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Artikler fra Trafikdage på Aalborg Universitet

(Proceedings from the Annual Transport Conference at Aalborg University)

ISSN 1603-9696

<https://journals.aau.dk/index.php/td>

trafikdage
NY VIDEN & NETVÆRK



PROVIDING PERSONAL TRAVEL INFORMATION AND PUSHING PLANNED CHANGES – A CASE STUDY FROM DOT BILLETTER

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Abstract

This case study examines how DOT addressed the challenge of efficiently disseminating planned changes to their customers. Traditionally, customers rely on webpages, auditory announcements, or physical signage for information, all of which pose scalability issues. To enhance information delivery, DOT leveraged their ticketing app as a platform for providing personalized traffic updates. Through collaborative workshops and user-centric design, they developed Departure Boards, allowing customers to curate real-time traffic information tailored to their preferences. A year post-launch, the feature boasts 155,000 personalized boards created by 70,000 users across all of “DOT land”, with over 400,000 planned change notifications sent. Notably, users with Departure Boards exhibit significantly higher spending, indicating enhanced customer loyalty. The ongoing development aims to further optimize user experience and integrate additional features, as well as a plan to turn the feature into a service to be used by any frontend. All in all the project is a resounding success in improving information dissemination and customer engagement within the public transportation sector.

What was the problem?

DOT wanted to push planned changes, to the schedules of bus-, metro- and train-traffic, to their customers. Planned changes used to be either **seek out** information the customers had to find on webpages or **right spot, right time** information they had to **hear** through speakers in busses, trains and metros or **see** on outdoor communication placed as signs on train stations and bus stops. It was evident that these methods could not scale further, and alternatives were needed to be able to deliver the relevant **existing** information to the customers before they know they need it.

What method and technology was used to solve the problem?

DOT operates DOT Billetter, a ticketing app installed on devices already in the customers pockets and the idea was hatched that this app could be an efficient, cost effective and scalable method of delivering planned changes. But how? Early plans for *top-down* methods of either building customer profiles in a

Customer Data Platform or having users subscribe to specific train and bus lines at specific times were rejected in favor of a *bottom-up* beta-app approach focused on delivering ideas as fast as possible and building what was identified as providing value to the customers. The idea was that each step of the way towards pushing planned changes (and eventually other relevant information) should consist of useful, valuable features. This was done because planned data exists, but it lives in a complex landscape of variable data quality and pushing this info would be so complex that a full plan could not be formulated ahead of time. Only by making the process iterative and value focused could we expect success.

Workshops, involving all the different stakeholders from the PTO's, as well as UX and technical experts – all users of public transportation – refined initial ideas of letting customers create filtering mechanisms as immediate part of the long term needs. The (still evolving) result lets the customer build personal **Departure Boards** with instant beneficial traffic information. The boards live in the app and as breakout widgets on the home screen, offering real-time traffic information at a glance. The boards in turn allow the system to know what lines and stops the customer is interested in and planned changes related to these stops and lines can be delivered, in a sense, before the customer know they need it. Without the tedious setup stage most, customers will never complete.

What are the results?

Now, about a year after launching the Departure Board feature, 155.000 personal Departure Boards have been created by 70.000 users **all across** "DOT land" and 400.000+ pushes with planned changes have been sent. (DOT Tickets app has 1.000.000 yearly active users and 40.000-50.000 daily active users.) The spending of the customers with Departure Boards is more than twice that of the average user in the app, meaning that this is a feature catering to our most loyal customers. We continue the process of developing the feature, both as a live traffic tool and as a novel way to deliver traffic information with existing data. Not only have we managed to deliver push of planned changes, but by using the existing data we have in many cases improved the data quality, because we have exposed issues that needed solutions. We consider the project a tremendous success.

What now?

The near future will see new features including journey boards and a simple way to make temporary boards based on location, from tickets, and a way to buy tickets from boards. As well as an ongoing refinement of the UX, convenience and simplicity of the tool

With DOT Billetters future uncertain, plans are also being hatched to turn the development effort into a service usable by any customer facing frontend. As well as efforts to disseminate the lessons and knowhow we have achieved along the way. The effort of *spreading the word* is also the reason for this "udvidede resumé"