largely reactive.	Controlled AI-driven experiments are conducted to test customer experience improvements and operational efficiencies. Innovation efforts are focused but siloed.
3 Standardized	Data flows seamlessly across all platforms, enabling real-time insights that improve operational efficiency. The business benefits from unified customer profiles, enhancing personalization.	A fully real-time architecture ensures that events (e.g., inventory, price changes) trigger immediate updates across all customer-facing channels, improving responsiveness and reducing missed opportunities.	AI-powered analytics provide predictive insights into customer behavior, enabling more informed business decisions. Insights are shared across teams to enhance strategy and execution.	Personalization is consistent across online and offline channels. AI uses real-time customer data to deliver relevant offers and experiences at each touchpoint, improving customer satisfaction and sales conversion.	AI search is fully integrated with backend systems, allowing for real-time updates on inventory and product availability. Search experiences are consistent across all channels, boosting conversion rates.	AI is integrated into core operations, driving significant efficiency improvements in fulfillment, inventory, and order management. Predictive analytics help forecast demand and manage resources effectively.	A comprehensive governance framework ensures that data is managed in compliance with all regulations across channels. Automated compliance checks provide early warning of potential issues.	A formalized innovation process is in place, with regular AI-driven experiments that align with broader business goals. Successful pilots are rapidly scaled across the organization.
4 Optimized	The architecture is fully composable and real-time. Data from all channels is integrated and accessible, enabling dynamic, responsive customer experiences and informed decision-making at every level of the organization.	The business operates on a real-time, event-driven architecture, dynamically adjusting offers, pricing, and inventory based on customer behaviors. This enables agile responses to trends and maximizes revenue opportunities.	Real-time, AI-driven customer insights continuously inform business strategies, from marketing to product development. Predictive models shape customer interactions, enabling proactive engagement and improved ROI.	AI drives hyper-personalized experiences in real-time, powered by advanced predictive models. The business anticipates customer needs and delivers seamless, tailored interactions across all channels, increasing lifetime value and retention.	The search experience is intuitive and personalized, with AI continuously learning from customer interactions. The platform offers advanced features like visual and contextual search, creating a frictionless discovery process.	AI-powered automation runs across all operations, continuously optimizing processes like dynamic pricing, inventory replenishment, and customer support. The business benefits from reduced costs, faster fulfillment, and improved customer satisfaction.	AI-powered governance proactively ensures compliance, monitoring and adjusting data handling in real-time across all systems. The business mitigates risks while maintaining customer trust.	Innovation is embedded into the company culture, with continuous AI experimentation and rapid deployment of successful use cases into production environments. The business stays ahead of the competition by constantly testing and implementing new technologies.