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### Introduction:

Spontaneous social innovation may reveal new and more sustainable solutions in daily urban way of life. How to improve these initiatives and make them more accessible for larger share of users keeping their initial social qualities? How to scale them up fostering their duplication at the local scale? What strategic design can bring to support these social innovators? What are the new approaches to co-design within a social fabric of creative users?

The paper presents the construction of an "enabling solution" by a team of designers at La Cambre design school together with 5 real size cases for shared mobility in Brussels: VAP, Comobil, Kotvoiturage, Myoto and Taxistop.

In particular it will show the analysis of the cluster of implemented cases and developing projects; the definition of the service idea as a set of cards to stimulate social conversation; the co-design sessions with new groups of local promoters; the enabling solution toolkit to support launch and development of the local initiative.

# The hypothesis of urban hitchhiking among alternative mobility

The different strategies of alternative mobility involving cars are based on intensifying the use of the same vehicle. They can be divided into two main categories:

1. Sharing the car between different users renting the vehicle one after the other. These services known as car sharing constitute the main type of solution in this category, although classical car rental could be seen as part of this cluster. They are based upon the leasing of the car for the time of usage and they require, according to the organization of the service, more or less anticipation from users in booking a car. The main environmental benefit is the reduction of the number of cars; which are shared instead of owned particularly. Side effects can be also mentioned such as less pollution by the use of more energy efficient models, the reduction of traffic jams, the reduction of the demand of parking places and a certain dissuasive effect for short drives due to the walking distance reguired to reach your shared vehicle. From the users' point of view, the patterns of use of the car as a personal mean of transportation remains the same. Only it is not owned but accessed, resulting in more cognitive overload to book in advance, securing availability, localizing and reaching the vehicle but also with some advantages such as the possibility to choose a model adapted to the drive or the reassurance of available parking place.



2. Sharing a car by different users simultaneously. This second category is mainly known as carpooling services, which may also includes informal or traditional hitchhiking. It is based on a more or less organized service that matches the offers of drivers to give a lift to whom may be interested during a dedicated journey for users searching a vehicle going in the same or similar direction. The environmental benefits are mainly due to the transportation of more people in the same car avoiding theoretically the same number of trips of people alone in their own cars. The effective reduction of transport intensity depends from the number of different people occupying the same car and from the nature of the operated switch: either from former car drivers or from former users of public transport. From the users point of view the vehicle is still owned by one of the participants to the solution but the model of individual use of the car is changes a lot: drivers and passengers have to agree for a common trip resulting often in adaptations of the itinerary and/or of the schedule. The very fact of sharing the same vehicle during all the period of the journey may result in opposite social effects scaling from security problems and cases of aggression to a socialisation effect and the creation of communities of users.

Urban Hitchhiking belongs to the second category of solutions based on simultaneous sharing described above. It covers solutions based on the principles of hitchhiking but applied in an urban context.

Theoretically this hypothesis is highly promising: on the one hand, the density of cars in cities ensure many opportunities of getting a lift in a short time, and on the other hand, the relatively small geographical area covered by most of urban trips make it more likely to adapt the demand and offer. In fact, those potential advantages are also the main challenges of these types of solutions: hitchhiking his difficult in urban environments because of the same diversity and shortness of the different car journeys.

The scheme shows two polarities that allow to better position it among other initiatives in this area of alternative mobility and explain the challenges it raises:

- 1. Compared to traditional hitchhiking along main roads between cities, the use of a particular street in urban context doesn't necessarily reflect the car's final destination. The first challenge of urban hitchhiking is to operate in open street environments whereas traditional hitchhiking is based on main roads network to match demand and offer on destination:
- 2. Compared then to car-pooling in urban environments, hitchhiking is not based on a pre-established agreement between driver and passengers. The second challenge of urban hitchhiking is to operate on demand, instantaneously, whereas all forms of carpooling require a form of anticipation and related infrastructures to match offer and demand in terms of schedule and destination.
- On top of this structural difficulty, other and more conjectural problems create barriers for the development of urban hitchhiking, in particular: the development of insecurity in the cities and the increase of burglaries from car jacking to aggressions with cars; the explosion of traffic that makes it difficult for drivers to stop near hitchhikers; the general acceleration of life where smaller delays as stopping or adapting journeys is considered as impossible.

Positioning of the different forms assumed by carpooling according two dimensions: the typology of urban fabric and the need for anticipation for the users.



## Initiatives of urban hitchhiking in Brussels

Regardless the challenges mentioned above, several cases of urban hitchhiking exist. In the city of Brussels, different initiatives have been developed in the recent years and some projects are in progress. We will give here a short description of the main ones approached in this research.

### 2.1 VAP

Voitures à partager (VAP), an initiative born in 2005, where determined to make auto-stopping in the city easy and safe. Claire Van Bellinghen who is the project initiator, was motivated by her commune's « Mobility week » to set this car-pooling system.

VAP considered two levels of the problem as challenges: more globally shared as global warming combined with transport accessibility issues; and more local ones like profiting from commuting cars that are not fully occupied, enhancing solidarity between pedestrians and drivers, and generating more social links in a commune that has already a quite open mind set.

It needs little infrastructure to accomplish its objective: Users subscribe to the service –no cost- getting a registry number and a VAP identification badge in return. The last is a graphic element made to be easily recognizable. The service is within members only: they can participate as pedestrians, as drivers or be registered as both.

The pedestrian then is able to hitchhike, card in hand, while any



passing car member of VAP can recognize the hiker as a fellow user; encouraging him to stop. The car, which should show a VAP ID on the windshield and the green VAP ribbon on the antenna, is made visibly reliable as a member to the hitchhiker and thus the spontaneous car pool is concreted. Like this, the system tries to establish itself through reciprocal identification and trust, encouraging spontaneous social contact.

VAP is thought more as a complement to urban transport than a substitute. This Carpooling system intends to be an easier approach to hitchhike in a city sub-area or commune, as the service's native Watermael-Boitsfort, who has only 3 bus lines for 80 km of streets. The members are currently around 720: 550 in Watermael-Boitsfort and 170 resident in other communes.

In order to succeed, the VAP promoter makes sure at subscription level that basic security requirements exist to both driver and passenger: They verify that all members are above 18, that the driver has proper insurance, a valid driver's licence number and all members remain registered in the service's database.

Effectively, this system has shown some specific problems: the quantity of members is still growing but critical mass has not yet been reached to have a fluid service. There is an imbalance amongst members who are 80% drivers and 20% pedestrians. However, works are being done to improve and develop the quality of the service such as destination signs for hitchhikers in the form of a booklet and 3 signaled meeting points installed on the streets in Boitsfort.

#### 2.2 Comobil

A similar case also in partnership with VAP can be found at a smaller area of the same Commune Watermael-Boitsfort called Le Coin du Balais . This locality is particularly isolated from public transportation but shows an advantage for urban hitchhiking due to the geographical situation that creates one general exit for cars going in all directions.

This very strong and involved community has a committee who has put into place a urban hitchhiking system based on a clear pick up point -the previously mentioned exit point and a series of A5 size, coloured, directional cards. Each one of the five cards is marked in different colours meaning different directions, connecting to the urban network. These cards are sold in the local bakery and bookshop for  $2 \in W$  which is the only cost of the service. More than 200 are in use, being again 2/3 of them drivers.

They consider directions to be more useful than destinations due to the fact that drivers may pass through certain places useful for hikers without them being the hiker's final destination, but being a place for them to connect to the public transport system. This action increases the chances to reach their destination more rapidly than of waiting for a car going to a similar destination.

The system works as follows: a car must signal the direction with a specific card in the windshield and the hiker must do the same by holding the card while hiking. So drivers and pedestrians, who create a habit of carrying and displaying the cards, can make a visual agreement showing their willingness of: sharing the transport, stopping for other members and passing through a common point; all in a quicker way. The same logic is used for going back...

The community has played a very important role: being so involved in improving their quality of life, they have developed the trust needed because they recognize other users as members of their community (due to the cards being only sold locally) and publicity through hear-say amongst friends and neighbours.

### 2.3 Myoto

Steve Ghijselings, interprets the general principle of carpooling as the activation of private traffic like a flowing and growing network of public transport. The service project called Myoto, led by Steve, is another urban hitchhiking system that should be launched during the second trimester 2008 throughout Brussels city, and even though it presents a very similar base structure to VAP, it portrays some technological added value and related costs that require a

more structured service.

It works under a similar principle as VAP. Through Myoto's Internet home page pedestrians over 16 years old can subscribe to receive at home a hitchhiker card carrying their name and membrecy number. Drivers don't necessarily have to subscribe; they just need to "have heard" about the service to participate taking Myoto hikers recognized by their member card in hand while hiking-, thus understanding the reassurances and responsibilities of the possible lift to the 'Myoto member'.

Once a car decides to stop and the destination is agreed, the hiker should immediately send an SMS using his or her mobile phone to Myoto's assigned number with the car's license plate, who will be stored by the system, implying a certain security and responsibility register for both passenger and driver involved.

Even though users base this service on trust, there is a more active role on the hikers' side, assuming the monetary cost for the couples "safety" to a third party. Each SMS will have a fixed rate between 0.75 € to 0.90 € per trip, no matter the distance. This money is destined to the upkeep of the technical system, promotion of the service and also to reward hikers and drivers. Drivers are rewarded -only if they decide to become Myoto members- with points in their chosen supermarket fidelity card, which is a common practice in Belgium.

As we can see, Myoto service is more of a structured business idea than of VAP and Comobil, which are more handled in terms of "good neighbouring". Here, there is a foreseen business that could possibly include sponsorships, collaborations with Telecom sector as facilitators (enabling the sms) and Retail sector as stimulators (through points). Also they have conducted a user study on about 1000 potential adopters, which responded more in favour of being drivers than pedestrians, showing that young people would be more open to use such a service.

### 2.4 Kotvoiturage

As a variant initiative between urban hitchhiking and carpooling





Une question d'habitude...



"MOBILE by MOBILE!"





Kotvoiturage is born in 2007 in the university town of Louvain-la-Neuve as a Kot-à-projets. It basically targets two kinds of student/commuters from and to Campus: the ones that travel everyday to go to classes and the ones who live on campus and go back home during the weekends.

The most common use is for arriving either to big cities as Brussels, Namur and Charleroi or to shorten journeys that with local transport take twice as much, like to Tournay There is no inscription fee or cost to use the system, but they recommend a compensation to the driver: normally between 0,07 EUR/km and if the driver has to detour, the supplementary fee should be 0,21 €/km.

Once the project was approved by UCL University they contacted TaxiStop (see 3.5 Taxistop hereafter) in order to integrate their project to its online service platform. Right now, there are more than 230 people using this service. Still, they have remained connected to Taxistop's main database to maximise possibilities of all potential journeys.

### 2.5 Taxistop

To complete the description of the alternative mobility scene in Brussels, Taxistop should be mentioned as the major player although not directly involved in urban hitchhiking actions.

Taxistop is a Non Profit Organization who's objective is the improvement of use of existing goods and means. It was founded in 1978 as the "Centre of Positive Use" in Flemish Region in Belgium to later expand throughout the country, and since then has developed several initiatives in order to connect people and optimize resources in different areas like temporary housing (Bed & breakfast, house sitting), vacations (home exchange) and mobility. They are also partners of the German car sharing organization Cambio, establishing a car-sharing project in Belgium installing the service to the disposal of members on several locations around the city.

Through their extensive Internet site, Taxistop offers a vast variety of services. Regarding mobility, Taxistop has developed an online tool that acts as a backbone to many of their own and other groups' fostered projects; the carpooling software called Smartpool. What



Smartpool does is connect registered users that have entered their trajectories in order to match them with the closest ones available. Then it's up to users to evaluate possibilities through the information displayed and contact potential trip partners.

On top of general carpooling, the service has been declined in several specific initiatives: Schoolpool addresses students and parents needs of commuting; Airportstop, set to travel to and from the airport; Eventpool, directed to cultural activities that vary in place and have a limited life span; Eurostop, as a hitchhiking service to travel around Europe; Less Mobile Services, to help people with mobility problems combining with low-income means to access transportation.



# Critical analysis of the different services

A presentation of two main services of urban hitchhiking, VAP and Myoto, has been organized to the students in Industrial Design & Interior Architecture of La Cambre in Brussels . A discussion took place with the two project promoters and the students got involved in a creative exercise taking inspiration from the initiatives, trying to improve the current solutions and reformulate them into a generic cluster of urban hitchhiking; key-point of the analysis will be reproduced here.

The VAP case, implemented since 3 years, is rich of experiences and feedback from the field. In comparison Myoto is a project structured on the basis of the experience of VAP with a more structured approach including a business plan and a user study of a large sample of users.

### 3.1 Security versus matching offer and demand

The first striking aspect that emerges analysing the two initiatives is that they don't particularly face the challenge of matching demand and offer that characterizes urban hitchhiking. Both services give for granted that the number of cars circulating and the willingness of the participants is more than enough to ensure the success of the initiatives.

Instead, the main bottleneck perceived is security. Hitchhiking became very popular in the 50's and 60's enabling lower income sectors to take advantage of the growing diffusion of private cars, in particular for medium-long trips such as holidays and leisure. The raising of security problems that goes along with economical

depletion, unemployment, overpopulation in ever growing cities during the following decades, mark a decrease nearly cancelling hitchhiking practices amongst population. Burglaries and aggressions to or with cars on the one hand, and on the other hand the ever growing possession of vehicles turns cars to be perceived and designed as protective cocoons or secondary homes. The mainstream mindset is then, at the turn of the century, mainly opposite to collective or shared use of cars especially in urban contexts.

The two initiatives are then particularly focused on reinforcing trust between drivers and pedestrians while restoring the practice of hitchhiking. Both services put a strong emphasis on reducing risks linked to insecurity problems. VAP seems to be a restricted club of users that should be more entitled to trust each other because they are among members of the same organization. VAP doesn't provide any new support to facilitate hitchhiking: raising a VAP card or a thumb is not really different to match offer and demand. Instead, the fact to be involved in the service, to make the effort of registering, to sign an agreement and certify age, insurance and driving licence, to hang a card on the windshield or to hold it in hand is probably sufficiently involving to filter out potentially deviant user profiles.

Myoto builds up on VAP's setting to propose a second dissuasive feature: before stepping in the vehicle, the pedestrian should send the car's licence plate number by SMS to the Myoto servers so that the identity of both driver and pedestrian is recorded in a database and available in case of problems.

An interesting point reported both by informal feedback from VAP users and by the answers to the Myoto market study is that users very quickly tend to hitchhike outside the service. VAP drivers with a certain experience report to give lift to any kind of hiker whether registered to VAP or not. Potential adopters to Myoto service declare in the user study they may quickly drop-of the sending of SMS to avoid paying the service fee but still using the system outside the security protection feature.

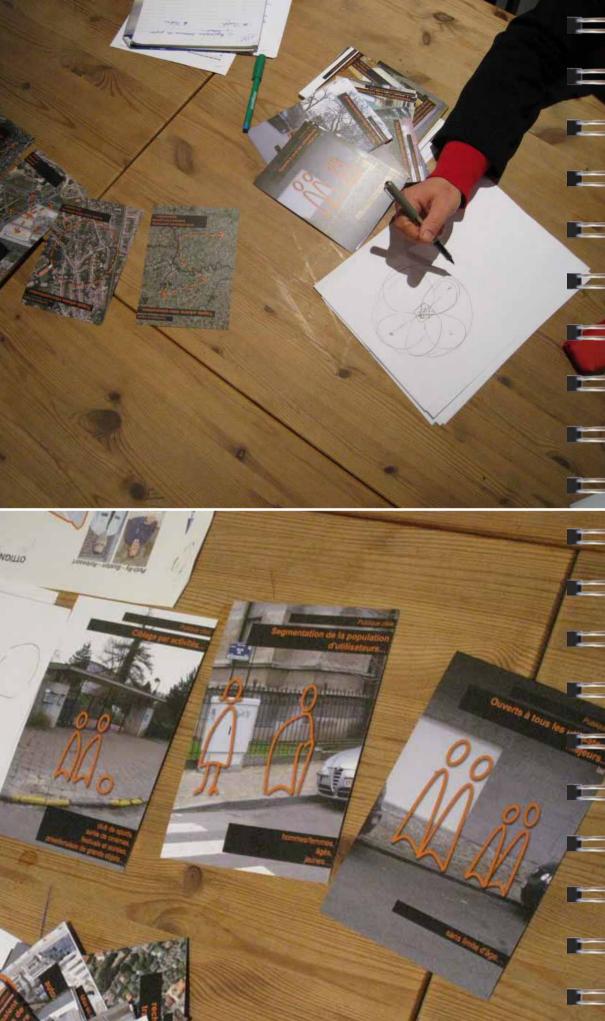
The absence of reported security problems due to relative limited development of urban hitchhiking is probably a key point in this rapid shift of users to a more open mindset, yet one single aggression may radically change the picture. Proper interpretation of this information would require further investigation but it probably means that the security barrier is not so determinant in the development of urban hitchhiking and people may overcome it with the first positive experience using the solution.

As conclusion of the discussion, both services VAP and Myoto are focussing particularly on security that is probably on the one hand a right orientation to restore trust in hitchhiking generally and particularly, in urban contexts. On the other hand, this focus appears to be not so consistent in the long run and tends to hide, in urban hitchhiking, the core problem of matching offer and demand instantaneously in an open street environment.

### 3.2 Launch versus maturation

VAP members are progressively growing from its launch in 2005 reaching now around 670 persons and the raising interest in the service seems to confirm this trend. Others groups of promoters intend to launch VAP antennas in other areas in Brussels and in local towns around. The different initiatives on alternative mobility listed in section 3 are discussing an agreement and a platform of action around urban hitchhiking. Nevertheless the critical mass of users still needs to be reached in order to consider it as a fluid alternative in urban transport.

Among the different initiatives, VAP is the more representative of what an average urban hitchhiking service may be and the most advanced experience on the field. We will therefore go deeper in the analysis of this case. VAP members can sign-up choosing between three options: as drivers, as pedestrians or as both. The VAP database counts at the moment 25% registered exclusive drivers, 25% exclusive pedestrians and 50% members intending to be sometimes drivers and sometimes pedestrians. The feedback collected by the service's promoter shows a different reality: more than 70 % of VAP members are most of the time drivers and only



30% tends to use the service as regular pedestrians. The figures of Comobil, 2/3 drivers and 1/3 pedestrians, seems to confirm this phenomenon. This remarkable difference reveals an important unbalance in the distribution of members, equal to the national mobility panorama, and probably a less positive picture about the success of the service than the growing membership tends to demonstrate. "Drivers are desperately seeking for pedestrians to give a lift to..." reports one VAP driver.

This remark leads to two important points towards possible improvements of the service.

- 1. Drivers seem to be easier to involve in participating to the service. This is a rather counter-intuitive result if we consider the mainstream position against sharing private cars reported in section 4.1, is probably linked to the fact that the service is not very demanding for drivers. They go on using their cars as they previously did (especially if they seldom encounter pedestrians). In other words, the adhesion to the VAP service may be interpreted as an excuse for scrupulous cars owners that fill guilty to drive alone in their vehicle. Being a VAP member, they potentially change status from mainstream car owners to car owners making an effort towards alternative mobility. This motivation is certainly very interesting and should be used in the promotion of the service. If drivers are seeking pedestrians, would they agree to do some more efforts to find some? For instance, among the main ideas raised during the creative discussion with the students, the drivers could indicate on a VAP website their usual journey to facilitate the matching with pedestrians. They also might accept small changes in their normal route to meet pedestrian requirements; or they also may involve themselves in the communication of the service. advertising it on their car or promoting it to potential new adopters.
- 2. Recent possible improvement in the setting of the VAP service, discussed between the core promoters of the initiative, focuses back onto the core challenge of urban hitchhiking which is how to foster instant matching of demand and offer in an open streets environment? VAP promoters are advising pedestrians to carry a



series of destination signage (station, market, metro...) to hold in a pocket size booklet and show together with their VAP card when hiking. The service seems to reconnect to the original setting of hitchhiking, where the indication of the destination has always been a mean to induce drivers' attention. They noticed that if most of the drivers are searching for pedestrians, on the contrary, only some of them are regularly transporting passengers. Therefore. inspired by the small Comobil initiative (see 3.2) they are discussing with the Watermael-Boitsford municipality, where these services are based, to define three pick-up points marked with street signs showing the VAP logo. The intention is to identify particular points of demand on the territory of the commune and to concentrate on segments of the city where hitchhiking traffic could be more intensive. Theoretically it is rather opposite to the principle of hitchhiking, which its advantage should be to be available everywhere. The service here seems to search for a new start, to focus on particular areas in need to secure a basis of users.

As conclusion to this second part of the analysis, the VAP service shows some disparity in the distribution between drivers and pedestrians and between contexts of use where it works more efficiently than others. It also reveals opportunities to improve the design of the service to make it more efficient and alleviate some barriers to its development. Moreover, it points out the hypothesis that VAP service is showing symptoms of an initiative facing its launching stage with the setting of a mature organization. Urban hitchhiking services need to grow: the more members belonging, the better the demand will match the offer in terms of both destination and schedule. The current implementation of VAP would perfectly run with probably 10% of the population as active members; but to reach this level it maybe requires another service setting focused in easily involving niches of population in terms of user profile and localisation.



### Collaborative decomposition in solution elements

After an in depth investigation of a cluster of initiatives of urban hitchhiking, the following step of this strategic design approach is to empower both current and new groups of potential promoters and users to improve and disseminate this type of service.

### 4.1 Scaling-up of the service

As mentioned in 3.2, urban hitchhiking services tend to work better as they increase their number of users. And reciprocally, the more population of cities will hike instead of drive, the more cars will be filled up and the global transport intensity reduced. This case shows the potential of a virtuous circle when the phenomenon has taken off. The strategic design goal is therefore to concentrate on supporting the early phases of scaling up of the service.

### Myoto and VAP models shows here different patterns:

1. Myoto is set as a top-down commercial service. Motivations of the project promoter are strongly connected with the improvement of alternative mobility on the one hand but the service is set as a commercial activity: users are paying a fee for the sms they send for each trip. The more users, the more profitable business is. The technical infrastructure supporting the web site and the user database can easily be resized to follow the growth of demand. At a certain level of development, it may free itself form the need of subsidies required at launch. It may then become a commercial company following the same type of evolution as car sharing did in many countries in the last two decades. Myoto's interest is then to expand regionally and nationally its market and its growth doesn't differ much from the expansion of a commercial service as any other.

2. VAP is set as a bottom-up open collaborative service (Jégou, Manzini, 2008). The service is reduced to registering the subscriptions and sending VAP cards to each user, free of charge. This activity and the promotion of the initiative are based on the involvement of a small group of early promoters around the inventor of the solution. None of them has anything to win in the growing of the service except the satisfaction of less traffic and more voluntary work to do. The subsidies they get from the municipality are covering part of the expenses (cards and leaflets printing, or the sending through post mail) and the core group of promoters should grow in number to cope with multiplication of memberships. Therefore, to scale-up VAP is fostering the replication of the initiative, assembling or assisting other groups of motivated potential users located in other places in Brussels and its surroundings. VAP may then replicate through dissemination, affiliation or branching (Dees, Battle Anderson and Wei-skillern, 2004) of a series of more of less similar VAP antennas.

The research chooses to concentrate on the second model of scaling up (best to say to reproduce); new and more challenging for a strategic design approach. Contrary to the more usual design of a commercial service taking into account possible evolutions from launch through growth and maturation, enabling new VAP antennas to emerge requires extracting all the knowledge and procedures gathered by the initiative in order to make it available to new groups of potential promoters. But profiting from the accumulated experience is not enough: on the one hand, some improvement may be made questioning the current VAP setting as seen in section 4, and on the other hand, a new implementation may have to face new contexts of use and the initial solution should be presented in a sufficiently flexible way to allow eventual adaptations. Moreover, the replication process intends to be self-supporting: the strategic design team -intended here as the students from La Cambre supported by the Strategic Design Scenarios consultancyshould empower the new candidate promoters with a replication process that they may afterwards handle autonomously, passing by both the flexible specification of service and the process to implement it.

The strategic design activities conducted consisted then in two parts:

- 1. The analysis of the different on-going services to list the many possible ways to organise urban hitchhiking and eventually complete and improve them. For instance, in terms of security of users of the service, VAP proposes a first system based on limiting the service to registered members whereas Myoto proposed another approach based on securing in a data base driver and passenger identity for each lift through sending the car's number plate through sms. Both systems are potentially valid and eventually complementary to each other. They also could probably be improved: the VAP card could easily integrate the photo of its owner to avoid swapping if registration is made through Internet; Myoto process of identification of the parties could be made less stigmatizing, more reciprocal and fluid using mobile phone possibilities to interconnect locally through Bluetooth.
- 2. The definition of a semi finished solution that can be reproduced and adapted to the different contexts. For example, the economical sustainability of the service even in a VAP-like configuration could be implemented in many ways between the passengers, the drivers, the service provider and eventual third parties as public authority or private sponsors. The service can be completely free, but it needs to find a minimum of subsidies and some voluntary hours of work. The service can be paid by subscription of both passengers and drivers; then a system to secure renewal of subscriptions should be discussed in the collaborative service. The drivers can be rewarded through points on fidelity cards offered by commercial sponsors: then the service needs to find a way to set apart some funds in between. The passengers could directly reward drivers with gas vouchers (or a small fee), in that case, a system recuperating some funds has to be discussed with local gas stations networks, etc...

### 4.2 Decomposition in solution elements

In order to define and discuss the characteristics and boundaries of the generic urban hitchhiking service, co-design sessions have



been organized with the different actors of alternative mobility in Brussels.

First, a working session was organised with the promoter of VAP upon which the solution cluster is based. Being VAP the first and more experimented service, the aim of the session was to confirm that all the experience collected during three years of activity has been registered and used. A first model of representation of the service in characteristic dimensions and related options was proposed to tease conversation. VAP, like most cases of social innovation, tends to be an informal initiative organically grown with low capitalisation material where the essential knowledge is stored in the memory of main actors. Therefore stimulating conversation with a tentative decomposition of the solution was of great help.

One month later, a second co-design session was organized. This time, with most representatives of alternative mobility initiatives in Brussels. In particular: the initiator of VAP representing also the Comobil initiative; the manager of Taxistop representing also the Kotvoiturage initiative and the manager of Cambio car sharing. Only the project holder of Myoto was not able to take part. Representatives of the two candidate groups to implement new VAP antennas in Ottigny and Villers-la-ville (both close periphery of Brussels) were as well present. The objective of this second session was to fine tune a second version of the solution cluster and to introduce it to new groups of promoters that will be the first users of the tool. The support of a semi-structured approach was particularly discussed and appreciated. It answers a typical need of voluntary user approach that is characterized both by a high level of requirement as users or potential users, (their preoccupation reflects a very fine level of expectation in usability, problem analysis, critical approach...) and at the same time a lack of project management capabilities -except for some involved professionally in similar activities, the difficulties to adopt a structured approach,

- Co-design session with the promoter of the VAP service to discuss a first decomposition of the solution in characteristic dimensions and related options.
- Co-design session with representatives of the main initiatives of alternative mobility in Brussels and the candidate promoters of the new VAP antennas in Ottigny and Villers-la-ville.





to turn critics into problem solving, to prioritize actions... tends to result in a much longer negotiation process that directly enters in competition with the willingness-to-do of volunteers.

The final format, agreed with the different actors to decompose the generic urban hitchhiking service, is structured into solutions on two levels

- 1. By solution elements, we intend to describe different components necessary and sufficient to constitute any particular urban hitchhiking service: A first level of decomposition focuses on what is characteristic to the service, including all dimensions that are mostly emblematic and that differentiate it from other categories of services. In other words, this level corresponds to what is necessary to mention when described by any external observer. For example: particular 'vehicle & hiker identifications' are provided by the service; no specific 'picking-up point' are defined, but an 'identification of destination' is shown through signs held by pedestrians; the 'trip type' is focused inside a city sub area and no "benefits and payments' are exchanged; etc...
- 2. The second more profound level of decomposition shows the various options available for each dimension described in the first level. They correspond to possible alternatives in the service's design, as various exclusive or complementary choices to be made, defining a particular instance of the service. For instance: the 'hiker identification' dimension could be based on users raising his/her thumb and thus, 'no particular hiker identification' will exist; or on a 'discreet identification' such as a hiker card; or also on a 'highly visible identification' such as a jacket for more efficiency, security and promotional reasons.

### 4.3 Enabling cards

In order to facilitate appropriation by users and manipulation during discussion of a new solution, the solution elements have been shaped as pocket size cards. 42 cards have been defined covering 12 main dimensions of a urban hitchhiking service The two dimension levels and options are written on the cards as

Decomposition of the generic hitchhiking service into two levels: the characteristic dimensions of the solution (first title), the related options to choose from (middle) and eventual examples (phrase below).







well as examples when necessary. A visualisation is added: both facilitating the identification of each solution element and helping users to differentiate cards easily. The visualisation is made out of a photographic picture of a current situation (i.e. cars in the street; street curve...) on which the possible solution elements are added in a simple, visible sketch form. This mix is useful to produce a balanced feeling between a semi-finished service still to be adapted and an already implemented or feasible solution. The name and logo of a generic service has been set to maintain both connection and distinction from the already on-going initiatives naming it "CityStop". Whites cards were also provided.

In the following month, two more sessions have been scheduled focused on each of the new promoter groups in Ottigny and Villers-la-ville respectively. The enabling cards will be used and tested by the promoters themselves. A moderator will explain the current VAP solution first and then stimulate the discussion of each service dimension to check for eventual upgrade and/or adaptations to new contexts. The design team will only assist and eventually support the process.

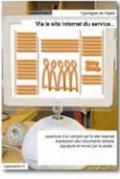
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<sup>◀ &#</sup>x27;Type of trip' different options: urban hitchhiking can be focused on sub-city areas with less public transport facilities or developed between poles in which high level of traffic is required (i.e. up and down town; a university installed in the suburb; the airport...)



























■ 'Subscription modes' different options: whether as a filling in form or through an Internet site, subscription requires an official involvement with a signature certifying the personal information given.

■ 'Vehicle identification' different options: cars can have a discreet identification through a simple service card displayed on the windshield or no identification at all. A small part of the drivers may also be proud of their participation in an alternative mobility system and accept to put a large identification on their car, resulting in an interesting promotional effect for the service.

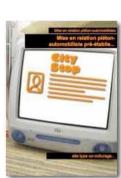
■ 'Hiker identification' different options: pedestrians can use the service card to identify themselves or simply raise their thumb to get a lift. Using a fluorescent security jacket as the ones worn by bikers but in the colours of the service could also act as a way to attract drivers' attention and simultaneously increase pedestrians' security.

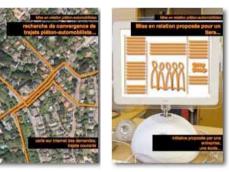
✓ 'Pick-up points' different options: fixed meeting points normally exist outside the concept of urban hitchhiking, but during the launching stage of the service, urban points marked by a street sign or agreed between the users can be useful.









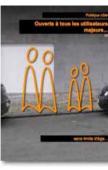
















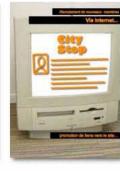


◆ 'Indications of destination" options: users could select only category and side of the street where they stand to indicate their destination, but they also may prefer indicating explicitly their destination in an open street environment. In any case, they may relate to individual solutions from holding a personal signage while hiking or to gather with fellow users near a street display where they can, writing with chalk, indicate the different destinations required by the group.

# ◆ 'Contact between hiker and driver' different options: informal contact as standing thumb-up in the street as traditional hitchhiking, or preagreed lifts between drivers and pedestrians on the service website or through a company intranet, which is more characteristic of carpooling, an intermediate solution could be interesting to consider: drivers could post in the service website their most frequent journeys and their related schedules so that pedestrians could increase their chances to find the lift they are looking for.

- ◆ 'Hiker and driver security' different options: a first level of security can be achieved through reinforcing the adhesion to the service, making it official through recognition by authorities with visible elements on public street signs; or enabling drivers to mark their experience in giving lifts through stickers every 10 rides placed on the windshield. A second level could be through recording identity of each participant in every ride through sending sms' to an appropriate database.
- ◆ 'Different types of users' different options: a priori there are no reasons to limit access to the service except to children and teenagers for obvious questions of responsibility. On the contrar y, the service could specialise focusing on exclusive targets such as women -for security reasons- elderly people or people with reduced mobility. The service could also be seen as an extension of a particular activity or place such as membrecy to a sports club, scholars and parents driving to and from school, or train commuters arriving at the station.
- 'Benefits and payments' different options: hitchhiking is originally free but the service could include payment of an annual fee of subscription. A more recent formula, as in carpooling, includes often a small charge per km. In the same way rewards for each lift could be organised as points on fidelity cards from a third party sponsor, or small value gas coupons or even money.







































✓ Recruitment of new members' different options: any presence of the service from an Internet site to booths in the local street market is good to give visibility and gain new members. Since trust is very important especially at a start, a more viral approach with members, them being drivers or pedestrians, promoting the service with leaflets in a face-toface relationship is probably even more efficient.

## ✓ 'Positioning of the service' different options: the perception of the service, related promotion and communication can be based on different ideas: urban hitchhiking can be positioned first related to alternative mobility, as a way to intensifying the use of cars and reduce transport intensity. But it's also an economic mean of transportation, and on the social side, it may assume another position such as a way to reconciliate drivers and

pedestrians or as an initiative to foster neighbourhood socialisation.

■ Application of the enabling cards as a mean to present and give visibility to a solution. Here, the current VAP service is described through 11 cards amongst the complete set. Here, one dimension is not present due that the service does not include a pre-established contact amongst users.







































### **Conclusions**

As conclusion of this on-going experience we will give some first feedback on the results achieved in general by the approach and in particular by the use of enabling cards. Although the process of supporting urban hitchhiking initiatives is not completed, we can already describe three distinct moments –described below- of this tool's application.

It is important to mention that two similar experimentations conducted in parallel, using the same or similar enabling cards, tend to confirm this moments. In Milan, eight initiatives of co-housing have been started with groups of potential users that begun using enabling cards to discuss their intentions in terms of sharing equipments and spaces, organizing mutual help and embedding this practices in a specific building configuration. In Paris, the service called Logement Intergeneration proposes to match students looking for logging with elderly people who have a spare room to rent. With a group of students from ENSAD Paris, a set of enabling cards was developed to facilitate the social conversation between elderly and students to generate a sort of visual contract or agreement regarding their habits and requirements for living together. A first test will take place in the coming weeks.

### 5.1 Give visibility

Social initiatives as the urban hitchhiking one described in this text, often reveal to be complex services. This complexity tends to disappear behind the informal setting of the solution, but going further into detail shows a subtle balance between flexible organization and social involvement, slowly evolving into experience embedded into the promoters practice. To explain properly

- ✓ Possible evolution of the current VAP model adapting the different context of suburb small towns as Ottigny and Villers-la-ville.
- Selection of key-options to re-launch VAP service and consolidate its take-off.

the solution, showing its reliability and social qualities it activates, requires describing the solution's complete panorama of characteristics. Enabling cards are very useful for that: they allow to show multiple facets of a solution, to present them progressively to any interlocutor entering into important details without threatening with too technical language. Only the first level of decomposition is used for presenting such applications, showing one option at a time. For instance, VAP could be described as below using one card per category if needed.

### 5.2 Tease strategic conversation

Scaling-up VAP as diffused local antennas requires to introduce the service to new potential promoters as described in section 6.1; but moreover, it requires adaptation to slightly different situations. Then it's important to guestion each dimension of the service using a different set of option cards to tease reflection amongst people in knowledge of the local context to further envision possible adaptations needed. Ottigny and Villers-la-ville for instance are more peripheral than Watermael-Boitsfort, involving more commuters to Brussels city. The 'Type of trips' are therefore different, more close to traditional hitchhiking with easier possibilities to precise 'indication of destination' and more obvious places to define 'pickup points'. As smaller suburb agglomerations and former villages, these cities shows clearer and more oriented urban fabric, with hot-spots for hitchhiking such as train stations and market places. The enabling cards allow composing alternatives to transform an existing solution progressively into a more context adapted.

### 5.3 Enable diffused design

Last but not least, the physicality of enabling cards as building blocs, easy to manipulate, compose, and reorder, made them an ideal tool to empower people who are not accustomed to project thinking feel confident in composing a new solution, and from there, to involve themselves more developing the solution. Cards here materialise solution elements which by definition is the result of what could be called an open design process: the presentation by a designer or a facilitator of a semi-finished solution, structured

in components to be assembled, enabling a non-professional to start the development of a solution. In section 4.2, the hypothesis of VAP facing a lag between a mature setting and a launching process was developed. The structuring of the service into characteristic dimensions and the materialisation of options into physical tokens allow the intuition of the VAP promoters to blossom in shape, to be brought into an organised discussion, and to build an hypothesis of downshifting certain characteristics of the current VAP to better fit the still launching stage, or imagining re-launches of complementary solutions consolidating a take-off of the service.



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