SAP CUSTOMER ENGAGEMENT AND COMMERCE

An Infosys point of view

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Executive summary

The digitally connected consumers of the 21st century are creating more pressure than ever on enterprises to win them over and stay ahead of their game. Innovative product / service offerings and increasing customer loyalty are driving enterprises to introduce new business models and IT transformations across industries and segments.

With over half of their customers ready to try a new brand to avail better experience and service, knowing your customer and their needs at that very moment has never been as important as it is today. Hence, enterprises that wish to be in the fast-growth quadrant must go the extra mile to be able to deliver a consistent, relevant, and personalized brand experience to their customers.

In this context, we discuss the SAP CEC solution portfolio and how it can help enterprises deliver an engaged customer experience. With a telecom case study, we have identified the key problem areas faced by the industry, mainly decreasing ARPUs and customers switching operators at the drop of a hat, and elucidated how the various components of SAP CEC can contribute in solving the long-standing problems of disconnected systems, archaic user interfaces, data silos, and complex legacy applications.

We have moved far ahead from the Stone Age of commerce, where a customer life cycle ended with transaction of products, fulfillment, and cash. In a market that has been redefined by the advent of digital and proliferation of new technologies, consumers need more than the basic shopping platform. They need **ease of purchase, information, personalization**, and **value**.

The customers no longer want enterprises to offer just a product or a service, but expect them to become their solution provider at every step.

Samaira, has just bought a new phone and subscription from the iElectra's website. On her way home, she decides to visit the store to set up her phone. To her dismay, the store associate has no visibility of her online purchase, and hence can't help her.

A few days after the purchase, she gets a marketing email from iElectra, offering her an exclusive personalized 10% off on buying a phone in that store. Sam feels frustrated at the missed opportunity of saving more on her purchase.

To add to her exasperation, when she had billing issues, a month into the contract, she had to go in circles with the customer care agents to explain the issue several times.

The customer journey discussed above has all the touchpoints of digital commerce, but even then the customer was left frustrated. Why?

Targeted marketing

60% of marketers struggle to personalize content in real time which affects marketing effectiveness and customer experience[1].

Omni-commerce

65% of buyers will come away from the buyer journey frustrated by inconsistent experiences[2].

Customer service

Customers are increasingly frustrated with the level of services they experience: 91% because they have to contact a company multiple times for the same reason, 90% by being put on hold for a long time, and 89% by having to repeat their issue to multiple representatives[3].

Billing

30% of customer complaints are due to poor billing and invoicing capabilities which do not meet customer needs[4].

The rules of the game are changing and companies need to recognize the accelerated demand for an engaged customer experience where customer interactions, which have become multi-faceted and complex, with several touchpoints, both online and offline, and pre-sales and post-sales are in synergy.

By the year 2020, customer experience will overtake price and product as the key brand differentiator[5]

Future IT solutions need to be evaluated on the scales of ability to create an agile, sticky, and engaging environment to respond to evolving consumer behavior and to increase customer share of wallet.

Delivering an engaged customer experience means understanding customer behavior intrinsically and to do so, you need primarily a holistic view of customer data and further a system which can generate actionable insights from the data. But as we consider industries such as telecommunications, the complexity is monstrous because they sell a continuous service where the customer keeps evolving throughout the cycle.

The **telecommunications industry** is overwhelmed with a continuous influx of data from multiple sources. To augment the perennial problem of **fragmented customer data**, telcos have additional **silos of operational customer data and network data.** Here most of the customers grow in the subscription phase. But as the customer moves from one phase to another, the data doesn't as each phase has a different B/OSS system.

To keep the customer engagement at an effective level, telcos need a solution that encompasses the customer profile, customer behavior at individual and segment level, network traffic, and usage and billing information to create a holistic view of each customer's experience as the customer is evolving. What will distinguish one communication service provider (CSP) from another will not be just how much data it has, but how they are able to **perform real-time optimization of that data, gain business insights,** and **monetize high-volume services.**

Key CSP business functions and what each is looking for

74%

of marketers say targeted personalization increases customer engagement[6].

Sales and marketing

They want to be able to know about the customer, her purchase, her usage pattern, online and offline behavior, and what is happening in the network, so as to `make the right offer at the right time', optimize customer journey, and increase customer loyalty. Subscriber-level information is highly valuable when analyzing VIP or high-margin customers.

400%

of customers are more likely to go to your competitor if your problem is service-related rather than price- or product-related[7].

Customer care

With nearly 1/3 of customer churn preventable if the customer issue was resolved at the first engagement, customer service is an important aspect of customer retention. Customer care needs a 360-degree view of its customer, simplified access to relevant information such as billing and other financial information, and connected customer care channels.

92%

of CSP executives believe their existing billing systems impede the launch of new offers[8].

Product owners

They want to manage the product and service offerings, fine-tune the current offerings, and innovate pricing models to respond quickly to the market changes.

SAP has forayed into the field of customer engagement solutions to help enterprises optimize and improve their end-to-end customer experience, by wiring SAP Hybris Commerce into the SAP ecosystem of enterprise systems. The **SAP customer engagement and commerce suite** is a conglomeration of unique industry-leading solutions that provides customer-centric omni-commerce experience with **contextual marketing, personalized assistance, and efficient monetizing of services** at its heart.

Suited for both business-to-business (B2B) and business-to-consumer (B2C) engagement strategies, the SAP CEC suite is woven together by solution components that are discrete, functionally rich, and independently deployable, with some thoughtful and non-intrusive integrations into SAP Hybris Commerce to provide a fully **unified and comprehensive offering, with customer engagement as the focus.** Except SAP Hybris Commerce, all other solutions continue to be on the SAP suite of technologies.

CEC Solution Mix

SAP Hybris (Y)

COMMERCE	MARKETING	SALES	SERVICE	BILLING
• JEE • Spring • HTML5 • CSS3 • jQuery • ZK Framework • SOAP / REST	• SAP HANA • HANA XS • HTML5 • SAPUI5 • SAP NetWeaver AS ABAP • OData APIs • SAP LT Replication Server	• SAP HANA Cloud Platform (HCP) • SAP HANA AppServices • SAP NetWeaver Process Integration • SAP HANA Cloud Integration • OData APIs	• SAP HANA Cloud Platform (HCP) • SAP HANA AppServices • SAP NetWeaver Process Integration • SAP HANA Cloud Integration • OData APIs	• SAP Convergent Charging • SAP Convergent Mediation • SAP Convergent Pricing Simulation • SAP Convergent Invoicing • SAP Flexible Solution Billing • FICA • SAP CRM

SAP Hybris Marketing is former SAP Customer Engagement Intelligence. SAP Cloud for Sales and Service (C4C) are cloud offerings of SAP CRM. SAP Billing and Revenue Innovation Management (BRIM) is now SAP Hybris Billing.

SAP Hybris Commerce

This is an omnichannel commerce platform that delivers unified and seamless digital experience across touchpoints and drives customer engagement from discovery to order. The solution is powered by best-in-class PIM module, fully integrated WCMS, i18N, and multisite features with industry-specific accelerators for online stores, and sophisticated order management capabilities. Service-oriented architecture, lightweight and predominantly open-source-based technology components, and open-standards-based integration patterns of the platform make it truly extensible and fully capable of being integrated with disparate systems to technologically orchestrate end-to-end customer engagement and commerce.

SAP C4C

This cloud CRM solution offers sales, service, and social engagement capabilities and contextual customer engagement. Out-of-the-box integrations with hybris Commerce enables synchronization of customer data and customer service ticket data between the two systems. Single sign-on between C4C and Assisted Service Module (ASM) of hybris Commerce allows sales and service agents to seamlessly navigate to hybris catalogs and storefront, and provide real-time sales and service support from within a CRM environment. An integrated solution of commerce, sales, and service delivers a fully personalized customer experience and engagement.

SAP Hybris Billing

Handles the order-to-cash business process in an integrated CEC solution portfolio. It is the platform for real-time monetization of subscription- and usage-based services that customers avail through varied channels that include hybris Commerce. It comprises functionally rich solution components – convergent charging, convergent invoicing, FI-CA, and mediation. Solution capabilities include subscription order management, pricing and charging, pricing simulation, invoicing, and management of receivables, payments, credits, and collections. hybris Commerce integrates with the billing solution through RFC for entities and transactions – business partner, subscriber account, contract account, provider contract, and invoices.

SAP Hybris Marketing

This high-performer marketing suite runs on SAP HANA, to enable real-time, contextual marketing across channels. The data management module offers an all-inclusive view of customer interactions and provides a deeper insight into the customer's intent through behaviors – implicit and explicit – dynamically captured and enriched through data imported from unrelated source systems – CEC and beyond. Real-time audience segmentation capabilities are provided with visualization tools to slice / dice data and perform advanced analytics to accurately target the right audience with omnichannel campaigns. Integration with hybris Commerce allows for product recommendations (upsell / cross-sell) and highly personalized content to be delivered through the WCMS module of hybris Commerce to target the finely tuned target segments. Open APIs and flexible architecture enable integration with multiple legacy and cloud-based applications, and SAP Hybris Marketing provides standard out-of-the-box integration with the Hybris Commerce suite.

Integrated solution

In a solution portfolio as diverse and sophisticated as CEC, the challenge at the hand of architects is to arrive at an integrated solution with well-defined separation of concerns among modules and platforms. The choice of modules and the resultant integrated architecture will have to be enterprise-specific. However, it is possible to arrive at an indicative architecture with a set of choices to be made.

The array of adapters that SAP has rolled out, since the acquisition, to integrate hybris Commerce with the rest of the SAP landscape (ERP, CRM, CPQ, CAR), and the out-of-the-box hybris Commerce extensions made available to stitch Commerce with Marketing, Billing, and C4C, will play a crucial role in the CEC portfolio. A focused foray by SAP into evolving this space functionally across business models (B2C / B2B) and industry solutions will be welcomed by SI communities.

Technologically, there has never been a dearth of integration options and it continues to emerge and evolve. Integration options include Data Hub, SAP Process Integration (PI), SAP Landscape Transformation Replication Server (SLT), SAP Data Services (DS), SAP HANA Cloud Integration (HCI), SAP Event Stream Processor (ESP), RFC, OData, CSV, SOAP, REST.

Reference architecture
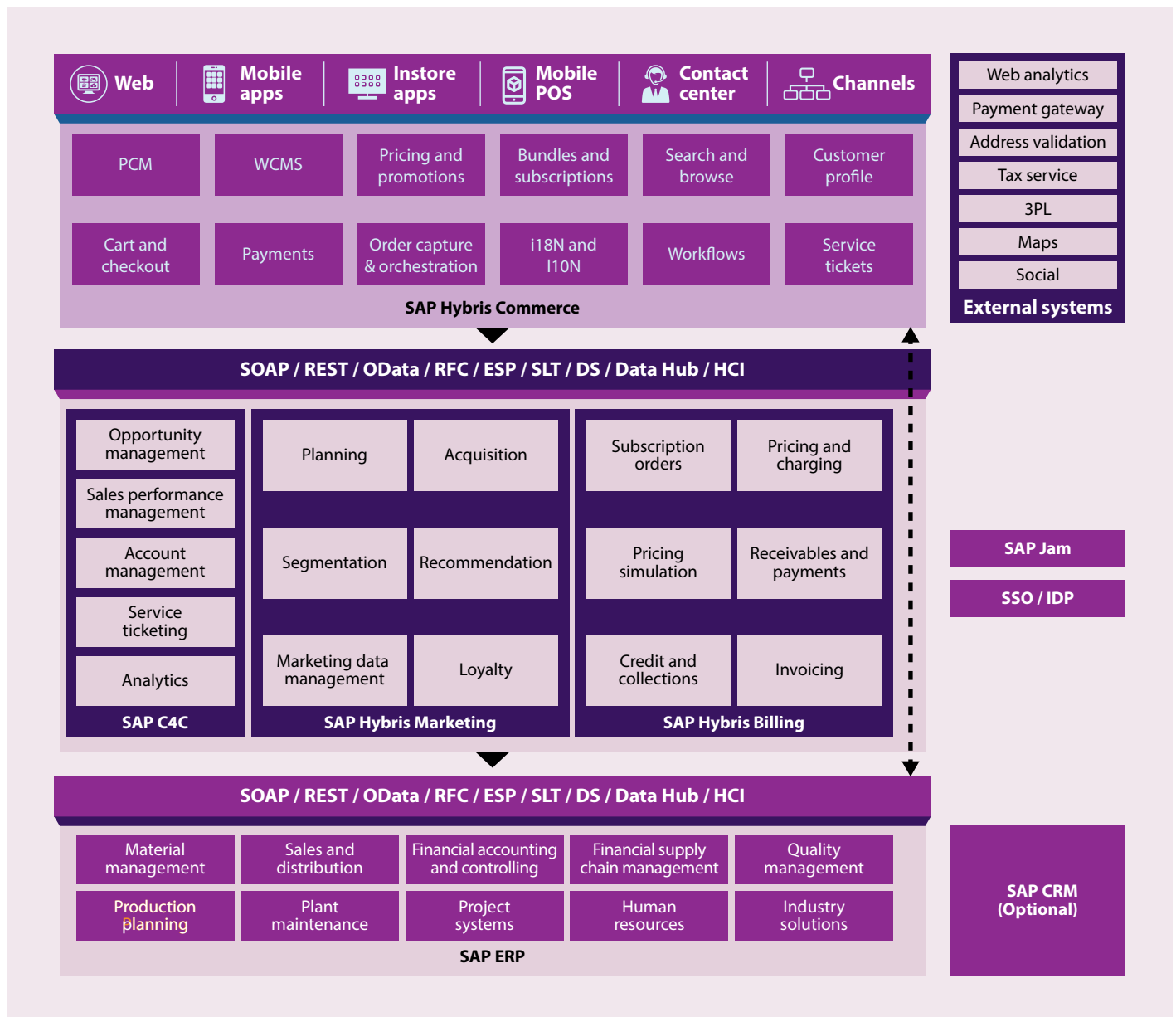
With SAP ERP, hybris Commerce, Marketing, Billing, and C4C co-existing in a landscape, the spectrum of choices, and the associated complexities of data architecture only widen. While hybris serves as the PIM platform, the product data would still need to be sourced from SAP ERP. Similarly, customer data, prices, inventory, and transactional data would need to be synchronized across systems with a single source of truth for each entity. There will be bidirectional synchronization of data between hybris Commerce and SAP systems

Data	System of record	Created by	Consumed by
Customer	ERP	Commerce, C4C	Commerce, Marketing, Billing, C4C
Products	ERP	ERP	Commerce, Marketing, Billing, C4C
Prices	ERP	ERP	Commerce, Marketing, Billing, C4C
Carts	Commerce	Commerce	Marketing, C4C
Orders	ERP	Commerce, C4C	Commerce, Marketing, Billing, C4C
Invoices	Billing	Billing	Commerce, C4C
Segments	Marketing	Marketing	Commerce
Campaigns	Marketing	Marketing	Commerce
Service tickets	C4C	Commerce, C4C	Commerce, C4C

Why SAP CEC for telcos?

SAP provides an end-to-end spectrum of solutions in the CEC context, tailored to meet the demands of the telco industry. SAP Hybris Commerce provides the Telco Accelerator, which is a feature-rich, ready-to-use storefront framework customized specifically for the telco industry. Capabilities include an enhanced PCM

for devices and service plans, bundles, subscription-based pricing / promotions / charges / orders, guided selling, and subscription billing gateway.

hybris Marketing for telecommunications provides the capabilities to combine customer and product data with network, usage, CDR, operational and billing data

from Operating Support Systems (OSS), and Business Support Systems (BSS). Out-of-the-box integrations with SAP ERP (for telco) and SAP Hybris Billing enable CSPs to improve the effectiveness of contextual marketing while simplifying the integration process.

Understanding the value delivered

SAP CEC brings value by simplifying a customer's journey, connecting various touchpoints and helping the CSPs gain context to personalize customer interactions. The below customer journey shall touch upon key customer interactions and how SAP CEC solution can benefit CSPs along the way.

Customer profile:

Jane, a 19-year-old college student just moved across states and is looking to buy a new subscription, and probably a new phone too, to make cheap calls back home.

AWARE AND ENGAGE

- Jane browses offerings from iTelDa on their website. She checks the various subscription plans

- She creates a profile to add items to her wish list

- She gets a 10% student discount coupon on phones

- Jane decides to visit a nearby store to check the phones available

CEC VALUE ADDITION

hybris Telco accelerator provides:

- Capabilities to manage complex subscription packages integrated with the billing system

- Easy compare of phones and plans

- Personalization in hybris Commerce based on active campaigns targeted at customer segments

- Integration with Google Maps for store locator services

ENGAGE AND ACQUIRE

- As Jane visits the store, Scott, the sales associate, can see Jane's preferences and needs in her profile

- Jane chooses a phone in store, but wants to purchase it online

- Scott helps her log in at the in-store kiosk to continue her purchase

- As she is completing her purchase, she gets an offer on a limited edition phone case from her favourite rock band. Jane is thrilled and adds it instantly to her basket

- Jane proceeds with the order journey and successfully places the order

CEC VALUE ADDITION

- **Cloud for customer** provides access to all prior customer interactions from all channels and touchpoints

- hybris omnichannel capabilites provide seamless hand-off between channels including mobile, in-store, and call center

- **SAP Hybris Marketing** allows telcos to re-target customer decision-making by using their online browsing behavior and purchase intent to make it easier for them to convert

USAGE AND BILLING

- It is 3rd June, but Jane still hasn't got her previous month's bill. She logs on to the website, and raises a ticket in the self-help portal

- Amaira, customer care agent, checks Jane's billing history and sees that her billing cycle is scheduled for 15th of every month. Jane is informed about the same and she closes the ticket, satisfied with the response

- Jane receives her bill on 15th June, a single invoice, giving her details of her voice and data

- She is delighted that her phone payment is split across months as requested

CEC VALUE ADDITION

- **Customer self-service portal** empowers customers to create tickets, get answers, and track service requests online

- Enables service agents to view customer's financial information

- **SAP Hybris Billing** enables telcos to provide a consolidated invoice by pulling together data from several billing streams and individual-rated events

- The invoice can be enriched with flexible discounts, invoice-level discounting, and capture special terms for important customers, such as split billing

RETAIN AND GROW

- With her new passion blogging, Jane's data usage generally crosses her subscription limit. She thinks about switching operators

- She gets a personalized marketing email from iTelDa, offering her new data plans

- She clicks through the link to check the offerings. She then calls the customer care who explains the plans to her and offers her additional VAS

- She likes the new bundle offer and decides to subscribe to it and stay with iTelDa

CEC VALUE ADDITION

- **hybris Marketing for telco** helps companies create telco segmentation models, target groups, and telco-specifc scores using various data elements such as CDRs, customer, usage, and financial KPIs

- Using **convergent charging,** telcos can simulate different pricing strategies based on historical customer data, and define accurate pricing strategies for each customer segment

- Leverage customer service interactions to make real-time offers and cross-sell and upsell

The Infosys advantage

Consumers now know more and expect more. Across industries, customers look for a seamless, personalized experience which goes beyond the checkout and cognizes the customer journey. To reshape their customer engagement strategy, businesses first need to understand what they are lacking and what more the market has to offer.

Infosys has extensive experience in delivering omnichannel commerce programs across business domains using SAP Hybris Commerce suite and a wide array of SAP backend systems including SAP HANA, SAP Hybris Marketing, and SAP C4C. Infosys offers a fully functional and an integrated demo of the SAP CEC solution portfolio demonstrating the seamless customer journey. It provides a hands-on experience to enterprises to see the potential in an engaged customer and help them envision how they can build their business on top of the CEC suite to deliver a connected customer experience.

About the Authors

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References:

1. DMA and Adobe Study of 263 e-mail marketers in North America
2. http://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/do-you-really-understand-how-your-business-customers-buy
3. Study, Global Consumer Pulse Survey
4. Ofcom Quality of Service Report 2015
5. Customer 2020 Report, http://www.walkerinfo.com/customers2020/
6. https://econsultancy.com/reports/the-realities-of-online-personalisation-report
7. http://www.bain.com/publications/business-insights/loyalty.aspx
8. Study, 'How CSPs Can Transform Telecom Billing Operations to Support a New, Convergent, Digital Business'

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