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NORDIC MOBILITY COIN

En incitamentsmodel for grøn mobilitet

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Et projekt udviklet til Nordic Innovation
Udviklet af JAJA Architects, Trigger Oslo og Blockchangers.
I samarbejde med TØI, #Ruter, NSB og NAF

Abstract

Nordic Mobility Coin is a mobility platform with an incentive model that rewards users who walk, take the bike or share transportation. A holistic mobility concept that expands the concept of transport to cover the entire journey, whether is through shared mobility such as car-pooling or mass transport, biking and walking.

The incentive platform will allow users to obtain a Nordic Mobility currency that can be used within different mobility sectors across Scandinavia. By gathering 'mobility coins' through walking, biking or taking the public transport, the user can use these coins to acquire rebates towards future transportation trips. For example, a person chooses to bike to the local train station, collect a cheaper train ride, and walk the remaining way to the office, and earn even more coins for the next trip. Or even better, a person bikes the entire journey and collects cheaper or even free tickets for use on public transport later. In suburban and rural areas with weaker coverage of public transport the platform will also reward shared cars, carpooling and even hitchhiking.

The platform will use the concept of nudging and gamification, to be in line with how other commercial actors are building successful platforms. By allowing people to gather coins that can have financial value, we allow for the possibility of gamification that has proven to be successful when trying to achieve behavioral change.

The impact of sustainable mobility reaches way beyond the scope of mobility. There have been numerous calculations of the societal cost connected to congestion, negative environmental impact, health, hazardous air quality, as well as the positive health benefits from walking and cycling etc.

Ruter's (Oslo- Akershus public transport) socio economic report suggests that for every 1 NOK that is invested in public transport (the report includes biking and walking together with public transport

offerings) society receives 4.5 NOK in return. Therefore, it makes sense to create novel way of incentivizing and instantaneously rewarding citizens that contribute to society by choosing the most appropriate sustainable transport at any given time.

With that in mind, the incentive system could go beyond public transport and include other brands and products that are supporting the underlying vision of green mobility. One example could be a person who now walks to work might be able to collect enough coins to get a rebate on new sneakers, the gym or the cinema. For actors within the public sector, the incentives are a higher modal share of public transportation, with its positive environmental side effects, while for the commercial actors, this could be seen a corporate social responsibility project, where the rebates they offer create both commercial gains while they contribute towards a better future.

Relevance

In the scope of the Nordic Innovation, what makes the Nordic countries unique is the welfare model. It's both a common cultural identity and a collective financial model for its residents. In recent years the welfare state has become under increasing political and economic pressure, but instead of endless efficiency reforms, we want to use new technology to reinvent the public sector in order to stay relevant and resilient for the future.

In the Nordic welfare model, accessibility is seen as a responsibility of the state, ensuring basic freedom of movement and mobility for everyone. Thus, mobility should not be restricted to transportation alone, as it has a massive effect on our environment, the climate, our health and quality of life. By incentivizing sustainable use of mobility (and the positive societal impact it brings within health, urban planning etc) and enabling smoother cooperation between public and private sector, Nordic Mobility Coin will enable to public mobility sector to stay resilient and even one step ahead for the impending disruption and revolution that is happening within the mobility sector.

The availability of the platform and the possibility for any mobility provider to plug their existing services to the Nordic Mobility Coin ensures that more prominent mobility players such as Ruter, NSB, SJ, Movia can share the platform with any start up within mobility (car sharing, e-scooters etc) and thus share and improve on existing services or together create new service within sustainable mobility.

Furthermore, as the impact of sustainable mobility goes beyond mobility alone, entrepreneurs, organizations from private/public sector and brands who either have direct interest in sustainable mobility or see synergies with their strategies and social impact programs can become part of the platform by offering incentives, products and rebates in order to increase and improve the incentive program. These kinds of collaboration will bring about new possibilities for improvement and/or creation of new products and services

Stakeholders

The stakeholders of this project are both the political level, transport providers and users of transportation in all Nordic countries. To learn and further develop this ambitious concept we plan to develop a pilot project in close collaboration with Oslo Municipality, #Ruter, Vy (former NSB) and NAF.

In the end since public transport is subsidised by the public sector, it's important to document the effect the pilot and its financial aspect, both in an operational cost and its socioeconomic perspective. To do this we have formed a collaboration with TØI to back our result and findings with scientific research method. These results are important to document the effect towards decision makers, enabling us to unfold the greater vision of Nordic Mobility Coin.

Result and impact

Working alongside with #Ruter serving the entire Oslo metropolitan area, this collaboration allows us to tap into valuable experience, and test our platform in a real environment. #Ruter is planning to launch their MaaS app in 2019.

Alongside with the MaaS platform #Ruter is also doing early phase piloting on an incentive model rewarding walking and biking in Oslo. As #Ruter being a frontrunner in public mobility, this is a perfect match between #Ruters incentive program and the Nordic Mobility platform, enabling a marked for mobility coins and a underlying platform coins across several mobility apps and services.

The pilot will focus on merging #Ruters incentive model with the Nordic mobility platform based on a underlying blockchain generating mobility coins on desired behavior. This will be a #Ruter app and the platform will be connected other mobility providers enabling usage and earnings across mobility platforms. This is an important step of unfolding the vision of a Nordic mobility platform.

Combining the MaaS platform with an incentive model is a powerful combination and allows for more integrated, seamless and innovative mobility sector in the Nordic region with major Nordic hubs (Oslo, Øresundregion, Stockholm) as potential frontrunners. The Nordic countries will become a test pilot for the Nordic Mobility Currency experiment with a view to export and expand the platform to other regions where the concept is applicable.

The incentive model will be designed promote the most sustainable mode of transportation available as the incentives will increase based on variables such as availability, weather, distance. The incentive model will therefore promote the right mode of transport where it makes the most sense, By creating a concept that enables more sustainable transport and better flow into and within the urban areas, we believe that Nordic Mobility Coin is an enabler of a more healthy population and more sustainable and livable cities.