

Mobility as a Service for the older population: a transport solution future sustainability?

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Source: EasyTransport.com.au

Study partners

- ITLS
- University of Aberdeen – led by John Nelson
- Community Transport operators in NSW and Queensland
 - Metropolitan, Suburban and outer Suburban based in NSW and mixed operation in Queensland
 - Ranging in size from:
 - 20-50 vehicles
 - 20-120 paid staff
 - 30-300 volunteers
 - 58,000 to 260,000 trips
 - Chosen to identify if there is an appetite to become mobility providers



Motivation for study

- Cohort of citizens aged 65 years or older is growing fast
- Retirement does not necessarily mean less trips
- Public transport use by older people is low and many older people still use car
- Older people cite
 - lack of direct transport

But

- Centralisation of local services changing travel needs
 - loss of direct transport impact disproportionately on the ‘old-old’
- Community Transport faces a very uncertain future

Why now?

- Opportune moment as:
 - Funding environment is changing
 - Sector moving to a more competitive market with person centred funding (PCF)

Existing situation

- Existing situation:
 - CT operators have block (per trip) funding from the Commonwealth to fund aged and frail mobility as part of a welfare strategy to allow older and frail persons to remain in their homes
 - State top-ups provide per trip funding for transport disadvantage (although this varies by State)
 - CTs provide
 - Shopping trips
 - Social trips
 - Medical trips
 - CTs offer
 - Individual transport
 - Group transport
 - CT transport is a mobility and care package
 - Some trips very expensive to provide
 - Significant cross subsidy in provision

Community Transport funding: the future

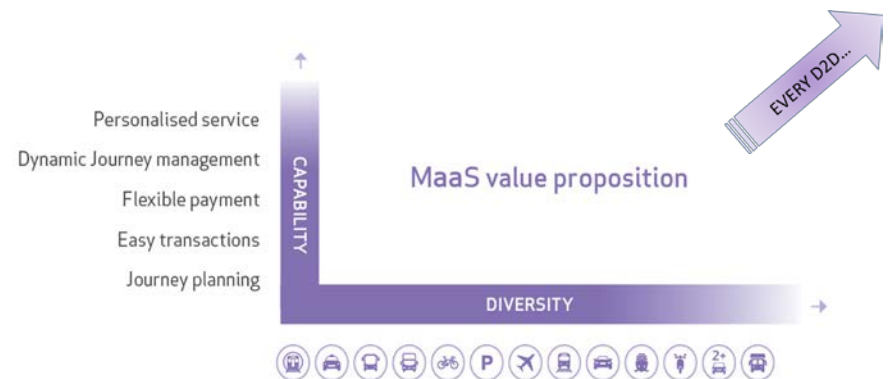
- Person centred funding in a lump sum to cover all needs (cleaning, meals on wheels, and transport)
- Individuals can direct spending as wished with businesses springing up to 'advise'
- CT will have to compete for trips
 - Likelihood is individuals will choose CT only for those trips which are expensive to provide but without the availability of cross subsidy
- Trials have already begun with disability services

The key drivers of MaaS

- Technology
 - Ready availability of digital solutions
 - Access to open data
 - Delivery of interoperable payment systems
- Regulatory reform
- Scalability – one of the critical challenges



Source:
<https://www.bartlett.ucl.ac.uk/energy/news/completion-of-the-fs-maas-project>



Source: **CATAPULT**
Transport Systems

A possible MaaS business model for CT

- Based around the key characteristics of MaaS:
 - Transport on Demand
 - Subscription Services for Payments
 - Potential to create new markets



Transport on Demand – Co-ordination and arranging suitable transport

- Co-ordination process typically predicated as a technology solution
- MaaS for aged frail will require far greater human interaction



Source:
<https://epthinktank.eu/2014/11/05/the-open-method-of-coordination/>

Subscription Services for Payments

- For the aged frail the door-to-door service provided by the CT could form their basic mobility service with add ons of
 - conventional public transport
 - other door-to-door service options (e.g. Taxi, Ridesourcing, Carpooling)
 - travel training

Bundle & Save!



Source: <http://www.prweb.com/releases/technology/bundles/prweb13526311.htm>

Study had three stages

- Discussions with CT providers to identify costs of different service provision
- Discussion with existing CT clients as to the types of mobility packages they would be interested in
- Stated choice experiment to identify willingness to pay for CT services for CT users using a bespoke survey and older respondents of the full survey

Structured conversations with CT organisations

- Wide ranging conversation about the present and future of the service
- Relevant to this presentation
 - How might existing clients view packaging?
 - Packages were seen to potentially increase resilience
 - Supported idea of providing mobility packages selling it as “this is what you are having anyway”
 - Willingness of organisation to include mobility services not provided by CT
 - CT organisations see themselves as distinctive (provide mobility and care).
 - Unsure how this distinctiveness can be maintained with other services
 - View on how mobility packages might be viewed by new clients not eligible for subsidy
 - Expensive without the subsidy
 - Potentially a way of paving the way to CT services

Discussions with CT clients

- CT clients preferred the status quo but when encouraged to think about the “new world” of PCF four packages emerged

Monthly mobility packages emerging from discussions with CT clients (November 2016)

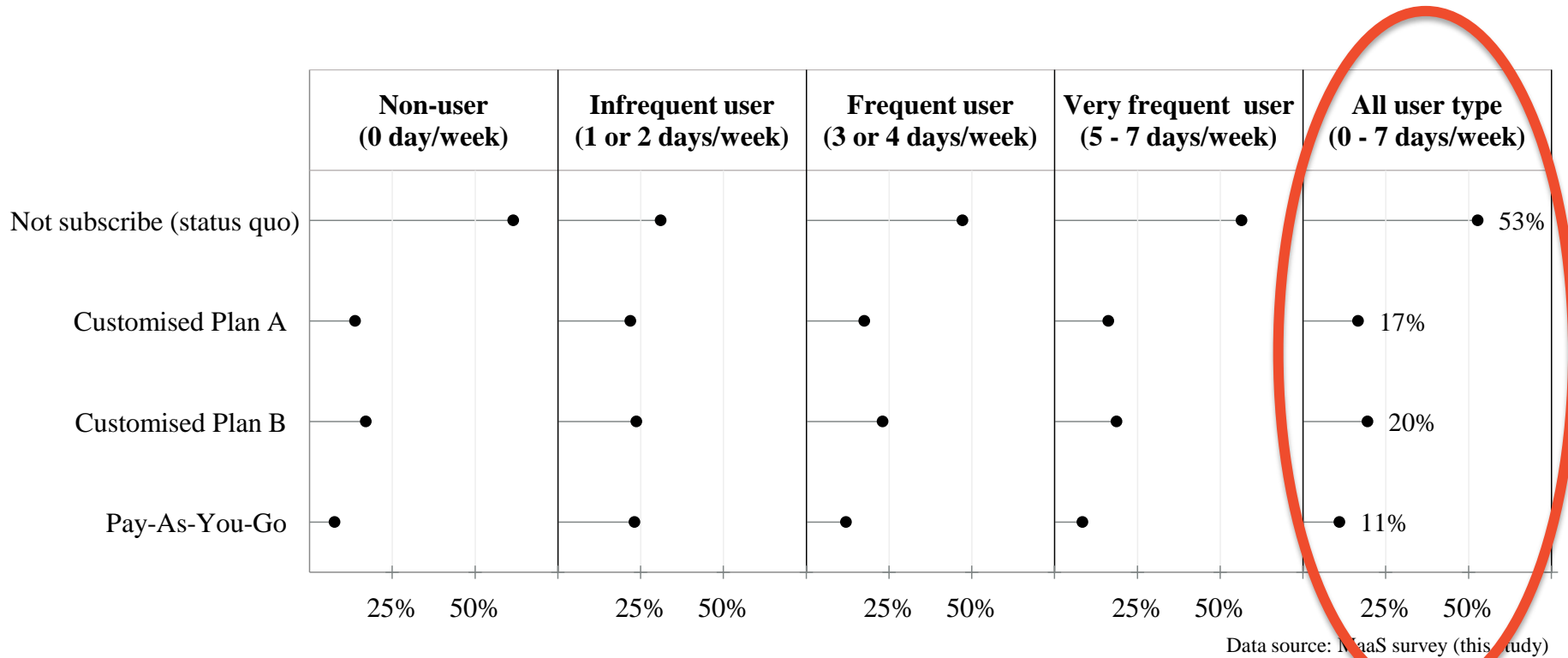
<i>Package 1</i>	<i>Package 2</i>	<i>Package 3</i>	<i>Package 4</i>
4 x shopping bus (group)	2 x shopping bus (group)	1 x shopping bus (group)	2 x shopping bus (group)
4 x social outings (group)	2 x group social outings (group)	1 x medical transport (individual)	4 x social outings (individual or group)
	6 x medical transport (individual)		1 x medical transport (individual)
	4 x emergency taxi**		1 x emergency taxi**

** emergency taxis are provided on an annual basis (so 1/12 of the cost would be allocated each month)

Stated choice experiment: response by CT clients

	CT1	CT2	CT3	CT4
Arrange own travel	70 (90%)	21 (58%)	96 (80%)	32 (36%)
Subscribe to MaaS	8 (10%)	13 (36%)	22 (18%)	51 (57%)
PayG	0 (0%)	2 (6%)	2 (2%)	7 (8%)

Older users (55+) shares of MaaS plans by car user type



WTP of population versus older people

MaaS component	Average WTP (\$/fortnight)	WTP of people aged 55+ (\$/fortnight)
An hour access to car-share	\$6.39	\$4.34
A full day access to car-share (10 hours)	\$63.85	\$43.40
One-way car-share	\$7.27	\$3.10
Round trip car-share	\$0.00	\$0.00
Every 15 minutes increase in advance booking time	-\$1.06	-\$1.29
A day of unlimited PT use	\$5.92	\$4.50
10% discount to every taxi bill	\$3.68	\$3.00
10% discount to every ride-sharing bill	\$7.18	\$5.40

Willingness to pay for CT services by CT clients

WTP for entitlement of one trip in monthly MaaS bundle	Median	Lower 95%	Upper 95%
Medical trip	\$11.71	-\$7.81	\$36.38
Shopping trip	\$10.10	\$26.38	\$51.86
Social trip	\$8.30	-\$4.81	\$25.00
Annual emergency taxi services	-\$9.83	\$35.49	\$13.24

Conclusions

- A learning curve for clients as move from subsidised to PCF – evidence is that this in itself is challenging.
- WTP is clearly low relative to cost – in some cases significantly so
- The promotion of bundling is largely a marketing exercise
 - To promote potential benefits of certainty and potential wider services if, for example, taxis are included.
 - The single point of contact for all their travel needs
- The benefit to the CT organisation of cross subsidy and in the longer run, gain revenue that can enhance provision to the core client base.