Hensher, D.A. and Mulley, C. Mobility bundling and cultural tribalism - might passenger mobility plans through MaaS remain niche or are they truly scalable?

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Abstract

This short note is a topical issues paper focussing on the role that mobility as service (MaaS) might play in the future with a question as to whether it can grow to become a scalable product offer in the mobility market or whether it is destined to a niche offering. We consider arguments that may enable MaaS to be more than a niche product and have a supporting business case with the key element being a move beyond multi-modality to multi-services.

Key Words: Mobility as a service (Maas), niche product, scalable, multi-service, multi-product, ambiguity and redundancy

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It is becoming popular in the transport sector to promote the packaging of multi-modal services, facilitated by digital platforms that offer the capability to coordinate services offered by many different suppliers. There has been a proliferation of reports and grey material praising the opportunities that bundling (or packaging) can have in achieving broad sustainability goals such as reduced emissions, and in the context of passenger transport through Mobility as a Service (MaaS), the reduction in private car ownership and use. The jury is still out as to whether MaaS will be a game changer or an interesting niche product for a limited population who can gain benefit from a one-stop approach to accessing mobility services.

Bundling or packaging is predicated on the ubiquitous development of digital applications which has allowed new ways of delivering and accessing services, as well as underpinning the development of the MaaS concept. This technology has been growing since the turn of the century with early day applications being smart cards (plastic cards with 'chips') initially used for payment systems in the transport domain. Research into the non-priced or soft benefits in the early days of these smart cards showed that there is value (and a positive willingness to pay) from multiple applications on a single smart card rather than multiple separate cards or multiple smart cards (Edwards and Mulley, 2004). This suggests that contemporary ideas of extending bundles beyond mobility to include a combination of services may well have buy-in from citizens. Telcos are an obvious service to combine with mobility, but utilities are also a good match, sharing the same characteristic of non storeablity with mobility. These also have the advantage of being necessary rather than discretionary purchases.

There is no doubt that some sort of partnering will be helpful for MaaS to develop out of the niche bracket, especially if it is all centred on the single item to carry around as with the smart phone. This is entirely possible, with even bank cards becoming superfluous with the take up of Apple pay. The big question is what sort of service bundles might emerge? Some pundits suggest that the types of service bundles that emerge may be a combination of various services, what we call multi-service in contrast

to multi-modal and not restricted to mobility, such as a mobile phone contract, with data, a streaming package and mobility options (e.g., first and last mile (micro-mobility), ride-hail and public transport) together with utility or other household related essential services (e.g., television packages such as Amazon Prime, Netflix). Retail discounts and other rewards have been favoured for inclusion, but these additions are likely to be more marginal, based as they are on discretionary purchases, unless retail reads food and groceries. This could, for those to whom it may appeal, capture all the behaviour of customers from the moment they wake until they sleep, where they go, what they like to look at, and what their willingness to pay is for an extended set of one-stop services and items. It is suggested by some commentators that most of the Telcos are pretty close to full customer capture at the moment (purely due to smart phone capabilities). If this is an active possibility going forward, then it may be just a matter of time before they transition to partnering with organisations to offer mobility. This could be the much needed shot in the arm for MaaS as the importance of getting non-mobility service providers involved becomes ever more apparent. Indeed, it is likely to be of more importance to MaaS than to the services with which it partners, as it provides the opportunity to create a business model for MaaS, especially if the aim is commercial, which has more opportunity for cross subsidy than hitherto. To support this idea, consider the business cases in other settings: telcos for example are increasingly offering more bespoke arrangements to keep their customers interested and grow their market share, including 'choose your own plan' and 'bring your plan with you' options. The blurring of the price of a subscription may well be key for these organisations to disguise the real way that the telcos make their money, through on-selling aggregated data and the broader commercial value in their partnering arrangements. Obtaining the customer is essentially marginal. Might this apply to MaaS in the future?

While we have shown, through the Sydney MaaS trial, that offering subscription bundles compared to Pay-as-you-go has appeal to nearly 50% of the market who are interested in MaaS (Hensher, Ho and Reck 2020, Ho et al. 2020), the big question remains as to whether the majority of the population really want such a tailored approach to accessing transportation? Hence the real question is whether 50% of a very small market of trial participants scales up to 50% of the broader population?¹ The outcome may well depend on the governance arrangements (see Hensher et al. 2020). If we have what is increasingly being called regulated utility MaaS, where there is competition between the aggregators in meeting demand, then there can, in theory at least, be a proliferation of MaaS packages where they are suitably differentiated to meet the needs of different people. This also applies to an extent with the walled garden type arrangement where the aggregators make contracts with selected mobility operators and create offerings to the customer based on these contracts. This is what has happened with the mobile phone/internet market where people have chosen their provider on the basis of liking the plan they offer. Other governance arrangements where there is only one demand facing aggregator (which arguably is what the Sydney trial mirrored) may not be able to provide enough packages to sufficiently differentiate and appeal to everyone. All of this suggests the need to be more focussed on mapping potential outcomes to potential governance arrangements, and to push in a direction where the MaaS bundles help create the greater sustainability that MaaS could offer, but is very unlikely to be the case if it remains niche.

In working through the arguments to support MaaS, there has always been one issue that has been a significant source of concern to us. It is that, if the packaging of mobility services is not sufficiently flexible, and this may require too many variations to be of value to mobility providers (noting that to date the few MaaS products such as Whim and Ubigo rarely exceed four bundles), then there is likely to be significant built in redundancy from a potential users position that they will not be interested in the uptakes of such offers. In a recent book by James Mumford called Vexed (2020), he is suggesting that we must be very wary of packaging, and that bundling may have significant concerning issues, since with few variants it constrains choice rather than expands choice. Within the passenger transport context, the one stop shop for all mobility that is claimed to be mobility *needs*, may in fact contain many

¹ One of the crucial experiences many people had with the Sydney MaaS trial was that they saw their monthly mobility "consumption" in dollars per mode the first time. Once consumers get more used to this, acceptance for bundles might increase, especially with marketing as the secure, easy, "not to worry about" option (mobile phone plans) as they offer a ceiling in the case of flat rates.

non-needs and missing some relevant needs, creating ambiguity, confusion and resulting lack of interest; and hence the best way to minimise ambiguity and redundancy might be to not package services. If this is true, then even if bundling may appeal to a small niche market, it is likely that scalability of MaaS is a dream. If simplicity as a pre-condition to other benefits is what most people want, this might be best provided through a digital platform that is single service focussed, exactly what we have at present for each mode (e.g., Opal for public transport in NSW, Uber, Ola, Didi etc.). Are people complaining about this? Generally no is the response.

How important is bundling to MaaS? If limited to a few options in a dominant multi-modal only setting, as is current and likely to be the case, MaaS will not grow beyond the niche. The talk of multi-service bundles is still hypothetical. To help understand potential opportunities for MaaS, it will be important to start with a full month of detailed travel activity by all modes of transport for potential users, capturing travel times, service frequency, reliability, costs, crowding, kilometres etc. as well as what non-transport packaging offers have appealed. This would allow the identification of changes that benefit specific individuals and use this to see if some possibly needs-based bundles could emerge. It is important to note that this process is likely to reveal the importance of transport service level improvements and not just financial savings opportunities. This process will not be straightforward since MaaS offers are unlikely to differ in terms of transport service levels as compared to other ways of accessing transport, and financial incentives associated with mobility services may be the only way to attract interest in a mobility-only based package. This is where the multi-service setting comes into play, and the addition of the non-transport services are what just might sway individuals to subscribe to a bundle that offers very little benefit associated with travel but benefits with being bundled with the other services (Hensher 2020). Multi-service contracts do offer the opportunity to cross subsidise, and the combination of mobility and other services may provide an overall financially beneficial package, not only to subscribers but to suppliers or brokers. However, if this is the case, one wonders how MaaS (with multi-service bundles) brings the societal benefit in terms of helping to meet sustainability goals². So it would seem the dilemma for MaaS is picking the bundle winners out of a very large stable of combinations of possibilities and developing a business case, commercial or otherwise, that can support the preferred set, where the preferences are those of potential customers in a way that makes all the services more appealing, and desirably passes the test of relevant sustainability key performance indicators which one would hope matter to the commitment of government to MaaS.

Underlying much of the thinking about the concerns surrounding bundling is what is sometimes called tribalism, or behaviour and attitudes that stem from strong loyalty to one's own tribe or social group. This needs to be placed in a cultural setting, and so it might best described as cultural tribalism, where national culture is understood as a multi-faceted concept which fits with the different approaches taken by MaaS operators in different countries (Hofstede³). Tribalism in this context also has synergies with the segmentation of markets into behaviourally sensitive segments (Anable, 2005) as Figure 1 illustrates with a segmentation or type of tribalism that could be evolving in the MaaS space. This, however, has the real risk of pigeonholing people, with profound implications for MaaS. In the words of Mumford, to let alliances fall where alliances fall. The implication for MaaS is profound.

² Outside of the transport sector, there is evidence of a growing area for organisations to have a 'social licence to operate'. This concept is big in the resources sector. As consumers become more environmentally conscious, this type of concept may translate into other sectors with a growing number of companies wanting to be certified as carbon neutral. We might expect that 'culturally' the environmental benefits of MaaS is one of the reasons that the Scandinavian countries embraced the concept of MaaS earlier than other countries. Of course, there is a role for regulators in this space too, in setting the broader societal outcomes that we expect from service operators. (personal communication with Natasha Hinrichsen).

³ see https://geerthofstede.com/culture-geert-hofstede-gert-jan-hofstede/6d-model-of-national-culture/)

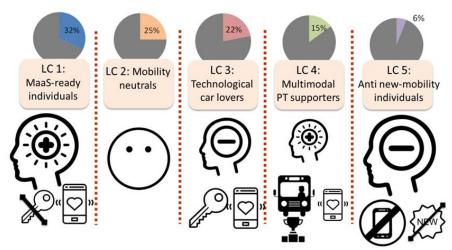


Figure 1. Five mobility tribes (Alonso-González et al. 2020)

There is a lot of evidence to suggest that (degrees of) integrated services are good and are what people would like to have, but cultural tribalism is a reminder that there are many built in prejudices that are challenging to break if sustainable outcomes are to be achieved. Perhaps another route might be to accept these cultural differences and use improved relevant information and opportunities to experience alternative ways of doing things, so that what we see in different contexts will be different. This is commonly seen through phrases such as 'I always tend to do what my friends do', 'If it is alright for other elderly people than it will work for me', and 'the world is becoming too complicated and the cost of finding out is not worth the likely benefits⁴'

For some, if not most cultural tribes, change will be slow, very slow, and the extent to which MaaS in particular can benefit by change will be inextricably linked back to how well it can demonstrate that the benefits significantly outweigh the costs (including effort) for many cultural tribes or segments. In the Telco context, customers appear to be happy with bundling as long as the increases are minor and incremental (so they are easy to comprehend and digest), and they can see 'value' in the service being offered. If not, we may, in ten years time or even sooner, talk about a program of historical interest that failed: MaaSively impactful may become MaaSively oversold! We hope we are wrong because MaaS has the opportunity to add significantly to sustainable outcomes, but time will tell; and with Covid-19 imposing an even more challenging future, that may be a very long time.

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⁴ It is noteworthy that less than 4% of household disposable income (HDI) is spent on mobile and fixed-line telephone rent, calls and internet charges (Source. The Household Income and Labour Dynamics in Australia (HILDA) Survey, Release 15.). If we exclude the cost of owning a car (~12% of HDI), then we have a similar percentage outlay on transport as on telecommunications.

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