Exacaster

Next Best Action & Next Best Offer for Telecoms

A Comprehensive Guide

For Prepaid, Postpaid and Converged Communication Service Providers

Content

Exacaster Understand. Predict. Act.

Executive Introduction

For years, there has been rising interest among telecom companies regarding digital & data driven methods to improve customer engagement, satisfaction, and retention — and the reasons are compelling.

According to McKinsey: "Organizations that use technology to revamp the customer experience can carve out significant differentiation—increasing customer satisfaction by 15 to 20 percent, reducing cost to serve by 20 to 40 percent, and boosting conversion rates and growth by 20 percent."[1]

Despite the huge potential, surveys show that quite a few telecoms either hesitate to fully adopt these marketing enhancement methods, or they miss significant opportunities due to poor execution.

Companies often fail because they are insufficiently aware of the real needs and desires of their customers across omnichannel journeys.[2] Furthermore, it requires a seamless, end-to-end process to take full advantage of the available customer data and insight.

By implementing Next Best Action (NBA) and Next Best Offer (NBO) strategies in the right way, telecoms typically realize substantial business outcomes.

"**Not so long ago it would have taken years of in-house data science work. Today, NBO or NBA can be implemented in weeks thanks to advances in technology.**

Egidijus Pilypas
Director of Product and Data Science & Co-founder of Exacaster

Tangible results are reachable when a company accurately identifies customer needs and preferences across many channels in an automated, self-improving fashion. In the past, this level of technology was only available to the largest firms with vast development resources.

Today, NBA/NBO solutions come in easy to implement, pre-built packages which enable telcos with little or no experience to tap into advanced digital marketing solutions, with near zero business disruption.

This Exacaster Guide reviews the characteristics of NBA and NBO solutions, and provides a comprehensive, step-by-step outline on how to implement this transformative technology.

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Executive Introduction

Next Best Action & Next Best Offer - impact you can't resist

For telecoms, NBA & NBO engines are designed specifically to impact strategic, commercial, and operational outcomes.

By implementing Next Best Action and Next Best Offer strategies, telecoms typically realize the following outcomes (see more information on page 27):

STRATEGIC IMPACT

COMMERCIAL IMPACT

OPERATIONAL IMPACT

Double-digit ARPU growth

Churn reduction of 25% or higher

NPS **Significant net promoter score uplift**

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What Is
Next Best Action
& Next Best Offer?

What Is Next Best Action & Next Best Offer?

Essentially every telecom customer engagement leads to one of two decision making moments:

Next Best Action (NBA) chooses the best customer-centric action (sending a birthday message, asking for service evaluation, emailing new smartphone instructions, etc.) based on preceding, relevant customer events.

Next Best Offer (NBO) optimizes a highly customized offer selection from the telco catalogue. NBO evaluates options and recommends the offer most likely to be accepted. Optimization occurs for product choice, timing, price, and channel.

The power behind NBA & NBO engines relies on key factors:
1. Entire customer data set is gathered, organized & leveraged towards business goals.
2. NBA/NBO fully anticipates the customer point-of-view to provide a satisfying, end-to-end customer experience.
3. Artificial intelligence (AI) / Machine learning (ML) algorithms automate, accelerate, and enable continuous improvement.

Initially, given any customer interaction, the NBA engine has a variety of actions to choose from, such as to sell, offer help, or educate the customer. When the time is right the engine decides to focus on Commercial actions and presents the Next Best Offer. This all occurs in an automated fashion, which will be fully explained in this guide.

Next Best Action is a higher-level decision which covers 3 areas while NBO focuses on commercial actions
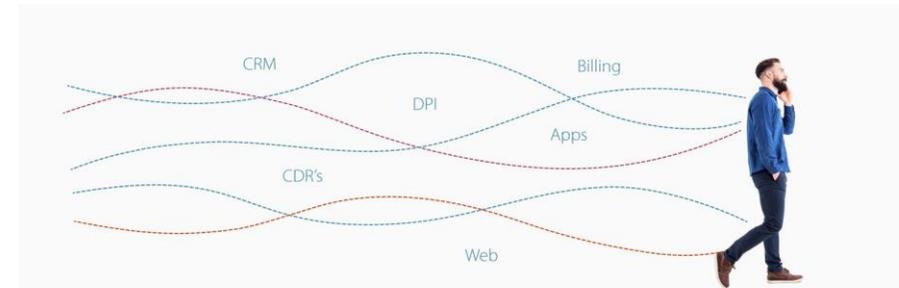
Next Best Action scope

Commercial actions	Service actions	Network actions
Cross-sell	Process complaint	Enable or suspend service
Upgrade	Troubleshoot issue	Apply fair usage policy
Renew	Process payment issue	Switch network 2G/3G/4G/5G
Retain	Process order or request	Notify about issue or resolution

NBO scope

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What Is Next Best Action & Next Best Offer?

Personalization is core for customer-centric marketing

In today's digital world, customer engagement must be highly personalized. We all expect high-end, satisfying experiences that make contextual sense, occur at the right time, and appear on the right channel.

The NBA/NBO process is not a linear protocol set in stone. Each interaction is evaluated as a singular event by the engine, which then makes decisions focused on optimal business outcomes.

For instance, if a person lands on the telco's Plans & Pricing web page, they are actively shopping. It would make sense to promptly place a targeted ad in front of the prospect for special offers or home service deals. More precise personalization can be achieved by showing upsell or cross-sell offers to an existing customer and new plan offers to non-customers.

When fully automated, a personalized NBA/NBO strategy produces higher yields and conserves resources more effectively than traditional marketing approaches

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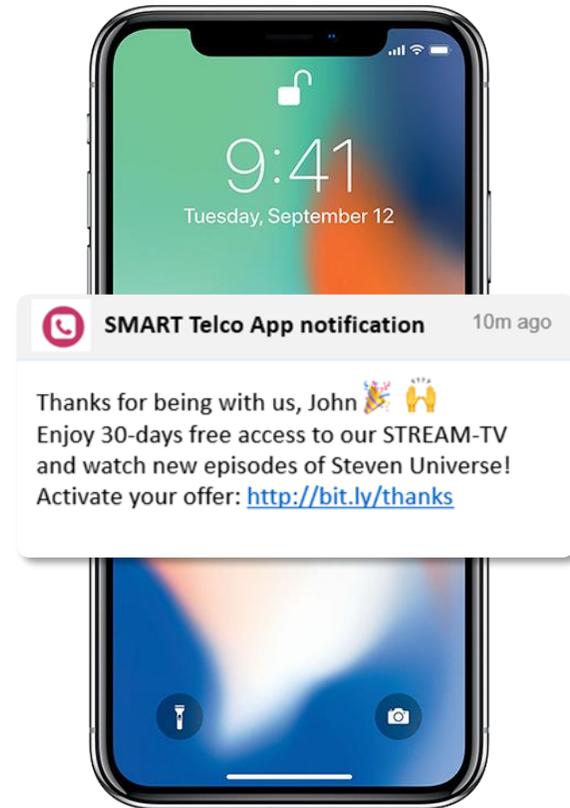
What Is Next Best Action & Next Best Offer?

The desired outcome of personalized recommendations - Mobile subscriber's perspective

" **It's the first time I got an offer from the telco operator that fits my family needs and really delights!**

Relevant, timely and handily delivered offers via the preferred channel can significantly improve the customer experience

What Is Next Best Action & Next Best Offer?

The desired outcome of personalized recommendations -
Front line perspective

> **NBO clearly improves front line sales performance and simplifies engagement flows. My agents are always equipped with the information about what is the best offer for each and every vistor.**

NBO can suggest mobile plan upgrades and additional services based on user consumption patterns, recent behavior, lifecycle stage, and probability to churn

6 STEPS
to Implement
Next Best Action
& Next Best
Offer

Focus on areas with maximum impact

Advanced technology is only effective when aligned with your business strategy. The first phase of NBA & NBO imple-mentation consists of defining a clear direction regarding:
- Business unit,
- Objectives targeted, e.g. revenue vs churn vs experience,
- Channels.

We recommend to prioritize business lines with the biggest number of consistent interaction volume as NBO/NBA will begin optimizing those.

In the chart below, the B2C Mobile renewals represent such an interaction. As a next step then drill down to identify which channels are carrying the lions' share of the interaction. In the example below it's Telemarketing, followed by Online. These should be the first priority for implementation.

Given the massive scope of a telco's catalogue of offers, it's important to further define focus on specifics. For instance, for each level: household, customer, service, and device – what is the corresponding cluster of services, offers, and actions.

Example: B2C Mobile service renewals represent a big opportunity, followed by a B2C Broadband service renewals

Renewals by channel

Legend: Gross adds, Renewals, Churn

Legend (Renewals by channel): Telemarketing, Online, In Store
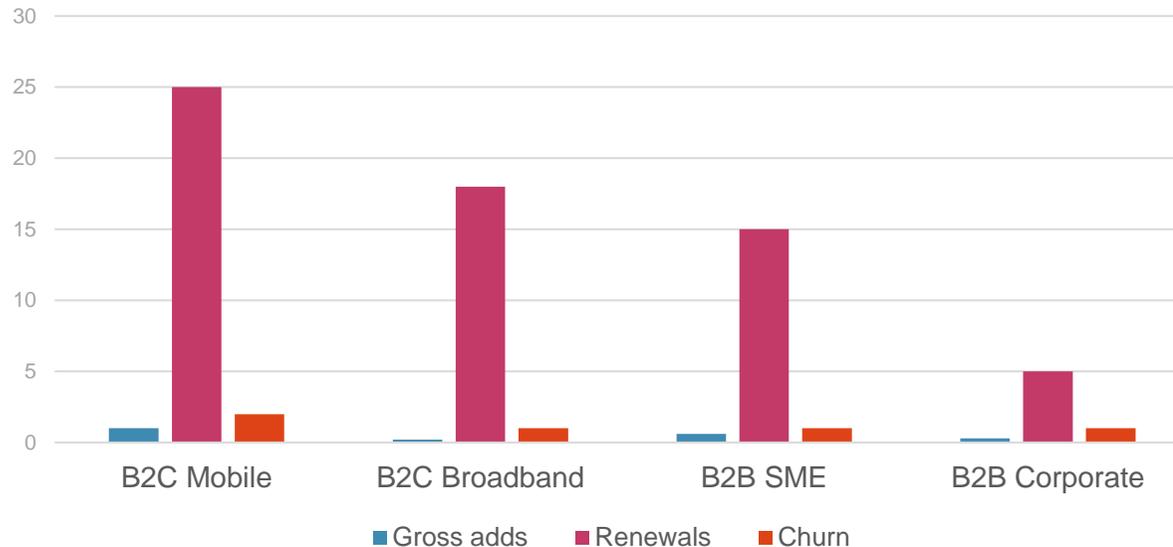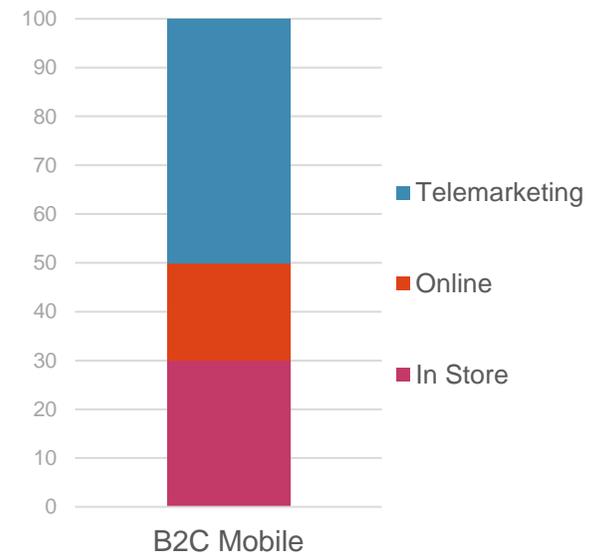
Topics to consider during this phase of NBA/NBO strategy development include:

Strategic value of a business – Assess whether you are focusing on a specific segment, product, etc. that will grow or decline due to market shifts or economic headwinds.

Upselling – Is there a clear value pathway to boost customer ARPU? The next offer should always have slightly more value compared to what the customer purchases today. Is that the case?

Customer retention – How much of a factor is retention and ARPU maintenance? Are you losing customers and can you offer them more value without eroding ARPU?

Cross-selling / migration to convergent offering – for example, can you cross-sell additional home services to existing mobile customers? Can you boost customer value and/or capture new customers in the same household?

Align KPIs across the organization – Make sure NBO KPIs are aligned with the Customer Base Manager's KPIs. If they are all about migrating from legacy plans to new offers, and you are about retaining customers, you will be at odds.

Channel specific – Confirm that recommended offers can be sold in the recommended channel and that the physical product inventory is visible.

Agent motivation – Align NBO KPIs and front-line Agent motivation systems. Are your NBO recommendations easy to understand for the sales person?

Customer specific – Consider price range, offer relevance, and how to adapt an offer to match customer need. Determine how to handle bad debt and potential fraud.

Situation specific – Decide how the NBO strategy will change with holidays, events, competition, etc.

Telecoms interact with their customers via many channels. For NBO/NBA implementation a specific channel(s) should be selected carefully based on its capabilities and communication cost. A major factor here is whether the channel can be upgraded to support a fully personalized offering process, and whether the cost of the channel does not break the busines case.

For example, digital channels like mobile apps, emails, SMS, push messages, etc. are inexpensive to personalize and have a wide reach, however, conversion rates may be low. Meanwhile, customer care or call center channels have higher conversion rates, but with a narrow reach and higher costs.

Select the most appropriate channel to reach customers depending on channel capabilities and cost

What can we do for the Customer in the channel?

POS	Tele-marketing	Call center	App push	Smart TV	Repairs	Email / SMS	Web
Info / offer	Info / offer	Complaints	Info / offer	Info / offer	Complaints	Info / offer
Troubleshoot	Process order	Info / offer	Process order	Process order	Info / offer	Process order
Process order	Survey	Troubleshoot	Accept Payment		Troubleshoot	Accept payment
Fulfillment / delivery					Process order	
Payments					Fulfillment / delivery	
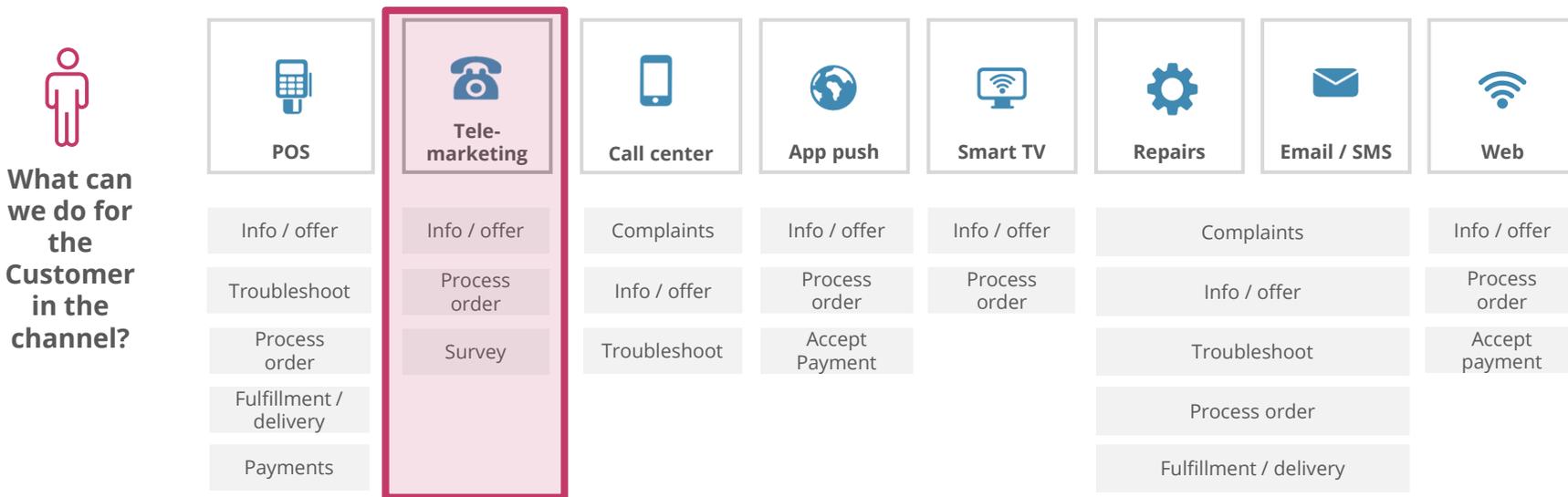
- example focus

Many companies wish to sell all products in all channels, but this is expensive and difficult to execute. A more effective strategy, especially to start, would be to select products that are sold best on a specific channel, and focus there.

Once the channel/product mix is clear, it becomes easier to determine what we need to discover about the customers' context.

Approach 1. All products in all channels - vision

POS	Product 1	Product 2	Product 3	Product 4
Call center, telemarketing	Product 1	Product 2	Product 3	Product 4
Smart TV	Product 1	Product 2	Product 3	Product 4
Apps, web	Product 1	Product 2	Product 3	Product 4
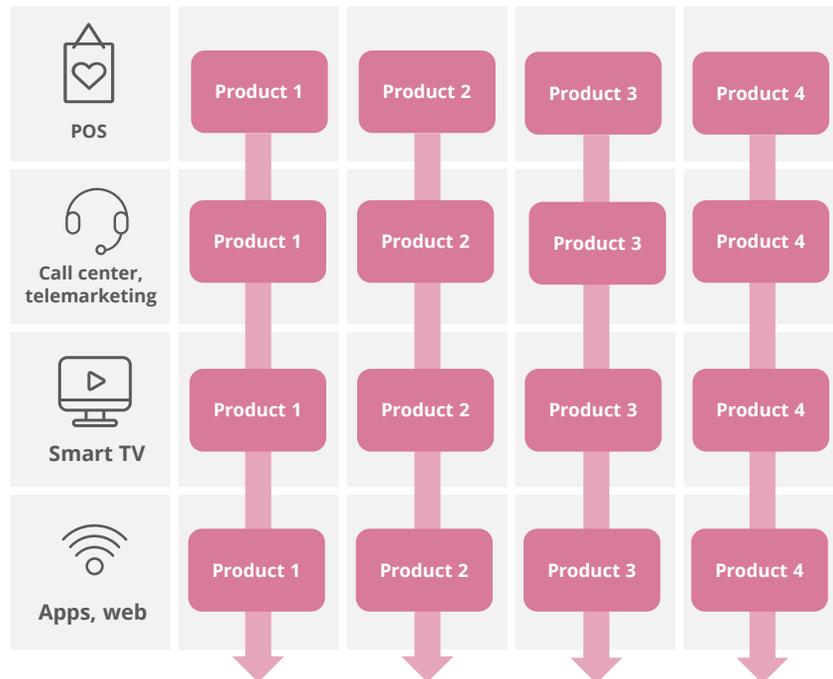
Approach 2. Certain products in selected channels - reality

POS	Product 1	Product 2		
Call center, telemarketing			Product 3	
Smart TV	Product 1	Product 2	Product 3	Product 4
Apps, web				Product 4

14
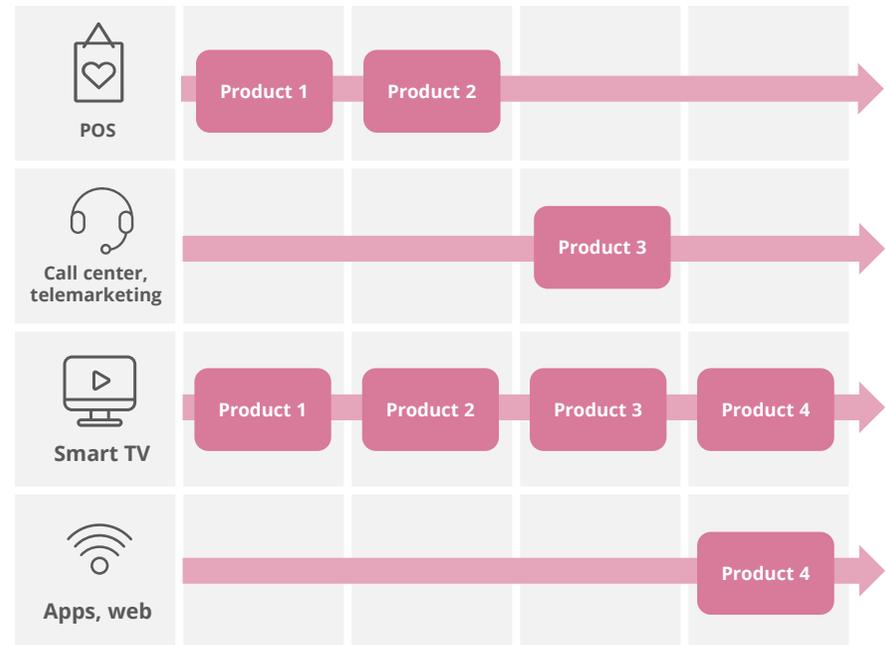
Each customer's context is influenced by important events in the customer's life, such as a birthday, address change, concert/sports event, job change, or ending of a contract. These events can be divided into categories based on their origin, such as environment, business, client relationship,

and personal events. All these elements help build a highly engaging customer interaction. One of the major strengths of an NBA or NBO is that these contexts can later be automatically used and tested against each other to accelerate the discovery of high yield combinations.

Define customer context based on multiple events

Source of event

Events that can be leveraged to start an interaction via proactive channels

Environment	Season change	Sports event, concert	Disruptions, disasters	Competition appears	Competition promos	
Business	New price	New technology available	New service bundles	Major TV content launch	Major device launch	Store opening
Client relationship	Contract lifecycle	Offer ends	Complaint	Order fulfillment	Repairs	Service usage
Personal	Birthday	Family change	Job change	Address change	Income change	Needs, expectations change

☐ - example focus

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When channels and customer context are clear, you are ready to consider the offers

The selection of a proper channel (or channels) to stream personalized communication with respect to your customer context is key for NBA & NBO process success.

Taken together, these two dimensions maximize the potential for a positive business outcome.

The next step is defining relevant actions to take towards your customer at this particular moment based on his or her context.

Different recommendations would apply for a person who just lost their job and urgently needs a plan downgrade compared to the student who consumes huge amounts of data watching online TV and YouTube videos.

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Define Offer Strategy for Major Customer Contexts

Recommend only good offers that benefit both your customer and your organization

Regardless of the size, skill, and experience of your internal CVM team, our experience reveals that only half of all presented deals benefit both customers and the telco when offer management is executed manually. This gives a clear reason to incorporate advanced technology rather than relying on the human factor alone, which generates limited success.

Using automated, AI powered recommendations, dozens of scenarios can be evaluated to find the best possible mix. The offer mix which is best individually for each customer is then presented to each and every one at the moment of truth.

Customer context

Ian McCormick, age 73
Monthly usage: 860 minutes, 17 SMS, 2.6 GB data
Monthly invoice: 29.35 USD
Contract ends in 3 months

📱 +36155489356 postpaid subscriber

Current plan		
Plan C	500 minutes + unlimited SMS + 2 GB	26.99 USD/month for 2-year contract
Recommended plans		
Plan A	700 minutes + unlimited SMS + 4 GB	28.99 USD/month for 2-year contract
Plan N	Unlimited minutes + unlimited SMS + 7 GB	30.99 USD/month for 2-year contract
Other valid offers		
Plan D	Unlimited minutes + unlimited SMS + 3 GB free data	28.99 USD/month for 2-year contract
Plan E	Unlimited minutes + unlimited SMS + 100 GB	69.99 USD/month for 2-year contract
Plan F	Unlimited minutes + unlimited SMS + unlimited GB	89.99 USD/month for 2-year contract
Plan H	Spotify + unlimited minutes + unlimited SMS + 2 GB	29.99 USD/month for 2-year contract
Plan I	Handset + first 3-month 100% discount + unlimited minutes + unlimited SMS + 2 GB	39.99 USD/month for 2-year contract
		More offers >>>

Customer and rate plan data are fictional and for illustration only

Define Offer Strategy for Major Customer Contexts

How do you approach each and every customer depending on his or her context? This is where data science and prediction algorithms can help prioritize across a huge pool of diverse offers. They consider hundreds of factors such as what you should you do when a customer is about to churn, and what to do if the customer is very much ready to take a bigger plan.

The NBO recommendation process:
- Automatically assigns relevant offers using specific algorithms and offer pools.
- Aggregates and prioritizes offers.
- Delivers personal recommendations to individual users across the most appropriate channels.

NBO delivers personal recommendations across any channel

Identifies relevant customer context	Assigns offers to each person	Collects and prioritizes offers	Communicates appropriate sets of offers via different channels
Ian, 73-year-old working senior	Offer pool 1 → Algorithm 1	Offer 1 / Offer 2 / Offer 5	Telemarketing
	Offer pool 2 → Algorithm 2	Offer 3 / Offer 8 / Offer 14	Email
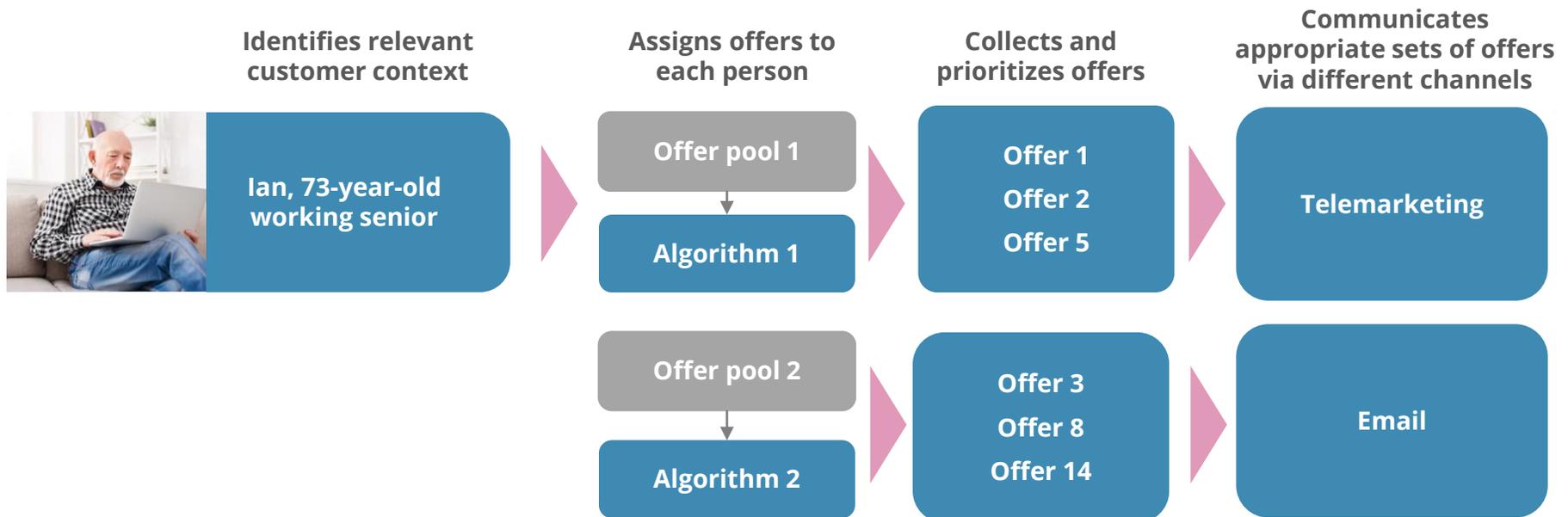
Another challenges is ensuring that your offer catalogue matches actual customer needs. Otherwise your catalogue produces the wrong outcome both for the customer and the operator. NBO/NBA software can provide advanced pricing analysis to help you see such gaps (see example below).

Take steps to audit and evaluate your offer pool relevance towards any target group, such as senior people using data as shown in the example below. This way, you can be sure that your current offers correspond accurately to customer needs, and have the highest probability to convert to purchases.

Offer pool relevance for 'Seniors that use data'

Ian, 73 year old working senior

USER DISTRIBUTION BY OFFER
- Users who probably should fall in a separate target group
- Users who could accommodate better offer.
- Users whoo potentially need a smaller offer.
- Users with a very good up-seel path.

○ Recommended offers

A Recommended plan A

N Recommended plan N

Recommended Offer LLO1 relevance

20% relevance to users with offers: ST23, ST45
39% relevance to users with offers: O3, O4, O5
13% relevance to users with offers: LOG23
ir tt

After you have assigned offers to customers, review selected samples for a reality check. Do they match what you would buy yourself given the customer behavior profiles? Up to 50% of offers can be poorly assigned by mobile operators. One of the most important steps is evaluating whether your offers balance both customer needs and your commercial goals. By inspecting offers with advanced technology, telecoms can instantly distinguish the best deals for personalized targeting, without spending weeks on sluggish manual analysis.

Off-shelf NBO/NBA software provides analytics that measure the impact of recommendations in real-life

Good deal — **4961 (28%)**

Good Deal is an offer that maximizes value for both Customer and Telco: customer gets more value for sligthly bigger price and price per resource drops.

	Conversion Rate	Revenue uplift	Churn Risk	
Good deal for customer and company	99,95%	12 900 EUR	00,05%	**2851**
Potentially too big price change	80%	11 456 EUR	20%	**2110**

Bad Deal — **10 336 (58%)**

Bad Deal is an offer for the customer that is economically irrelevant.

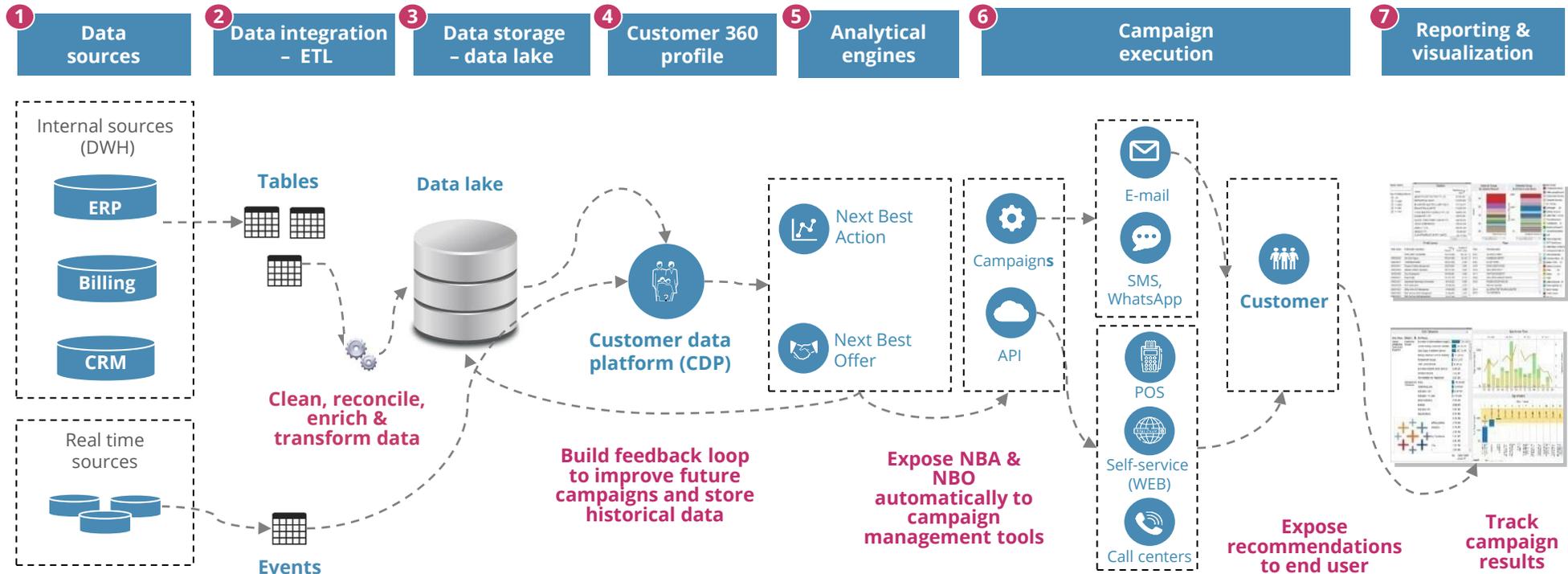|	Conversion Rate	Revenue uplift	Churn Risk	
Bad deal for customer: price increase witout extra value for customer	0,05%	12 EUR	99,95%	**1281**
Bad deal for customer: too aggresive up-sell	5%	670 EUR	95%	**4621**
Bad deal for customer: price for recource became more expensive for customer	25%	8 007 EUR	75%	**2700**

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Automate & Integrate

The final step is to ensure your process is automated end-to-end and can run without interruptions, manual interventions, and data quality issues.

Let's take a look at each step and review it's role in NBA & NBO implementation.

Example of fully automated Next Best Action or Next Best Offer process for telecoms

| ① Data sources | ② Data integration – ETL | ③ Data storage – data lake | ④ Customer 360 profile | ⑤ Analytical engines | ⑥ Campaign execution | ⑦ Reporting & visualization |

Internal sources (DWH)
- ERP
- Billing
- CRM

Tables

Data lake

Clean, reconcile, enrich & transform data

Real time sources

Events

Customer data platform (CDP)

Build feedback loop to improve future campaigns and store historical data

Next Best Action

Next Best Offer

Expose NBA & NBO automatically to campaign management tools

Campaigns

API

E-mail

SMS, WhatsApp

POS

Self-service (WEB)

Call centers

Customer

Expose recommendations to end user

Track campaign results

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Automate & Integrate

The fuel for this process is data. It is collected from a variety of telco sources: ERP, CRM, billing and real-time sources. Data is then integrated and stored. Next, a complete customer profile is built on a Customer Data Platform. It feeds analytical engines that craft personalized recommendations. The interactions are executed in the channels using campaign management tools, and the full process is followed up with detailed tracking and reporting.

Typically, it takes up to 2 years to launch an NBA/NBO framework using a linear, siloed approach and building it from a variety of different components. Meanwhile, the dedicated NBA/NBO solutions provide an accelerated end-to-end rollout process. In fact, off-shelf AI/ML driven solution can be launched in weeks and reduce the amount of work for the internal data science and marketing teams.

NBA/NBO process can be launched significantly faster with off-shelf software

Duration	1. Data sources	2. Data integration - ETL	3. Data storage - data lake	4. Customer 360 profile - CDP*	5. Analytical engines	6. Campaign execution	7. Reporting visualization
	Use multiple data sources from different locations	Map, identify, and extract additional required data sets	Store information from multiple sources in a data lake	Create 1000+ metrics about individual users	Leverage AI algorithms to empower analytical engines	Expose data to campaign automation channels	Report and track results to improve campaign performance
Typical implementation: 1,5-2 year	3 months	3 months	3 months	3 months	3 months	3 months	3 months
When off-shelf tools are used: < 7 months ▶ 3x faster	3 months	3 months	1 week	1 week	1 week	1 week	-

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CDP - customer data platform, a packaged software to create a unified customer data base that other systems can access and leverage.

Start Small & Build Governance

Prior to full deployment, a *small launch* should be conducted to minimize the risks. There may be issues lurking behind the surface that only real interactions with customers can reveal.

The *small launch* adheres to Test & Learn philosophy and begins with the smallest possible target group. There are two ways to reduce the scope: narrow down a channel or a segment.

How to reduce target group size in different channels

Inbound call center	Inbound POS	Inbound self-care web or app	E-commerce web	Outbound call center	Outbound message SMS, app or email
Work only with 2-3 agents	Work only with 2-3 stores	Work only with specific, small customer segment	Work only with specific, small customer segment	Work only with specific, small customer segment	Work only with specific, small customer segment

Once the *small launch* is live and runs for 2-4 weeks, conversion results and feedback data are collected and assembled. Based on the tracking reports, any necessary adjustments can be made prior to the *big launch*.

During the *small launch*, solid governance rules should be established for the *big launch*. Focus on three areas: launch, execution control, and adjustments.

Launch

Make internal launch announcements followed up by agent training as needed. Monitor the NBA/NBO engine and channel integration to ensure everything works smoothly. Schedule periodic management meetings to update on the progress.

Execution control

- Daily reviews during the 1st and 2nd week.
- Weekly reviews from week 3 to week 8.
- Subsequent monthly progress review meetings.
- Daily performance analysis via reports.

Adjustments

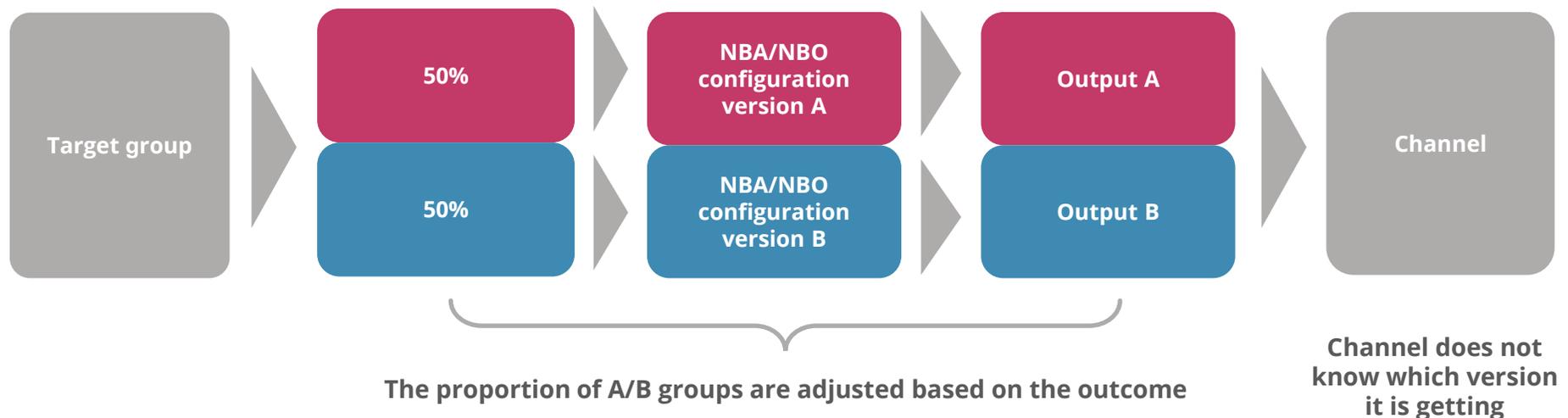Update the NBA/NBO engine settings to correct any issues detected on an ongoing basis.

Test & Learn for Continuous Improvement

As an ongoing process for continuous improvement, use A/B testing. A/B testing determines which combination of NBA/NBO pathways convert best. This occurs continuously without business disruption and can evaluate established configurations as well as new initiatives. A/B testing can be organized in the following way, as shown in the graph below.

Make sure you carry out all the changes to live NBA/NBO deployment in an A/B test regime in only one arm and then compare the results. Testing should be set up to be blind, that is, the channel is not aware of the testing or which version it receives.

Implement Test & Learn approach with A/B testing

Target group	50%	NBA/NBO configuration version A	Output A	Channel
	50%	NBA/NBO configuration version B	Output B	

The proportion of A/B groups are adjusted based on the outcome

Channel does not know which version it is getting

Exacaster

Understand.
Predict.
Act.

Building the business case for Next Best Action & Next Best Offer

Building the business case for Next Best Action & Next Best Offer

STRATEGIC IMPACT

What you can influence with NBA & NBO:

- Improve alignment with customer wants and needs.

- Enable product portfolio expansion and accelerate digital transformation.

- Reduce comparability of your offers to other telecoms when personalized bundles are delivered to the customer.

Building the business case for Next Best Action & Next Best Offer

COMMERCIAL IMPACT

What you can influence with NBA & NBO:

- Boost revenue after an interaction with a customer. According to our long-term experience in the telco industry, the majority of projects gain an **ARPU uplift from 5% to 10%**. For more than a quarter of cases, ARPU growth is 25% or higher.

- **Reduce customer churn by 25%** or more. This is a realistic indicator, achieved historically across one-third of all NBA & NBO projects.

- Improve conversion rates across multiple channels. The right channels demonstrate a **40% or higher conversion rate** per month instead of usual 5-10%. Typically, up to 75% of subscribers who convert, accept the 1st offer recommended by the NBO engine.

- Improve customer experience in digital and traditional channels - **raise net promoter score.**

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Building the business case for Next Best Action & Next Best Offer

OPERATIONAL IMPACT

What you can influence with NBA & NBO:

- **Reduce team workload** – An automated NBO removes nearly all day-to-day work related to offering management.

- **Lowers risk of human mistakes** and improves the execution of customer base management decisions.

- **Reduce interaction time** with your customers thanks to better relevance.

- **Accelerate new product introduction** to the market thanks to more relevant recommendations.

- **Improve the quality** of your customer data and product catalog as a byproduct of the initiative.

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What's Next?

What's Next?

Telco organizations of any caliber can take advantage of advanced NBA & NBO methods

Driving market forces are highly unpredictable. Don't be tempted to stay the course and rely on dated strategies, even as market share slips away.

Overall use of digital communication is soaring and people are more willing to complete major transactions online with no call center or store agent assistance.

However, during 2020, call center traffic has also increased.[3] Imagine how much they could have sold if they knew specifically what the caller was looking for?

The ability to successfully navigate unknown terrain requires an agile approach that can adapt itself quickly as new trends arrive – exactly the promise of NBO.

Due to these headwinds, NBA and NBO adoption is growing rapidly & to enables telcos to solidify their market position and continuously improve customer lifetime value.

In the past, this technology was only available to multinational brands with large data science & engineering teams. With today's arsenal of affordable technology and accessible analytical & data science knowledge, this gap can be closed within a few weeks instead of years.

At any stage of development, telecoms can quickly implement advanced digital marketing solutions to keep up with today's challenges and be well prepared for the future.

What's Next?

Drive positive outcomes with a dynamic, automated NBA & NBO approach

Exacaster helps telecoms grow ARPU by providing tools that:

- Identify gaps in the rate plan catalog.

- Recommend every customer an offer that maximizes value for the customers and the telecom.

- Provide ongoing insights about recommendations quality, coverage, and performance.

- Enable inbound and outbound touchpoints to sell *good deals* easily.

Contact us today and book an
Top Performance NBO App demo!

Top Performance NBO

Add
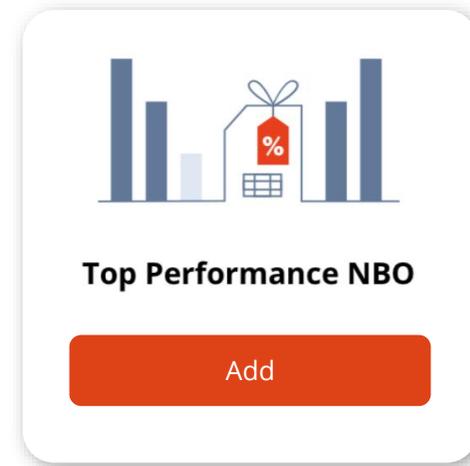
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About Exacaster

A great consumer experience, powered by data & AI

Exacaster helps telecoms achieve superior revenue growth and profit by making more data-driven and focused decisions on delivering great customer experiences

We are based in the same **Baltic & Nordic tech cluster** that gave you Skype, Spotify, and Revolut.

Exacaster operates from 5 regional offices:
- Europe – Lithuania & UK
- Africa – South Africa, Cape Town
- LATAM – Chile, Santiago
- APAC – India, Bangalore

www.exacaster.com

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