ABSTRACT

Omni-Channel, and the omniscient customer experience, is most commonly used as a buzzword to describe the seamless customer experience in a traditional multi-channel marketing and sales environment. With more channels and methods of communication, there is a growing need to establish a more customer-centric way of dealing with all customer interactions, not only 1:1.

Telenor, based out of Norway, is one of the world’s major mobile operators with in excess of 200 million mobile subscriptions throughout 13 markets across Europe and Asia. The Norwegian home-market is a highly saturated and mature market in which customer demands and expectations are constantly rising. To deal with this and with increased competition, two major initiatives were established together with SAS®. The initiatives aimed to leverage both the need for real-time analytics and decision management in our inbound channel, and for creating an Omni-Channel experience across inbound and outbound channels. The projects were aimed at both business-to-consumer (B2C) and business-to-business (B2B) markets. With significant legacy of back-end systems and a complex value chain it was important to both improve the customer experience and simplify customer treatment, all without impacting the back-end system at large.

The presentation sheds light on how the projects worked to meet the technical challenges alongside the need for an optimal customer experience. With results far exceeding expectations, the outcome has established the basis for further Customer Lifecycle Management (CLM) initiatives to strengthen both Net Promoter Score/Customer loyalty and revenue.

INTRODUCTION

SAS® has supported Telenor in their efforts to improve key areas in customer engagement with emphasize on Customer insights, Campaign Management and Data Management. From a previous silo approach for campaigns, the development has been focused on increasing how:

- Analytics is built into campaign management.
- Real time model execution across channels
- Campaign orchestration can be used to increase sales and customer satisfaction.
- Business rules and framework is assisting the orchestration.

This is done in an Omni-Channel approach, providing the channels with sufficient context to react in real time to campaign eligibility and relevant context (Next best offer).

Consultancy- and technical teams from SAS® have been a vital part of the projects discussed in this paper, and have also been in charge of the core architecture of the solutions. The challenge in any large company is to lose track of the overall goal, and to get bogged down in the entire technology legacy, and all the problems a change like this can pose. The collaborative effort of Telenor, SAS® and other third parties has been essential in overcoming these challenges thus being able to succeed in creating value for the customers and the company.
The paper and presentation will focus on key factors that made Telenor’s journey a success which can be transcended into similar projects.

TELENOR

Telenor Group is an international provider of tele, data and media communication services. Telenor Group has mobile operations in 13 markets in the Nordic region, Central and Eastern Europe and in Asia. Headquartered in Norway, Telenor Group is one of the world’s major mobile operators with 200 million mobile subscriptions from consolidated operations per Q4 2015, revenues of around 15 billion USD in 2015 and a workforce of about 33,000. Telenor Norway was founded in 1855 and is the dominant operator in Norway with around 3.2 million mobile subscriptions. This in a country with around 4.2 million inhabitants over the age of 15. Even though the Norwegian market is fairly small in number of subscribers, the Average revenue per user (ARPU) is high. This leads to the Norwegian market contributing around 20% of the total revenue of the company.

THE MARKET

The local market is advanced with a smart phone share of 77% and with average introduction of mobile phones at age 8. Currently there is about 115% mobile subscriptions in Norway compared to number of people.

![Figure 1 - Historical number of mobile subscriptions vs population](image)

Based on the current market situation, and the rapid technology shift, customer loyalty is increasingly important to maintain. When the general penetration is higher than the population a market share focus alone will in most cases lead to a decline in the average ARPU (Average revenue per user) for the whole market. With Telenor being the only quad player (Mobile, Fixed, Broadband and Television) in the market there is much more to gain to keep existing market share and increase value through bundled offerings and products. This has been especially important in the shift where customers expect more services to be
free of charge or close to free due to the introductions of OTT (Over the top) services like Skype, Facebook and WhatsApp. Being a pure data provider is in the long term not sustainable for future growth.

This shift has introduced the need to move from a market share objective to customer loyalty objective where customer experience and satisfaction are important building blocks. To create superior customer experiences the ability to communicate personalized, with relevant context in a similar way across channels is one important element. The customer of today does not accept receiving contradictory information in different channels or being required to provide the same information multiple times. Customer statements like “they don’t know me” or “why do I have to start all over again?” proves the lack of coordination and data governance across channels and customer touch points and ultimately results in the customer leaving for another provider.

THE STRATEGY – THE ENABLER

"The aim of marketing is to know and understand the customer so well the product or service fits him and sells itself."
— Peter Drucker

Having a clear defined and anchored strategy from the top may not be a necessity to succeed with a customer centric Omni-channel ambition, but it makes it much less difficult. Creating the playing field for the team to operate within is anchored in Telenor’s global strategy. Not just in PowerPoints, but in an actual drive and push from the whole organization. There are four pillars in Telenor Group’s strategy: Loved by customer, Engaging digital products, Most efficient operator and Winning team. Each of these is crucial for success.

Figure 2 - Telenor strategy overview
Delivering a “consistent cross channel experience” is one very important pillar in delivering on “Loved by customers”. This is the basis for all activities described in this paper.

**ORGANIZATION – GOING IN THE SAME DIRECTION**

One of the challenges in any large organization is to ensure that divisions or projects don’t end up competing or working against each other unintentionally. In Telenor Norway this was solved by placing the funding, execution and governance of all initiatives and projects delivering on the strategic pillar “Loved by Customers” in one program.

This resulted in a very efficient prioritization across the portfolio of initiatives, unifying goals and architecture and a way to measure success across multiple projects. One of the most beneficial parts of this structure was the speed of decisions as the journey from business need to board approval was reduced to weeks instead of months and years. Equally a focused and condensed tracking of all projects back to CEO board gave them the overview and insight to direct the portfolio and projects when needed.

**USER EXPERIENCE – THE SECRET RECIPE**

“You’ve got to start with the Customer experience and work back toward the technology.
— Steve Jobs"

It might not be so secret anymore, most companies know this, and most companies know why companies like Apple have emerged like they did. They started making products people around the world loved (or hated). When my two year old kid intuitively knows how to unlock an IPhone without seeing one before, you know they have done something amazing. Yet, there is still a huge push to be technology focused in any development since most companies are still very product oriented.

For Telenor this was a balancing act, and it was also a learning process for everyone.” How are we going to work differently to understand our customers, to engage with them and to develop products and services they loved, not just needed? “

In essence very basic, but in reality it is quite hard. Telenor did four things that were essential to succeed;

1. Engage user experience experts in all projects were customer engagement was above a certain percentage
2. All projects needed to have a customer advocate – someone to always be the devil’s advocate on customer behalf.
3. All employees (independent of what they worked with) had to physically engage with customers about their products and services at least once a year for a full day.
4. User experience skilled teams were created to facilitate requirement building and user acceptance testing to support business.

The result of this change was a constant reminder of how customers would experience the technology that was created. It also gave the possibility of testing out prototypes on actual customers through UX labs.
SCOPE – CHOOSING THE RIGHT PATH

One general observation when it comes to Omni-Channel approaches and also the general application of Marketing technology, is that it is used only on parts of the customer communication without sufficient links to the complete customer experience. It could be lacking in the channel handling, order fulfilment or in customer service. By compartmentalizing the experience, the outcome can be seen from the customer as a “bumpy road”. On the other side, in large organization with significant legacy it can be a risky bet to do changes in the whole order value chain which can lead to significant complexity and cost in the project.

This was solved by deciding that all parts of the customer engagement were to be included, but order value chain could not be changed. This meant using the existing solution, thinking smart, but also making compromises. All in all this was a good balance with total customer experience, cost and complexity.

![Diagram](image)

Figure 3 - Project technical scope areas

It’s important to emphasize that the journey to improve and enhance the Omni-Channel strategy never stops. It is also important that changes in other projects should follow guidelines and principles for continuous improvements.

There were a couple of things that became clear quite early in the process;

- The need for a unified customer log was essential
- The context of customer engagement needs to be tracked and managed in real time
- There needs to be a manageable layer of business rules governing the cross channel arbitration based on different scenarios
- Contact policy and recency needs to work hand in hand with the general business rules
• The strategy and solution have to support inbound/outbound and both batch campaigns and Next-bet-action (real time model based sales recommendations).
• The need to have one centralized campaign-logic across all channels.

All in all the scope was a balancing act, where compromises were made to keep it manageable, but at the same time keep true to the promise of a consistent customer journey. The effort on process change and anchoring throughout the organisation was equally important for the success.

THE PROJECTS – BRINGING IT ALL TOGETHER

Make everything as simple as possible, but not simpler."
– Albert Einstein

Two projects was established, one for the B2C (Business to consumer) area and one for the B2B area (Business to business). Both had the same long term goal, but with different short term needs and objectives. The projects were established as a twin constellation to ensure high level of synergies and common base architecture. The aim was to create a project delivery structure which both supported the short term business demand, and ensured continues value contribution throughout the projects. One of the major issues to solve was the logic around inbound vs outbound communication and how the channel handling should work across these channels. Additionally the question of real-time vs batch was important. The business requirements and legacy on capabilities was a guiding factor for the focus of the projects. In the B2C-side it was more important to provide real time recommendation based on analytical models. For the B2B-side it was more important to establish support for marketing communication throughout all channels which had been a missing capability.

The ambition for both lines of business was the same. To arrive at a state were all 1:1 marketing communication with customers inbound and outbound was enriched with customer insight, and presented in a way where the context is consistent throughout the customer journey. This is the path which will continue on, since the business and customers will always evolve.

ARCHITECTURE – A PUZZLE TRANSCENDS INTO A SOLUTION

The architecture had to be flexible. The needs to support complexity of the business rules, campaign arbitration logic in Real time, and at the same time ensure a consistent customer experience throughout the channels was a challenging task. The aim was to create solutions that both were business friendly, but at the same time ensured sufficient flexibility in solution, and agility in execution. The focus was especially on the information architecture, Business rules (qualification framework) and campaign orchestration. By mastering this, it gave a foundation for the integration with the channels. It also presented the projects with some new challenges.

One apparent thing was around the need to ensure that the rule logic was available at all time. This was not made easier by the fact that SAS® is not defined as a 24/7 business critical system in Telenor. In order to be consistent, there was a need to create an architecture which ensured sufficient redundancy in cases where SAS® was not available. This was solved through a synchronized duplication of the CDM (Customer Data Mart) which is a central component of SAS Customer Intelligence®. The duplication – Campaign log, is optimized for channel integration and is technically independent of SAS Customer Intelligence® for all batch related campaigns. The most important key capability to ensure when creating a consistent channel experience across multi-channel campaigns was the real time updates of eligibility.
This required integration with all channels to ensure constant updates on results. The response is captured in all channels, but done differently dependent on how the channels are managed. In manned channels such as Customer service and Telemarketing the customer representative is responsible for setting a positive or negative response on the offer. In self-service channels it is based on the customer interaction. And finally in outbound digital communication it is based on tracking presented state, and positive response. This logic was captured together with contact policy/recency strategy and coded into the solution. Below a simplified example on how the presentation logic of campaigns works in the channels.

![Campaign channel availability logic](image)

**Figure 4 - Campaign channel availability logic**

As Figure 4 shows there are multiple outcomes of a campaign state. The campaign can be presented to a customer but no response is given. This would often be the case for an email communication for example. In Telemarketing a customer could be on a call-back state. This means that the campaign has been presented but the status is pending. In this case the business rule would halt all outbound communication on that campaign, but it should still be available in inbound and self-service channel if the customer decides to buy the product, not waiting for the call-back.

These rules were defined and serve as the core logic of when a campaign should be active towards a customer or not. Below the logic is described on end data of active campaign.
Figure 5 - Campaign status logic

The logic might seem basic, but when updated through web services in real time it gives a manageable way of handling the complexity. In this way, when the Telemarketing operator is fetching their next customer, the eligibility of the customer is reviewed and it is not presented if the customer already has accepted the campaign in a self-service channel.

Another important part of this logic is the end state needed to be recorded back to the Campaign Log. This recording is used for reporting and analytics to measure the true effect of a campaign. This way it was also possible to view the effect of cross-channel contribution and see which channels was participating in the successful completion of a campaign.

A realization in this regard was the necessity to supply the channels with relevant and updated information of the campaign history into the channel. When a customer calls into customer channel to ask about an email they just received, the response should be: “Yes, I see that you just received an email about our new data package offering. How can I assist you further?” This again is solved by ensuring that the Campaign log is sharing this information with the channels as a supplement to the campaigns.

This emphasises the necessity to ensure tight channel integration in real time to achieve the Omni-Channel experience.
RESULTS – MEASUREMENTS OF SUCCESS
All projects initiated in Telenor go through a thorough test of value and risk. The two projects referred to in this paper both projected high values in terms of profitability. Yet, it was not without risk – it was hard to assess if the customer would respond to the projected improvements.

However, both projects turned out to be even better successes – and more profitable – than Telenor had anticipated, giving pay back in only 1.2 and 2.7 years. That meant one of the two was paid back even before it was finished. With a net present value (NPV) over capital expenditure (CAPEX) of 7.7 and 5.6 these projects had an exceptional profitability compared to other projects both in the “Loved by Customer”-portfolio and across other portfolios.

This has paved the way for further enhancements, and work to continue the journey of creating a lasting competitive advantage in customer experience and service.

CONCLUSION – IMPORTANT STEPS TO ACHIEVE A SUCCESSFUL OMNI-CHANNEL STRATEGY
The journey for Telenor started with a decision. The decision was not coming from a single department, or a single segment. It was a strategic global initiative that revolved around the desire and need to be loved by customers. To excel in the growing competition and shifting environment, the strategy was a crucial contributor to be able to execute on the desire to become channel agnostic, and contextual in all our customer communication.

Second it was important to understand that the full experience is not only about marketing communication done in the right way. It was much more than that. The customer experience is the whole value chain across all the customer touch points. It is important not to exclude important parts of this journey. This will lead to a disrupted customer experience. This is especially relevant in the challenge on how to scope the project right. Including the channels and order value chain was important for Telenor, but done in a way that was manageable.

Third, understanding the need to be relevant in the contextual space the customer communication happens is essential. This requires real-time capabilities to adjust according to business rules and product eligibility.

Finally, and maybe most important; Understanding and working with the customers. This gave Telenor a chance to see if they are working in the right way. This means to work hard to create value for both Telenor and the customer. To listen to the customer and make sure the input is taken into account when solutions are built. It is much easier to implement changes during the project period, learning from prototyping and testing on real customers. Doing changes after a final release is often much more complicated and costly.

NEXT STEPS – THE PATH AHEAD
The aim to construct the optimal customer experience is a never-ending one. For Telenor it is all about doing more. More channels, more insights and more contextual information. Currently the work is focused
on increasing the scope of the insight driven customer communication to reach all types of customer communication. The high level ambition is that all communication/touchpoints is either:

a) Controlled and personalized by the Campaign engine
b) Value added by the Campaign engine
c) Logged as a activity by the Campaign engine

This way the chance of creating unwanted customer experience is reduced, and the propensity to sell and serve is maximized. Doing this in a way that benefits both the customer and Telenor will have a high likelihood of creating future success.

CONTACT INFORMATION
Your comments and questions are valued and encouraged. Contact the author at:

Jørn Tronstad
Telenor Norway
jorn.tronstad@telenor.com
www.telenor.com

SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries. ® indicates USA registration.
Other brand and product names are trademarks of their respective companies.