

Mobility as a Service (MaaS) – The Sydney Trial and Lessons Learnt

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On behalf of all my Colleagues who have contributed significantly, especially **Dr Chinh Ho** (ITLS) and **Sam Lorimer** (IAG).

Other colleagues are **Dr Goran Smith** (ITLS and Chalmers University Sweden), **Daniel Reck** (ITLS and ETH Switzerland), **Prof John Nelson** (ITLS), **Dr Yale Wong** (ITLS), **Andre Pinto** (ITLS), **Ivy Lu** (IAG), **Dave Worldon** (IAG), and the Skedgo team (**Tim Doze**, **Dr Brian Huang** and **Claus von Hessberg**)

SKEDGO

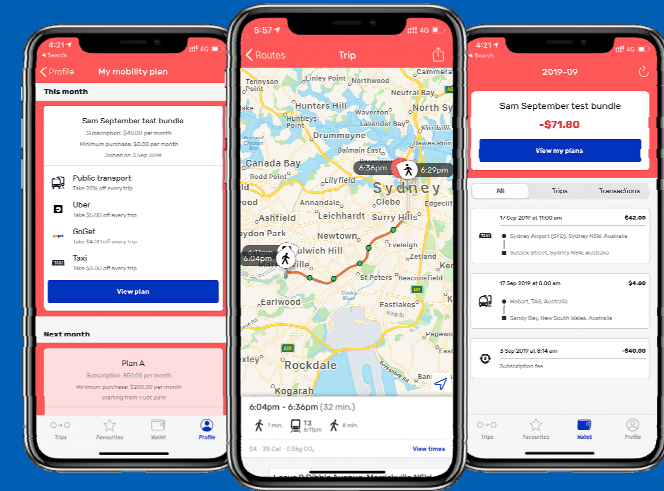


Level 4 Policy
Level 3 Packages
Level 2 Payment
Level 1 Information



The Sydney MaaS Trial

iMOVE CRC Project 3-003: 2019-2021



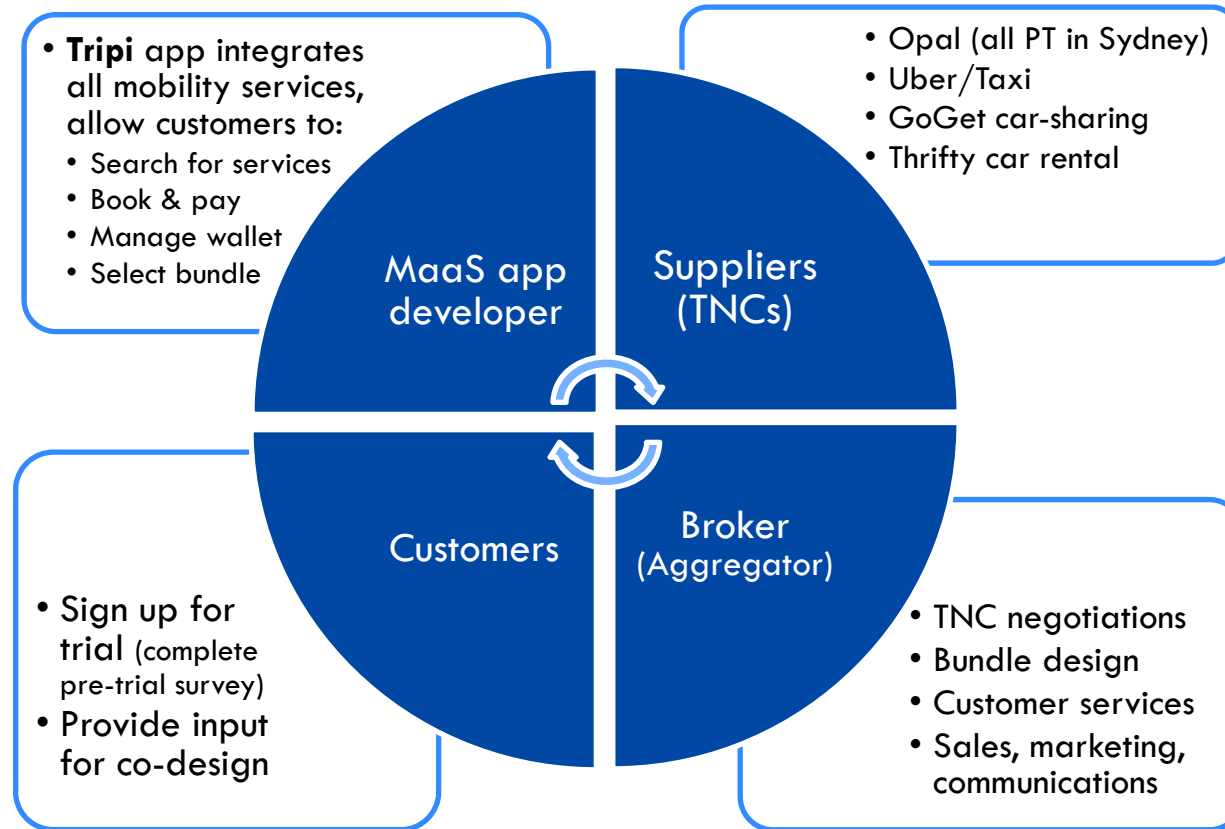
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Re-Cap of Project Objectives

- To explore appropriate **transport service mixes** and **subscription plans** for early adopters of MaaS ✓
- To generate **first-hand knowledge** of actual MaaS experiences ✓
- To assess the readiness of the current public and private transport mix in **Sydney** to support MaaS ✓
- To advance the understanding of **user uptake** and **willingness-to-pay** for MaaS ✓
- To test the ability to **influence travel behaviour** through introducing MaaS subscriptions ✓
- To **document the experience** in designing, planning and undertaking a MaaS trial ✓

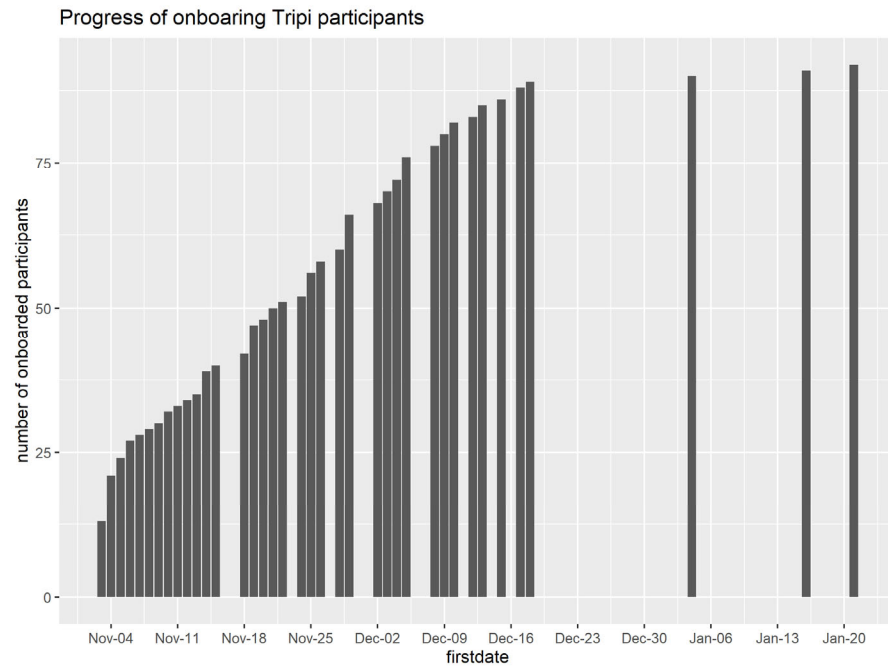
Key Components of the Trial



Plus Post-Trial Evaluation – 12 months (to April 2021) of data analysis, insights, Reporting, talks (nationally and internationally) and assessment of commercial possibilities

The Customers: Participants of the in-field trial

- 93 participants in total, on-boarded gradually from November 2019 to January 2020



The trial uses a mixed methods research approach. We draw on interviews and open questionnaire responses in addition to formal statistical models. In qualitative (and mixed methods) research, 93 is not a small sample size.

- By age and gender

	Under 35 years old	35+ years old
Male	12%	36%
Female	25%	26%

- By household structure

	0 children	1+ children
One adult	9%	2%
2+ adults	42%	47%

- By private car use

	Don't use private car weekly	Use private car weekly
No daily access	12%	8%
Daily access	4%	76%

- By travel behaviour

	Don't use car-based services weekly	Use car-based services weekly
Don't use PT	1%	0%
Use PT weekly	75%	24%

Subscription Bundles at the Centre of the MaaS Trial

Without subscription bundles we argue that we have a limited specification of MaaS, which is essentially a multi-modal trip planning app which has a vague connection (if any at all) to sustainability goals

Overview of Subscription Bundle: Incrementally Offered to all Participants

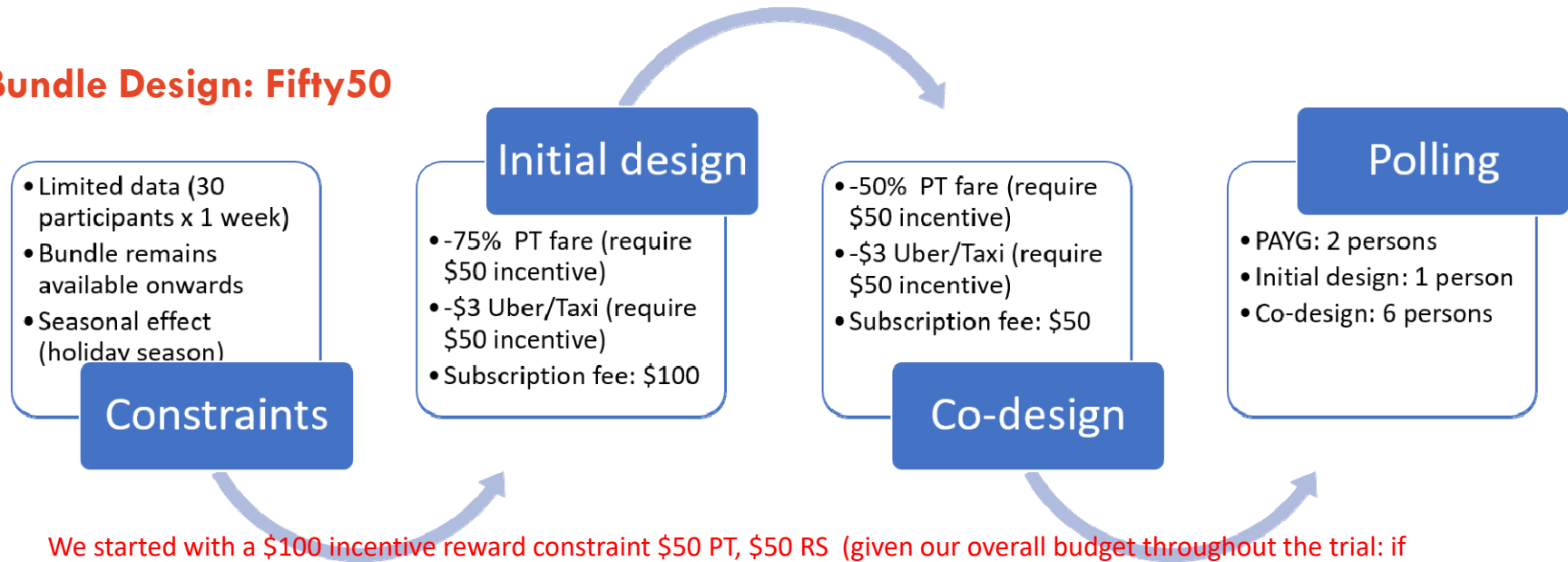
- Nov 2019: PAYG only (familiarity period)
- Dec 2019: Added Fifty50 bundle
- Jan 2020: Added Saver25
- Feb 2020: Added GreenPass
- Mar 2020: Fine-tuning bundles
 - Replaced Saver25 with SuperSaver25
 - Replaced % discount with fixed \$ discount
 - Removed GoGet from all bundle offers
- Next few slides summarised how we came up with these subscription bundles

	Nov 2019	Dec 2019	Jan 2020	Feb 2020
	Pay As You Go	Fifty50	Saver25	Green Pass
	No Monthly Fee	\$50/month	\$25/month	\$125/month
Opal	No Discount	50% off every trip	25% off every trip	Unlimited trips
Uber	No Discount	\$3 off every ride	15% off every ride	15% off every ride
Taxi	No Discount	\$3 off every ride	15% off every ride	15% off every ride
GoGet	No Discount	No Discount	15% off every ride	No Discount
Thrifty	No Discount	No Discount	No Discount	No Discount

Mar 2020: fine-tuning existing bundles

	Pay As You Go	Fifty50	Super Saver25	Green Pass
	No Monthly Fee	\$50/month	\$25/month	\$125/month
Opal	No Discount	50% off every trip	25% off every trip	Unlimited trips
Uber	No Discount	\$3 off every ride	\$3 off every ride + \$5 rides to/from any PT station	\$3 off every ride
Taxi	No Discount	\$3 off every ride	\$3 off every ride	\$3 off every ride
GoGet	No Discount	No Discount	No Discount	No Discount
Thrifty	No Discount	No Discount	No Discount	No Discount

Bundle Design: Fifty50



We started with a \$100 incentive reward constraint \$50 PT, \$50 RS (given our overall budget throughout the trial: if all took it up it would cost \$10,000 for bundle #1)

PT example: 75% discount* \$200 cap of Opal/month (\$50/wk) = \$150 cost - \$100 subscription fee = \$50 gaps (from incentive budget).

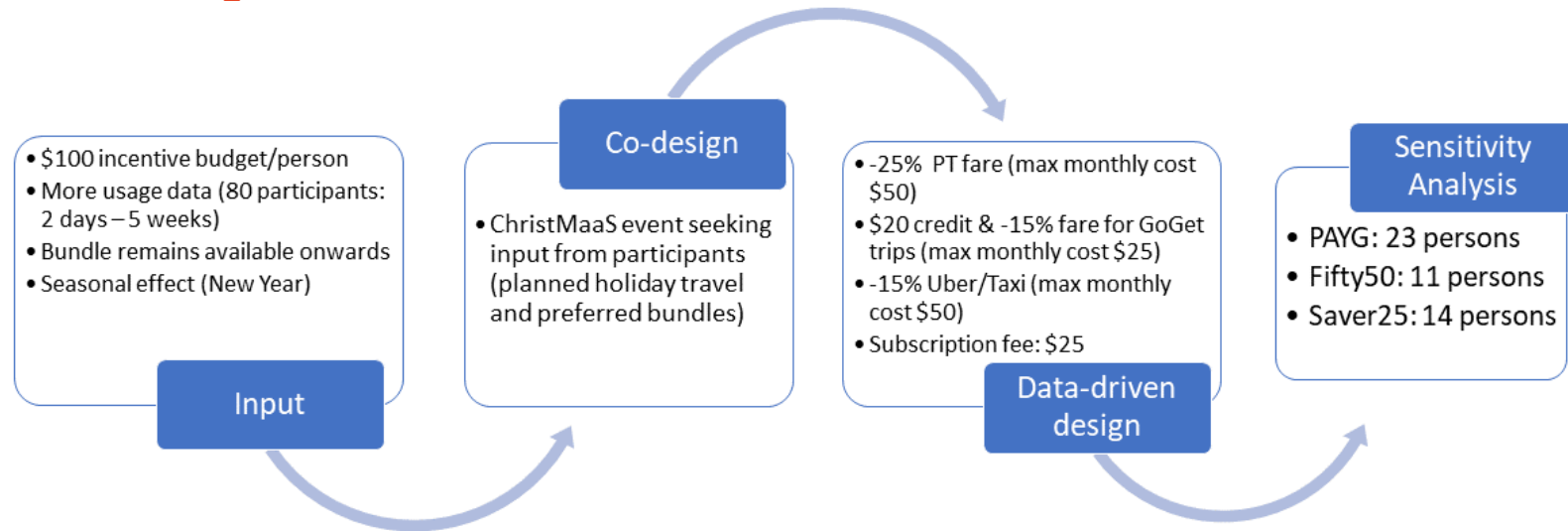
50% discount* \$200 cap of Opal/month = \$100 cost - \$50 subscription fee = \$50 gaps (from incentive budget). **Gave us the nice name Fifty50**

Key considerations:

- Seasonal effect (Dec): less work days, more parties, translating to less PT and more Uber/Taxi trips
- Once offered, bundle remains available for the remaining trial period
- Limited usage data were available

	Pay As You Go	Fifty50
	No Monthly Fee	\$50/month
Opal	No Discount	50% off every trip
Uber	No Discount	\$3 off every ride
Taxi	No Discount	\$3 off every ride
GoGet	No Discount	No Discount
Thrifty	No Discount	No Discount

Bundle Design: Saver25



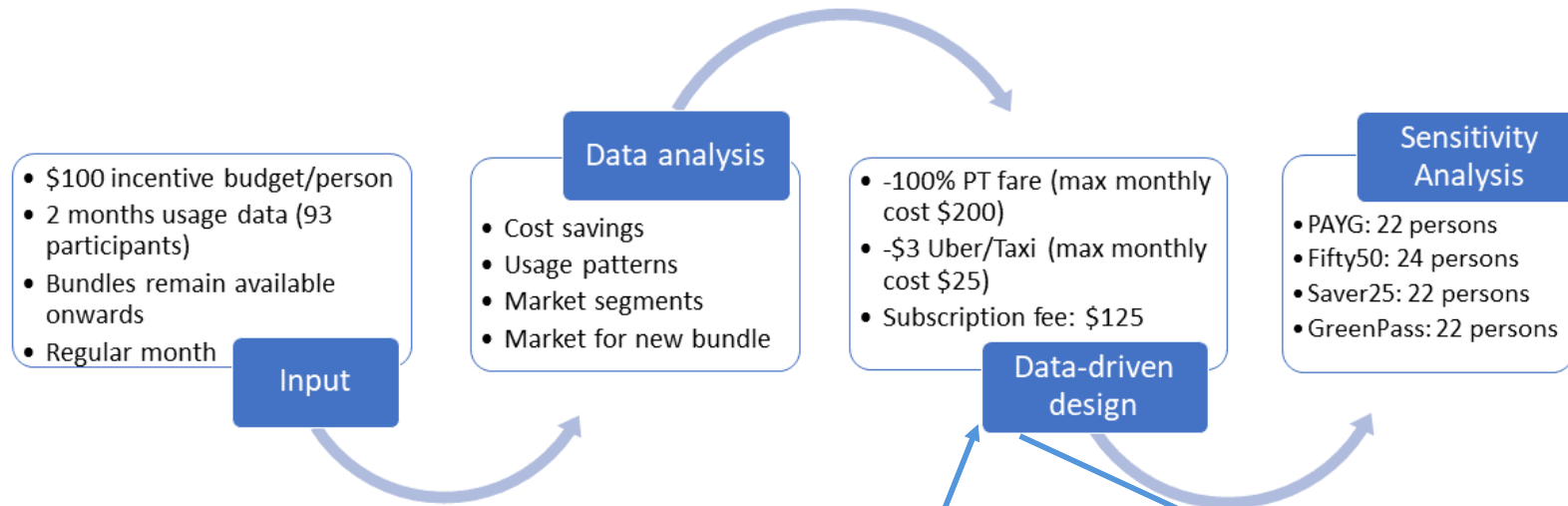
Key considerations:

- Seasonal effect (Jan): less work, more flexible (non-PT) travel
- **Testing lower entry barrier (\$25 cf. \$50)**
- Add more services (GoGet) (a generous offers of \$20 credit + 20% discount for first trip results in 3 new users; to experience Car sharing for the 1st time). 15% afterwards
- More usage data were available
- **Try to avoid diluting Fifty50 take up (less discount on PT)**

	Nov 2019	Dec 2019	Jan 2020
	Pay As You Go	Fifty50	Saver25
	No Monthly Fee	\$50/month	\$25/month
Opal	No Discount	50% off every trip	25% off every trip
Uber	No Discount	\$3 off every ride	15% off every ride
Taxi	No Discount	\$3 off every ride	15% off every ride
GoGet	No Discount	No Discount	15% off every ride
Thrifty	No Discount	No Discount	No Discount

For details, see Ho, C.Q., Hensher, D.A, Reck, D.J., Lorimer, S. & Lu. I. (2021, forthcoming) MaaS bundle design and implementation: Lessons from the Sydney MaaS Trial. *Transportation Research Part A: Policy and Practices*.

Bundle Design: GreenPass (February – a regular work related month)



Key considerations:

- Design bundle for regular months
- Segmenting the market
 - **Fifty50**: attracting regular PT users (~8 – 10 trips/week in regular month)
 - **Saver25**: attracting uses with a lower level of PT use (~4 – 5 trips/week) and one/two weekly Uber/Taxi trips
 - **Market gaps**: **heavy PT users (free PT and high subs still attractive)**

	Fifty50	Green Pass
	\$50/month	\$125/month
Opal	50% off every trip	Unlimited trips
Uber	\$3 off every ride	15% off every ride
Taxi	\$3 off every ride	15% off every ride
GoGet	No Discount	No Discount
Thrifty	No Discount	No Discount
	Pay As You Go	Saver25
	No Monthly Fee	\$25/month
Opal	No Discount	25% off every trip
Uber	No Discount	15% off every ride
Taxi	No Discount	15% off every ride
GoGet	No Discount	15% off every ride
Thrifty	No Discount	No Discount

Fine-tuning Bundles

KEY CONSIDERATIONS & ANALYSIS

- Quantitative analysis of usage data suggests:
 1. many users who stayed with PAYG are already multimodal users (have access to private car and use shared modes much less than subscribers)
 2. GoGet car-sharing is quite unpopular to the trial participants (a generous offers of \$20 credit + 20% discount for first trip results in 3 new users)

- Qualitative interviews of 22 participants & analysis suggests:
 3. users prefer fixed \$ discount to % discount
 4. users prefer more discounts for modes they use (e.g., Uber) and removal of modes they don't use (e.g., GoGet)
 5. add services (bike-share, Ola) to address first/last mile issues of PT use

WHAT WE DID TO FINE-TUNE BUNDLES

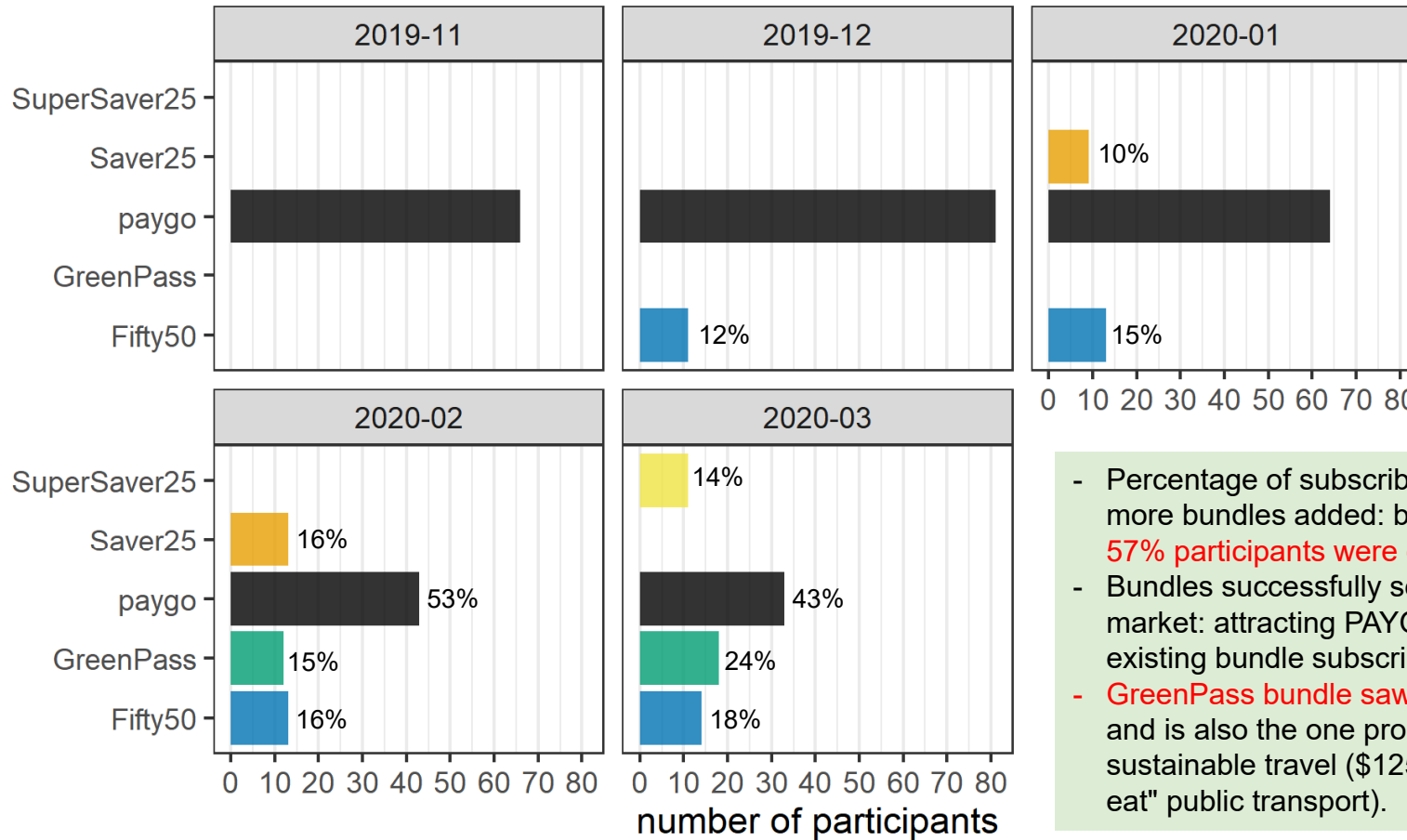
- Replace Saver25 with SuperSaver25:



- Introduce \$5 flat fare for Uber trips connecting to/from PT, address points #1&5.
- Replace 15% discount with \$3 discount, address point #3 (same change applied for GreenPass bundle)
- Remove GoGet from all bundles, address points #2&4

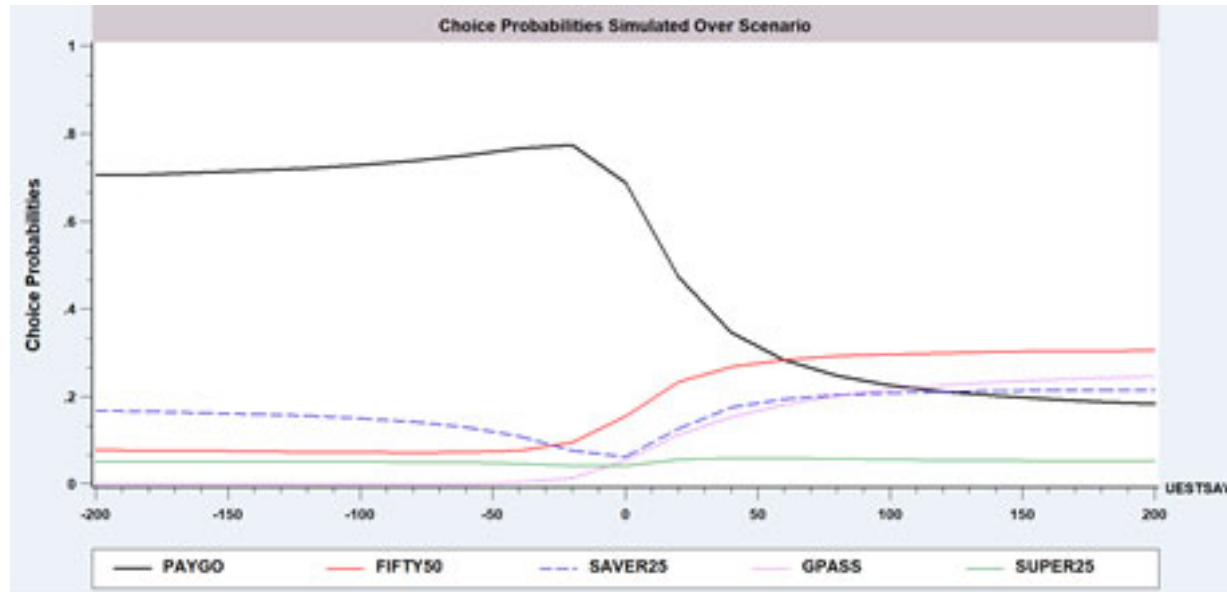
**Bundle Uptakes/ Customer Responses?
 COVID-19 set in March 20, 2021)**

Monthly bundle subscription: Nov 2019 - Mar 2020



- Percentage of subscribers increases as more bundles added: by March 2020, **57% participants were on bundles**
- Bundles successfully segmented the market: attracting PAYG users instead of existing bundle subscribers
- **GreenPass bundle saw the most growth** and is also the one promoting the most sustainable travel (\$125 for "all you can eat" public transport).

**Simulated scenario impact of estimated monthly savings (\$) by subscribing to a bundle vs. PAYG
Obtained from an advanced mixed logit model with correlated (Cholesky) attributes)**



From: Ho, C.Q., Hensher, D.A. and Reck, D. (2021) Drivers of participant's choices of monthly mobility bundles: key findings from the Sydney Mobility as a Service (MaaS) Trial, *Transportation Research Part C*, online 29 December 2020, 124. 102932.

Elliott McFadden, Greater Minnesota Shared Mobility Program Coordinator at Minnesota Department of Transportation

"This is really great. I've been searching for some evidence that a subscription model could actually work for the user, and oddly enough for all the focus in the MaaS industry, there has been very little research with real customers. I hope more MaaS projects do this kind of study to see if this is replicable."

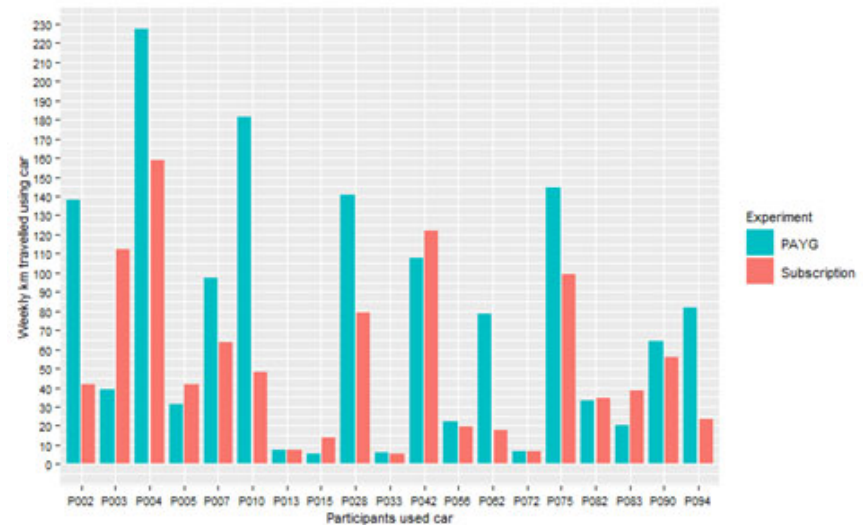
Relationship between monthly private car kilometres and bundle take up

- The Sydney MaaS trial presents new evidence (or knowledge) on the prospect of MaaS through subscription bundles to influence car dependence and this is good sustainable outcome.
- **At the mean monthly kilometres of 434, a 1 percent increase in the probability of choosing a bundle (from 0.349 to 0.353) is predicted to reduce monthly kilometres from 434 to 367 kilometres.**
- **If scalable over a large population of MaaS subscribers, this is a significant reduction in car kilometres.**
- What we do not know, however, is whether that is **dependent on the specific bundles offered** (and we suspect it is) and the extent to which such evidence might be scalable beyond the trial participants.
- We encourage further research on co-creating bundles with potential participants in order to see the extent of preference heterogeneity in bundle uptake and then to test this through further trials.

Trip, the digital platform used in the trial, did not capture car use; however, a complementary program called *Safer Journeys*, run by IAG, provided car use data for a subset of participants who also subscribed to this complementary program. Although the possibility of undertaking a journey by car was shown in the options, the use of the car was not tracked.

Hensher, D.A., Ho, C. and Reck, D. (2021) Mobility as a Service and private car use: evidence from the Sydney MaaS trial, *Transportation Research Part A*, 145, 17-33.

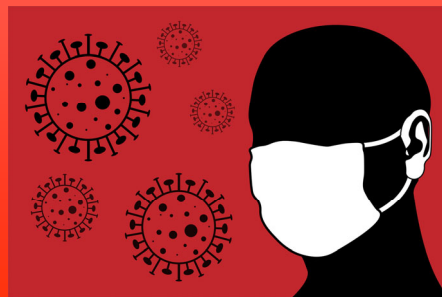
Weekly car kms travelled of participants on PAYG (Green) compared to all bundles (Red)



March after 20th and April plan under PAYG

April 2020

Planned return to PAYG Did not happen



What have we learnt through the Sydney Trial?

Lessons Learnt to date from Bundle Design

It is noteworthy that every single promotion of MaaS and an App in Australia (and most places globally) is PAYG only (even if with a discount on a mode such as Uber linked to Opal).

We doubt this is enough to achieve sustainable goals such as reducing car use and emissions. Bundles are the mechanism to deliver relevant incentives.

Lessons Learnt in Bundle Design: an Important part of MaaS

**The first lesson is that bundles are tools that serve a goal.
(This does not appear to be the case for PAYG)**

- The goal needs to be clarified before the bundles are designed.
 - Goals can vary from profit to behavioural change to customer retention or combinations thereof
 - Could be a challenge with differences between Govt. and private sector interests?
 - Could be a focus primarily of sustainable outcomes (less emissions, congestion)
- Methods for bundle design might vary accordingly.
- There appears to be a positive link from bundles to the goal of sustainable outcomes.

Lessons Learnt in Bundle Design

The second lesson is that data elicitation and bundle design have to be coordinated well if the aspiration is a data-driven bundle design.

Sydney is a nice example of a well-planned cascade with:

- a pre-trial survey,
- an initial pay-as-you-go period, and
- subsequent, monthly sequential bundle design and introduction.
- Besides facilitating continuous learning, this has a positive effect on trial participants (with appropriate feedback) keeping them interested in the trial.
 - Can also work post-trial on MaaS offers
- The monthly “feedback and choose” is very innovative and allows for a customisation of personal preferences which should be a key feature of MaaS - no other trial or actual offering has this as far as we can tell!
- The Sydney trial also shows how the data-driven approach has to be (temporally) substituted by a hypothesis-driven approach if data is not available as planned, especially in the initial months.

Main components of MaaS bundles

(Think of the many possible combinations – time frame (monthly, weekley etc.) may become even more important with Working from Home)

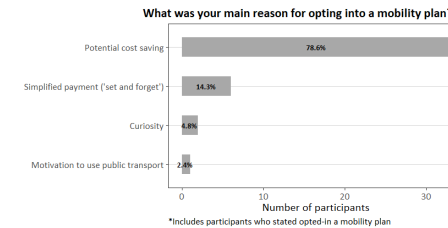
	Term	Definition	Examples
<i>Necessary design criteria</i>	Modes	Modes of transportation included in the bundle.	Public transportation, carsharing, (e-)bikesharing, e-scooters, taxi, car rental
	Metrics	Way in which a mobility budget / the mobility consumption of one mode is measured.	Time-based (minutes, hours, days), distance-based (km, miles), trip-based (number of trips)
	Target unit	Entity the bundle is sold to.	Individuals (residents, tourists), households, employee groups
	Time frame	Period of single recurrence of a subscription.	Weekly, fortnightly, monthly
<i>Additional features</i>	Discounts	Type and granularity of rebate.	Trip-based (20% / \$5 off each trip), budget-based (subscription fee or top up \$50, pay \$45)
	Caps	Limit to discounts, also referred to as budgets, depend on the metric.	Time-based (30 included hours), distance-based (300 included km), trip-based (10 free trips)
	Customizeability	Bundles can be fixed or customizable.	NA
	Roll-over option	Transfers unused credit to the subsequent time period.	NA

Source: Reck, D.J., Hensher, D.A. and Ho, C. (2020) MaaS Bundle Designs, *Transportation Research Part A*, 141, 485-501.

Assessment through Qualitative interviews: Mid-Trial and Post-Trial

The trial uses a mixed methods research approach. We draw on interviews and open questionnaire responses in addition to formal statistical models. In qualitative (and mixed methods) research, 93 is not a small sample size.

Post Trial Main Feedback



- **Firstly**, the majority of the people that signed up for the trial were **frequent users of both public transport and private cars**.
 - This supports the notion that multi-modal travellers are more interested in MaaS than others, and contradicts the fear that MaaS does not appeal to car owners and frequent car users.
 - Rather, 82% of the people that registered interest for the trial had daily access to private cars.
- **17% of the participants reported that the experience of the trial changed their view of car ownership and 82% would have purchased the trialled offering if it became available after the trial.**
 - This indicates that the trialled service has **potential to reduce car ownership**, although the behaviour change was limited during the trial.
- **Secondly**, a will to support the development of a service that might help their employer and make the transportation system more sustainable was a main motivation for signing up for the trial, followed by a curiosity about MaaS and how the trialled MaaS service could improve their traveling. **Link to Social Licence and Sustainability Charter. But once signed up see graph above.**
- **Thirdly**, quite a few participants struggled with making the service work for them.
 - They seemed to value the support and feedback functions higher than the functions included in the trialled app (the multi-modal travel planner and the mobility wallet).
 - This speaks to the novelty of MaaS, compared to existing transport services, and reiterates the notion that **(much) more than an app and a set of subscription plans is needed to put together and disseminate MaaS offerings.**
- As with previous studies of the user perspective on MaaS, this work has **several limitations**. The sample size was limited and hardly representative of the general population, the trial was confined to Greater Sydney area, and the trialled service embodied only one example of how the MaaS concept can be realized.
 - Subtle changes to either service design, target group and/or context could significantly alter the users' perception of and experience with MaaS.

Source: Smith, G., Hensher D.A., Ho, C. and Balbontin, C. The user perspective on Mobility-as-a-Service: Insights from a trial in Sydney. Submitted to *Transportation*, 24 December 2020.

What have we Learnt from the Sydney Trial? The Snapshot Followed by some Specifics

Unless one has been priviledged to undertake a MaaS trial it is hard to realise all of the many challenges, and they are substantial and Significant.

What is our major contribution in a Snapshot

- First trial worldwide with transparent reported quantitative evidence on MaaS bundle uptake and induced changes in travel behaviour
 - Fully transparent trial from design to implementation to impact assessment and lessons learnt
- Validation of previous results from SP surveys with RP data
- Successful trial set-up with tripartite structure (broker, app developer, university) as blueprint for future trials.
- This is one of the two well documented MaaS trials in the world (the other is UbiGo 1.0).
- **Key Challenges learnt from the trial***
 - No evidence of a sustainable business model without subsidy yet
 - The backbone of MaaS is public transport which is heavily subsidized and hence profitable business model for MaaS may need a level of (cross-)subsidy unless scalability can deliver enough customers to obtain a profit margin.
 - While MaaS bundles themselves might not be profitable, once sustainability improvements are priced in, they might become a viable business model (non-profit motivation).
 - Commercial claims are not proven yet
 - Profitability goes hand-in-hand with scalability and sustainability and without any of these, MaaS is unlikely to take off.
 - Those who have access to a large pool of customers through, for example, existing products or services, are in a better place to work with MaaS (as broker).
 - Multi-modal need to be reframed as multi-service
 - This requires a mix of services, including but not limiting to transport services, for segmenting the market through subscription bundles.

*Hensher, D.A., Mulley, C. and Nelson J.D. *Mobility as a Service (MaaS) – Going Somewhere or Nowhere?*, Submitted to *Transport Policy*, Topical Issues Section, 10 February 2021.

What is our major contribution in a Snapshot : Incentives

- We doubt that sustainable goals can be achieved without adequate financial rewards (including free use of non –transport services) and that these make best sense as part of a subscription plan (i.e. a bundle offer).
 - PAYG by itself is unlikely to make a difference in respect of sustainable outcomes
 - It is bundle subscribers that are more interested in continuing than PAYG subscribers
 - Without a (monetary) incentive, travellers appear to be unlikely to see very little value in MaaS in the presence of existing services that are improving all the time (such as Opal (Connect Opal, Apple pay,..), and improved technical platforms that facilitate payment in addition to searching and planning)
 - and hence one may not get enough buy-in to make a currently niche product scalable.
 - We should seriously consider electric cars in the bundle offer
 - A corporate deal with future online purchase of vehicles by broker to keep cost attractive.

What is our major contribution in a Snapshot

- While a MaaS app (and hence technical actors) is important, it is only one of the many factors that we need to structure a successful MaaS program/product offer.
 - Other key factors are **customer service, data analysis capability, marketing, sales, and billing.**
- A breadth of different mobility service providers is fundamental.
 - **But ensure a good suite of bundle offers allowing for no irrelevant modes**
 - **But how many providers will survive without subsidy?**
- Also **an open-minded core team** with complementary skills (business development, research, app development) that is committed to quality and open to piloting new ideas pragmatically.
- **Relationship building and trust between mobility providers**, customers, digital platform developer and provider, the broker and regulators is possibly the most challenging part of the MaaS delivery program.
 - **All still seem to have different and (currently) conflicting objectives.**

A final comment

– “By itself, MaaS is not a panacea [**alone**] for modern problems of traffic congestion and emissions. It needs to address all of the pain points in transport, connecting with such solutions as road pricing reform and incentives to reduce private car ownership (or at least use of such vehicles).” (page 155, Hensher et al. 2020)

– **It is a contributor but to what extent it is far too early to say!**

Hensher, D.A., Mulley, C., Ho, C., Nelson, J., Smith, G. and Wong, Y. (2020) *Understanding Mobility as a Service (MaaS) - Past, Present and Future*. Elsevier, published May 18 2020, 204 pp. (softcover and e-book). ISBN 9780128200445. Order at

<https://www.elsevier.com/books/understanding-mobility-as-a-service-maas/hensher/978-0-12-820044-5>

The MaaS book ITLS wrote is #2 on best technology and mobility books:

<https://skedgo.com/our-top-ten-must-reads-on-business-tech-and-transport/>

MaaS Benchmarked Definition (For your reference)

- MaaS is a **framework** for delivering a portfolio of **multi-modal mobility services** that places the **user at the centre** of the offer. MaaS frameworks are ideally designed to **achieve sustainable policy goals** and objectives. MaaS is an **integrated transport service** brokered by an **integrator** through a **digital platform**. A digital platform provides information, booking, ticketing, payment (as PAYG and/or subscription plans), and feedback that improves the travel experience. The MaaS framework can operate **at any spatial scale** (i.e., urban or regional or global) and cover any combination of multi-modal and non-transport-related multi-service offerings, whether subsidised or not by the public sector.
- MaaS is NOT:
 - a digital version of a travel planner
 - a flexible transport service (such as Mobility on Demand)
 - a single shared transport offering (such as car sharing)
- *‘Emerging MaaS’ best describes MaaS offered on a niche foundation. This relates to situations where MaaS is offered on a limited spatial scale, to a limited segment of society or focused on limited modes of transport. The MaaS framework becomes mainstream when the usage by travellers dominates a spatial scale and the framework encompasses a majority of the modes of transport.’*

This definition below was initiated by David Hensher (Institute of Transport and Logistics Studies (ITLS), University of Sydney) with extensive input from Natasha J Hinrichsen (TMR Qld), Sampo Hietanen (MaaS Global), Corinne Mulley (ITLS, University of Sydney), John Nelson (ITLS, University of Sydney) and Andy Taylor (Cubic).

Outputs of the Sydney MaaS Trial, 2019-2021

Version: 4 March 2021

Pre-Project

- Hensher, D.A. (2017) Future bus transport contracts under mobility as a service regime in the digital age: are they likely to change? (Presented at the *15th International Conference on Competition and Ownership of Land Passenger Transport* (Thredbo 15), Stockholm, Sweden, 13-17 August 2017) *Transportation Research Part A*, 98, April, 86-96. (Third most cited paper as of December 2020). Third most cited paper in TR A as of December 2020.
- Ho, C., Hensher, D.A., Mulley, C.M. and Wong, Y. (2018) Potential uptake and willingness-to-pay for Mobility as a Service (MaaS): A stated choice study, (paper presented at the *15th International Conference on Competition and Ownership of Land Passenger Transport* (Thredbo 15), Stockholm, Sweden, 13-17 August 2017), *Transportation Research Part A*, 117, 302-318.**
- Wong, Y.Z., Hensher, D.A. and Mulley, C. (2018) Mode-agnostic mobility contracts: Identifying broker/aggregator models for delivering mobility as a service (MaaS), paper presented at the *Australasian Transport Research Forum*, November 2018, Darwin. This paper won the David Willis Prize for best paper.
- Mulley, C., Nelson, J. and Hensher, D.A. (2019) Intelligent Mobility and Mobility as a Service, in Stanley, J.K. and Hensher, D.A. (eds.) *A Research Agenda for Transport Policy*, Edward Elgar publishers, Chapter 21, 187-195. <https://www.elgaronline.com/view/edcoll/9781788970198/9781788970198.html>
- Wong, Y.Z., Hensher, D.A. and Mulley, C. (2019) Mode-agnostic mobility contracts: Identifying broker/aggregator models for delivering mobility as a service (MaaS), *World Conference on Transport Research - WCTR 2019 Mumbai* 26-31 May 2019. Also presented at the January 2019 *Transportation Research Board Annual Conference*, Washington D.C.

During the Project

- Hensher, D., Mulley, C., Ho, C., Nelson, J., Smith, G. and Wong, Y. (2019) Understanding MaaS: Past, Present and Future, paper prepared for presentation at the *2nd International Conference on Mobility as a Service*, Tampere, Finland, November 2019.
- Hensher, D.A., Mulley, C., Ho, C., Nelson, J., Smith, G. and Wong, Y. (2020) *Understanding Mobility as a Service (MaaS) - Past, Present and Future*. Elsevier, 204 pp. ISBN 9780128200445.**
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THE SYDNEY MOBILITY AS A SERVICE (MaaS) TRIAL



DESIGN, IMPLEMENTATION,
LESSONS AND THE FUTURE
MARCH 2021



THE UNIVERSITY OF SYDNEY



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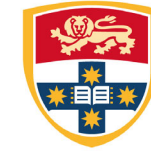


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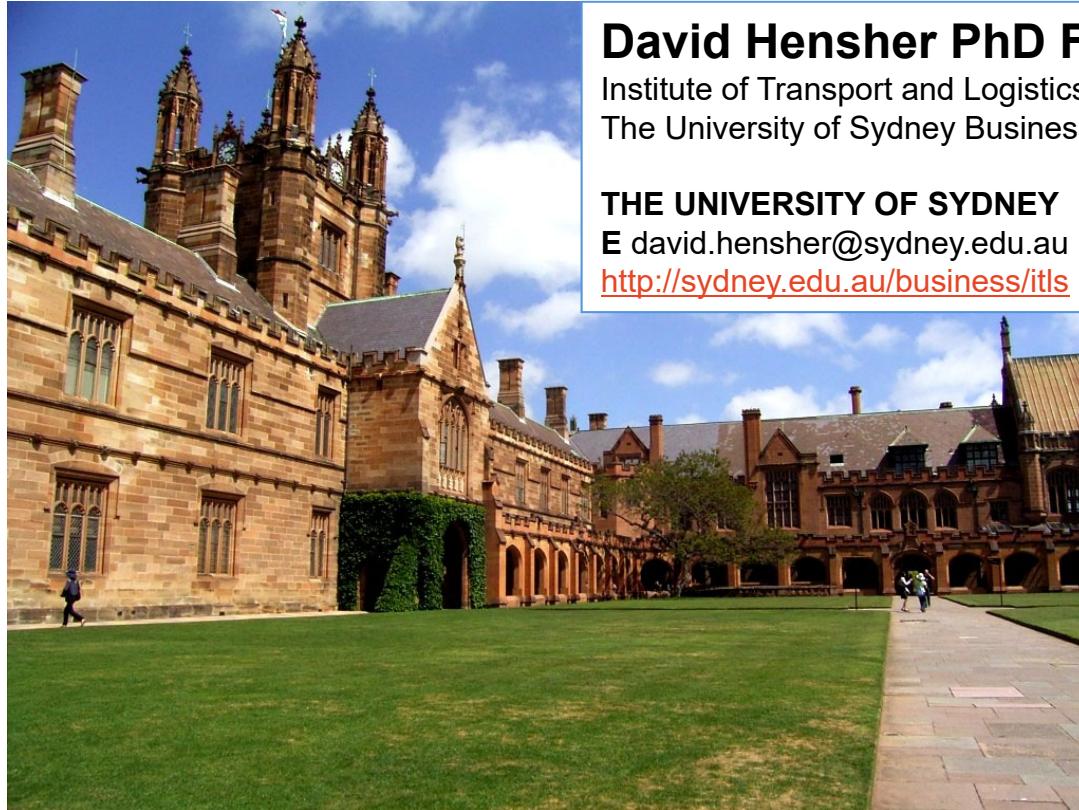
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On behalf of the MaaS Trial team, THANK YOU



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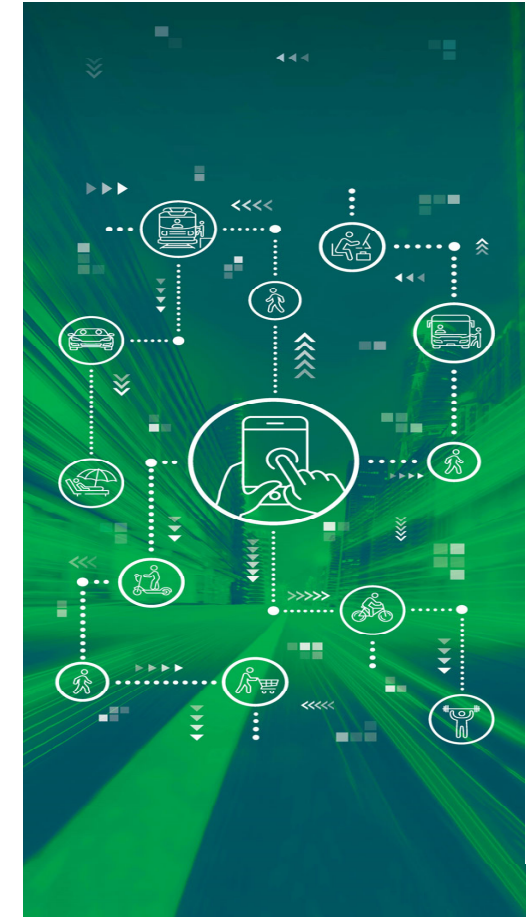


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On behalf of all my Colleagues who have contributed significantly, especially **Dr Chinh Ho** (ITLS) and **Sam Lorimer** (IAG). Other colleagues are **Goran Smith** (ITLS and Chalmers University Sweden), **Daniel Reck** (ITLS and ETH Switzerland), **John Nelson** (ITLS), **Yale Wong** (ITLS), **Andre Pinto** (ITLS), **Ivy Lu** (IAG), **Dave Worldon** (IAG), and the Skedgo team (**Tim Doze**, **Dr Brian Huang** and **Claus von Hessberg**)

Assessment through Qualitative interviews: Mid-Trial

There is clear interest in MaaS

- **57% of participants up to end of February subscribed to a bundle**
- The designed bundles have attracted interest
 - although we have only limited evidence of scalable* appeal of bundles due to the few bundles we have offered.
 - just as many as existing real offers – indeed we exceed or equal the number in Whim/Ubigo/Mobil-Flat. (Note Ubigo_2 has folded in March 2021)
- **Have we got the best set of bundles?** We do not know.
- What other bundles might we consider? That is unclear.
 - Reck, Hensher, and Ho (2020)** can guide us in ways of investigating candidate bundles.

*Hensher, D.A. and Mulley, C. (2020) Mobility bundling and cultural tribalism - might passenger mobility plans through MaaS remain niche or are they truly scalable? A Topical Issues Paper, *Transport Policy*, 100, 172-175. <https://doi.org/10.1016/j.tranpol.2020.11.003>

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Hensher, D.A. (2020) What might Covid-19 mean for mobility as a service (MaaS)? *Transport Reviews*, 40 (5).

More General Lessons Learnt to Date: Mid-Trial

Other Interesting Findings:

- Big point - **the on-boarding process exceeded expectations**; and the one-on-one time and dedication.
- Participants have stated that they are “super proud” of the trial and how it constitutes “innovation” as the “future of transport”.
- ‘One of the biggest gripes (mentioned) is in **better communicating the cost savings under different subscription plans as compared with PAYG on an ex ante basis.**’
 - **Issue of feedback in detail resolved after mid-trial feedback**
- An important point was the **exclusion of relevant modes** (e.g., Ola*, Didi**) from the offerings through *Tripi* and bundles. If a relatively popular mode i.e., excluded it can have a negative impact on subscribing to *Tripi* and indeed to a bundle.
 - * Ola is cheaper than Uber even with Uber discount.
 - ** DiDi has just entered Sydney in March.

So can a single MaaS (App) offer really cover all relevant modes & variations?

- **Service levels often are more important than cost savings...**
- **Incentives that impact on reductions in car use appear to be essential in achieving key sustainable outcomes....**

Hensher, D.A. (2020) What might Covid-19 mean for mobility as a service (MaaS)? *Transport Reviews*, 40 (5).

The Sydney MaaS Trial journey from the participant perspective

