



BUILDING INSIGHT-DRIVEN CARE FOR TELECOM

Facing upheaval triggered by technological and economic influences, the Telecom industry is investigating ways to cater to increasingly demanding, digitally-empowered customers, amid competition from a plethora of over-the-top players. All the while, it must achieve returns on its CAPEX investments.

To rise above the disruption, a Telecom's first concern must be to become a customer-centric company. Telecom operators must completely redefine their relationship with their customers – they must transcend the mere provision of high quality connectivity. Today's telecoms should be concentrating on operational efficiency, adopting a mobile-first approach, and providing personalized customer care. This means revamping existing customer-care strategies, turning customer service from a cost center into a profit-generating engagement hub. Such capability can only be created by equipping call centers with advanced analytical capabilities that enable the personalization of every customer conversation.

Whilst a few operators have ed in on analyzing customer experience in order to drive growth (with varying degrees of success), a large proportion of the sector is yet to unlock the value of the data at their disposal for conducting day-to-day operations. For example, having heavily invested in customer relationship management (CRM) software, many companies now rely solely (and myopically!) upon the limited customer information recorded in these CRM systems – as though no other data were available to them! Across the industry, Telecom leaders still rely on legacy metrics (e.g. ARPU, churn) when, in actuality, there is now so much more information available that could afford them managerial insight into their company's performance.

To access this information in today's digital customer-centric world, *Telecoms must address the challenge of building data-science capability: the vital bridge between raw data and real insight.* Revised sets of business metrics will then emerge from the analyzed data – reflecting new connectivity concepts, digital behaviors and customer definitions etc. Disparate data sources must be drawn together such that new quantifiable measures and data-science insights can be derived in respect of every aspect of the company's operational performance and every aspect of its customers' experience.

Thereafter, continually updated and honed, such measures and insights can be leveraged to achieve greater operational and financial efficiency – and critically, to facilitate *more personalized and effective customer service and customer care*.



CUSTOMER CARE DONE RIGHT

Customer care done-right underpins good experience. This white paper describes the SteppeChange Intelligent Care Suite™, and the ways a data-powered, personalized approach to care has the potential to become a hub of customer success, while creating new revenue streams for the company.



STEPPE CHORUS™ FOR INSIGHT-DRIVEN CUSTOMER CARE

SteppeChange builds and deploys a turnkey Intelligent Care analytics suite for data-powered customer service, along with useful strategies and guidelines for success.

The solution leans on SteppeChange Chorus[™] - a high-performance analytics platform with machine learning algorithms that comes with robust analytics and built-in deployable use cases for intelligent customer care. The platform efficiently handles large volumes of data associated with millions of customers, providing streaming analytics for real-time individual customer sessions at scale - for all aspects of customer care: from agent-assisted service to self-care outlets.

SteppeChange's Chorus[™] blends unfiltered data scattered across different sources into an analytics engine, which, in turn, synthesizes it into usable points of insight for proactive and preemptive care, customer value management, retention and service-driven revenue opportunities.

Powered by data science, the engine drives the creation of high quality predictive and other advanced analytics models for intelligent care applications. It enables the isolation of key transactional information, location, or customer complaints - instantly merging it with segmentation results and other customer databases, to conduct a real-time analysis, dramatically collapsing time-to-results.

The use of machine learning enables the anticipation of existing and potential issues, as well as - constant enriching and refreshing of the insights offered. Preemptive analytics facilitates anticipation of likely customer queries and enables them to be resolved proactively thereby improving customer satisfaction and the likelihood of substantially increases their average spend.





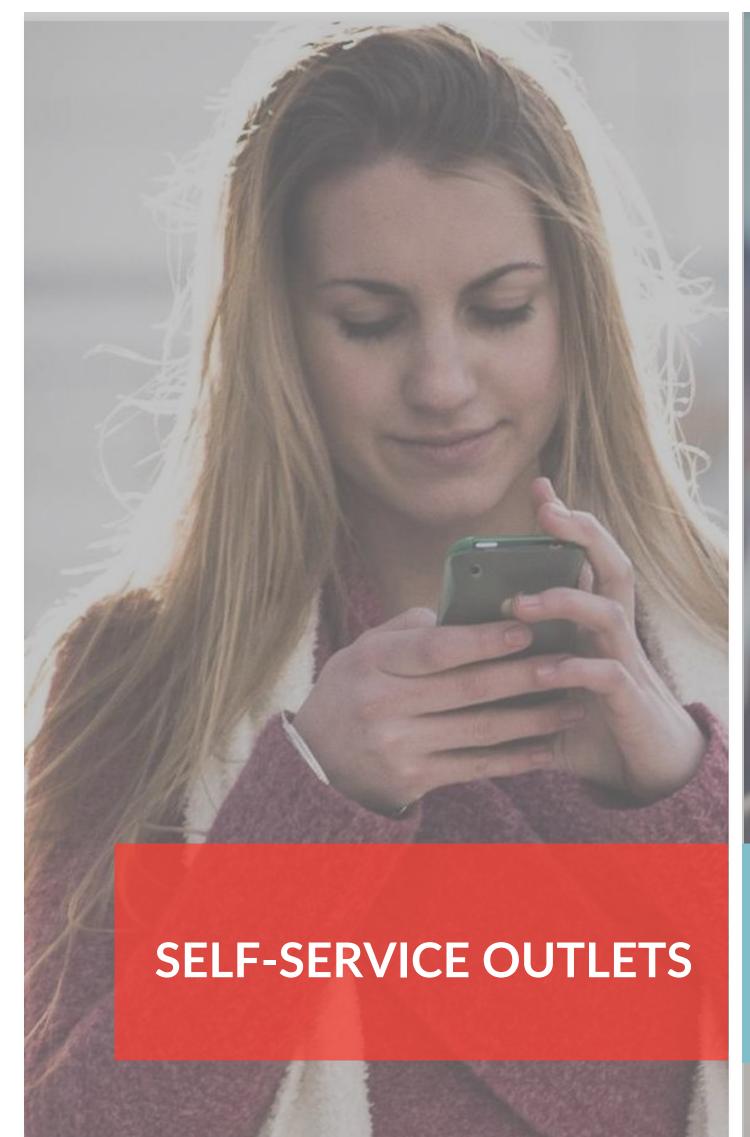
STEPPE CHORUS FOR INSIGHT-DRIVEN CUSTOMER CARE

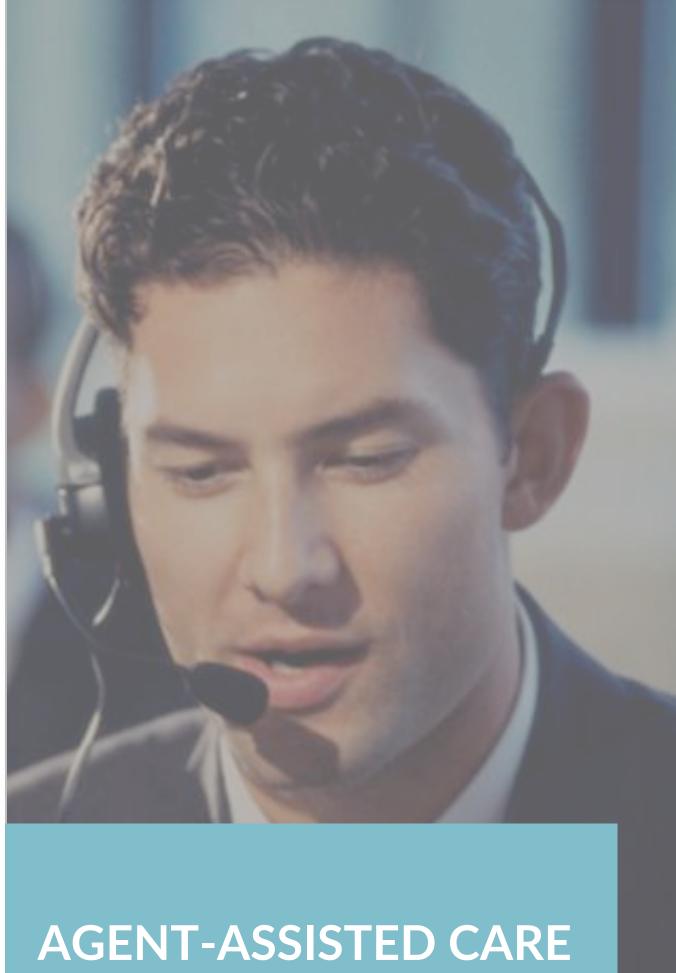
The insights are packaged as analytical outputs - for rapid and intuitive consumption by both human and automated service workflows.

Customer service personnel are presented with a real-time visible rendering of consumer KPIs – a consolidated view of both classic and next-generation customer metrics. Such exhibits allow caretakers to individualize the entire spectrum of care needs - from billing and network issues, to service activation, device configuration, and returns.

When infused with product palette information, the Intelligent Care Suite™ generates personalized offers, in turn increasing the probability of a customer accepting the deal. This personalized offer information is also available to service reps for product attribution and upsell.

The very same set of insights, similarly, underlies the automated intelligent agents – such as an IVR system, robadvisor, chatbot or self-service app – personalizing the whole digital care experience.







VITAL ANALYTICS DELIVERED VIA REAL TIME INTEGRATED DASHBOARDS

DESCRIPTIVE ANALYTICS

Real time digital dashboards promptly slicing descriptive metrics by relevant time cuts and aggregated detail

- → Customer profile and Package details
- **→** Segment Attribution
- **→** Instant Comparative Billing
 - o Billing history
 - o Transactions
 - o Pay Bulk
 - o Payment Modeo eBill history
- → Instant Comparative Usage
 - o Data Usage
 - o Calls
 - o SMS / MMS
- → VAS Usage
 - o Activated VAS List
 - o Cross sell products
- → Call Management services
 - o Missed Call Alert, Voice Mail, Divert, Auto-Reply
- **→** Roaming information
- → Customer-level QoS information

Real Time Integrated Dashboards

PRESCRIPTIVE ANALYTICS

- Highly-contextual Offer Palette, at-aglance (next best offer, etc.)
- → Personalized discounts and incentives
- → Treatment for customer-at-risk
- **→** Focus on Customer Lifetime Value:
 - Quantified discounts for high-rank, profitable customers
- → Individualized segment-of-one offering
- Care for network operations issues customer cure palettes
- → Offers for Multi-device / Multi-SIM users

OTHER FEATURES

- → Customer-level case information: by time, topic, locale, etc.
- → Self-service KPIs
 - Knowledge base views
 - Ratio of views vs. tickets
 - Number of positive votes
 - Bounce rate
- → Call center / agent KPIs
- → Rollups of simplified structures for improved usability and simplicity:
 - Quick switch between totals and drill downs
 - Omni-channel rollup zeroing in to history of customer interaction

PREDICTIVE ANALYTICS

Behavioral Score Dashboards

- → Churn score
- → Best customer score
- → Projected lifetime revenue

Scores are presented as single values or score bands, including historical trajectory

- → Propensity to change of consumption pattern (either increase of specific traffic type, or substitute)
- → Customer-at-risk prediction
- Customer segments and predicted segments
- → Predicting customer needs:
 - Device characteristics
 - Plan configurations



SOLUTION MODULES

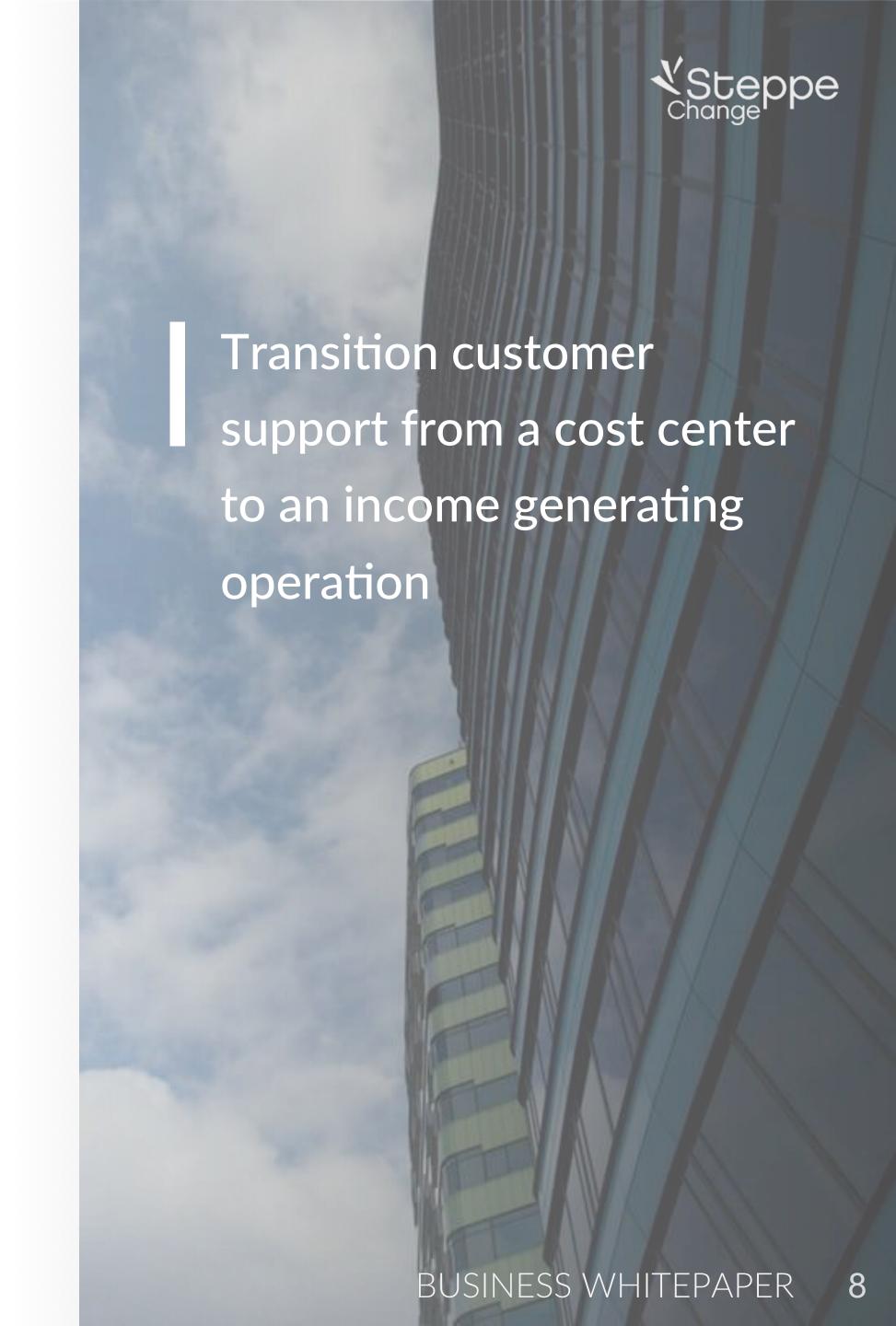
Don't cut cost – generate revenue

Most customer support units are outright cost centers. Even with the deployment of intelligent self-care and AI-powered apps, customer service call centers are considered a "necessary evil". Call center teams invest heavily in saving by reducing call time, setting up step-by-step menu trees, and conducting staff performance reviews – in their efforts to optimize a center's cost.

Placed at an important juncture of the "customer moment", a customer care framework – both human and automated - is well positioned to generate revenue: to turn itself into a profit center. To achieve that, it requires new analytics tailored to generating soft-sell revenue generating opportunities automatically.

SteppeChange Intelligent Care Suite™ leverages machine learning to empower the decision flow across the entire customer care framework. At a call center level there is a comprehensive console containing new information such as individualized product palette, dynamic pricing, progressive customer metrics, upgrade paths, complimentary offers and much more.

A service rep is able to access opportunities in real time, in order to make a meaningful engagement while smoothly transforming a "ticket" into a sale. A well-handled flow of upselling can be very effective and drive significant improvements in profitability.



Progressing Customer Success

The Science of the Best Offer

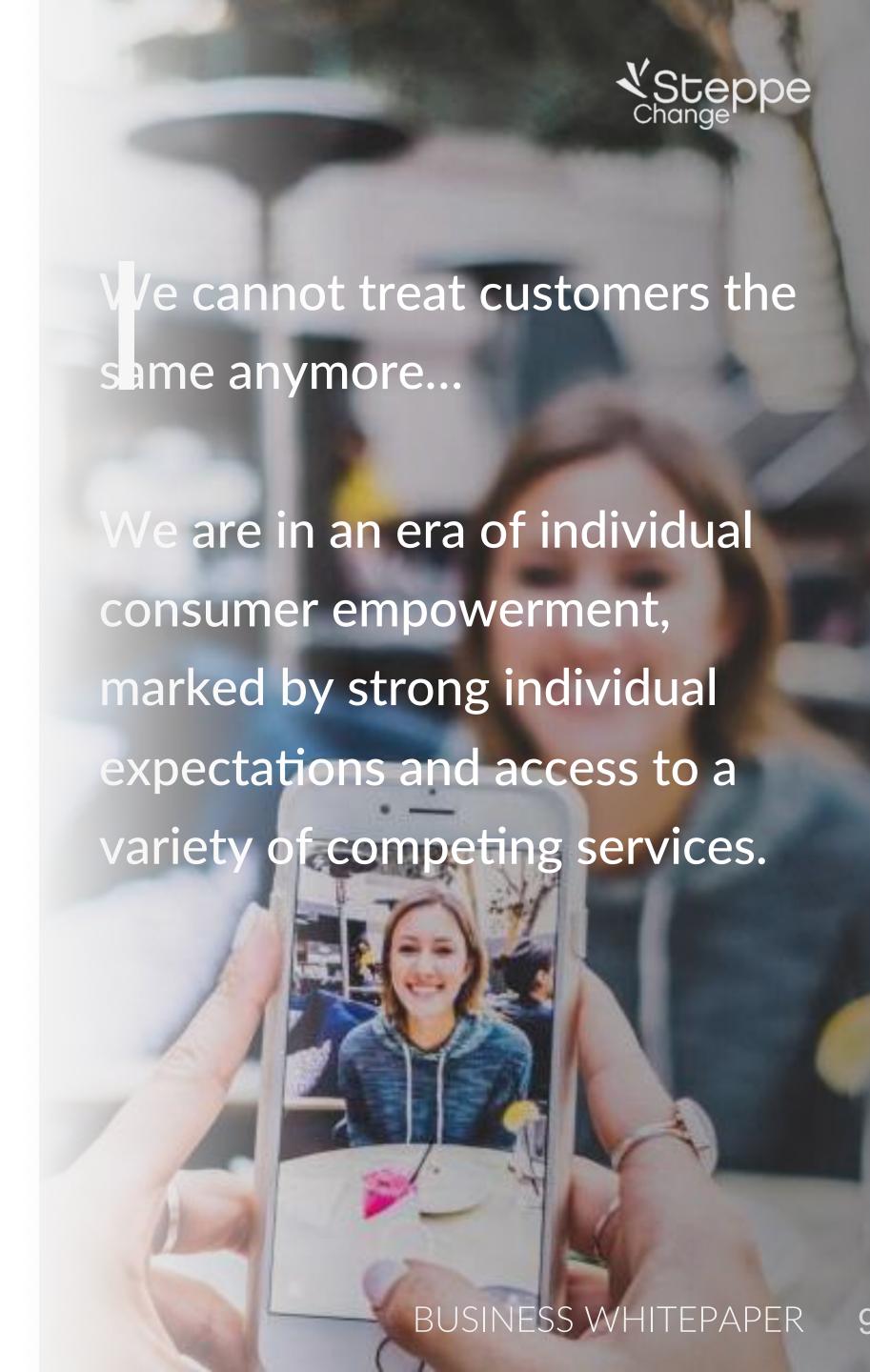
Deep personalization means delivering differentiated customer care and anticipating customer needs. Success will lead to operator revenue growth through timely next-best offers.

SteppeChange's solution incorporates offer-suggestion dashboards and conversational scripts, prioritizing offers that can be seamlessly blended into the fabric of a conversation.

Designed with appreciation for the precious call-in time of both customers and service representatives, Intelligent Care Suite™ incorporates precise prioritization palettes – generating a single offer to be promoted in the context of a given conversation.

Offer recommendation is underpinned by powerful behind-the-scene analytics - anticipating future consumption of services, predicting device needs, optimizing granular offers and selecting best plan configurations for future needs.

The solution also incorporates current and expected lifetime value analytics, identifying customers who should be offered discounts and promotions.





Progressing Customer Success

Segmentation - for deeply personalized customer care

In today's world, segmentation that doesn't include customer preferences just won't cut it. Accurate segmentation, based upon the full range of available data and data-science-based inferences, will drive increased profitability by enabling service levels to be tailored for each segmented customer group according to its different needs, priorities, and economic behaviors.

SteppeChange's Intelligence Care Suite™ incorporates quantitative and qualitative research necessary for the foundational understanding of customers and their behaviors. SteppeChange's segmentation predicts expected customer-level revenue through dimensions of customer needs, life circumstances, past and predicted use of services, device and digital preferences. This tool equips operators with the powerful capability to identify behavioral levers of customer lifetime value, allowing the achievement of win-win scenarios that empower revenue growth by catering to the unique potential of each customer.

SteppeChange Intelligence Care Suite™ leverages advanced segmentation capabilities, offering succinct dashboards, assisting customer service agents in the context of limited-time, solution-focused conversation. The dashboards provide a comprehensive view of customer metrics, tailored to the strategic objectives of each operator.

Customer journey mapping

Examples of things that please, even delight, a modern customer include:

- Simplicity of understanding the bill;
- Personalized bundles;
- Zero-touch configuration.

To succeed, operators must listen to customers, know exactly what customers are doing, and understand the context of where they are in their customer journey.

This is enabled by well-designed customer journey mapping embedded into SteppeChange Intelligent Care Suite™.

Depending on an operators' strategic objectives, customer journey dashboards can provide views into recent impactful changes in customer preferences, as well as multi-dimensional scoring overviews that reflect, for example, movements in churn, lifetime value or purchase propensity scores.



Progressing Customer Success

Proactive support

"We noticed your unusually high bill. There are a few possible reasons that your bill could be higher than you expected. We've listed some of the most common reasons to help you understand your bill..."

Progressing to an advanced experience requires operators to explore proactive engagement – to foresee issues, needs and expectations of their customers.

Whether it's proactive troubleshooting, promo offers, or alerts – customer success teams will better handle being proactive if they improve their grip on data. SteppeChange analytic engine anticipates and delivers the right information at the critical stages of customer experience. The learnings from these proactive engagements are taken further into consideration for predictive and preemptive care.

Predictive at minimum and preemptive at best

The next-level customer support must migrate from reactive and proactive to predictive and preemptive: predict the problems a customer might face and solve them in advance; probe upsell and cross-sale opportunities.

A preemptive approach to service – driven by AI (artificial intelligence) methodologies – can fuel customer success with:

- Faster issue-solving at lower costs;
- Suggested canned answers;
- Personalized engagements;
- Retention of customers-at-risk; and
- Anticipation of future customer needs.

SteppeChange Chorus Platform™ combines comprehensive machine learning and AI capabilities, enabling operators to modernize customer care using automated tools for real-time support decisions.

Progressing Customer Success

Ditch Omni-Channel, Think Mobile-first

Providing omni-channel customer experience is a mantra from the past. Let's face it, mobile is increasingly becoming the channel of real-time context, the ultimate access to all channels through one device.

In addition to traditional phone, web and email support, operators must build support for the connected digital channels – instant outreach via a self-care app, social media, live chat and IM, smart IVR, chatbots and more.

SteppeChange Intelligent Care Suite™ enables seamless and consistent switching between channels, informed by context and customer knowledge. For example, customers who initiate a chat could be quickly transferred to voice. Web transactions - validated and confirmed with text. Social media and IM chatbot functionality is augmented by voice callback, etc.



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OUR APPROACH



OUR APPROACH

SteppeChange works as a seamless, multi-disciplined team of experienced engineers, data scientists, and marketing and industry experts that can flexibly and rapidly develop sophisticated analytical capabilities centered on the unique needs of our clients.

We do not have standard consulting templates or off-the-shelf technology solutions. Instead, we are geared to design and implement custom-made solutions specific to the needs of an individual enterprise.

We start every project by building a deep understanding of the client's business model, competitive position, strategies, organization, and objectives.

We aim to engage our clients actively in a process (that we call "data discovery") whereby we establish what their data might permit them to do better. The SteppeChange client-centered process requires continuous client engagement in designing and deploying solutions, to ensure detailed alignment with our client's needs.

We go deep into the IT "plumbing" that supports the client's operations and customer interactions, both to understand the nature and quality of the data, and to devise the most efficient ways to extract and process it. Understanding the client operating environment and systems architecture also allows us to design solutions capable of scale implementation in each production environment.

We do not build data warehouses and, in fact, consider them a constraint on developing effective analytics. Contemporary technology allows data to be extracted from live operating systems at frequent intervals. New tools, "shovels," allow the construction of analytical solutions from raw data dumps.

This is central to our goal of working quickly and cost efficiently, creating time and space for multiple iterations, with a degree of trial and error in the design of solutions.



OUR APPROACH

In close collaboration with our clients, we design, prototype, and test potential data-science solutions. To do so, we follow – in a thoughtful and flexible way - what is now relatively standard design thinking methodology. This begins with developing customer empathy and the ability to walk in the shoes of those who use the client's product or services, including internal users.

Next, in collaboration with the client, we conduct structured workshops to identify the full range of potential improvements in processes, decisions, and end-to-end customer interactions and experiences that might be empowered by data analytics. We then forge consensus on which solution or solutions have the highest impact on business performance.

Finally, we move on to building and testing early prototypes. We are keen to build and implement real artifacts that the client can operate on an ongoing basis.

SteppeChange delivers in-market capability end-to-end. Our processes encompass designing data science solutions, embedding models into the production environment, and supporting marketing programs and the customer treatments involved.

When we complete an assignment, our objective is to leave the client in the position to use (and continuously evolve and improve) the solution we have assisted in developing, as a part of the core business process.

To the greatest degree possible, our solutions are modular, allowing clients to select sets of modules that they can configure and customize to create different solutions and meet new needs.

You can learn more about SteppeChange at www.steppechange.com.



ABOUT STEPPECHANGE

- We are a global team of experienced architects, data scientists, engineers, application and infrastructure developers, and accomplished industry experts.
- We serve global leaders in communication, financial services and digital media industries.
- Headquartered in Palo Alto, with offices around the world, SteppeChange employs over 250 professional staff.

GET IN TOUCH

Ina Goldberg	-)
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Head of Analytics Practice

ina.goldberg@steppechange.com

Kevin Mellyn

Strategic Advisor

kevin.mellyn@steppechange.com

Sophia Babkov

Head of Marketing

sophia.babkov@steppechange.com

www.steppechange.com

info@steppechange.com

@steppechange

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