## Bendigo and Adelaide Bank & Ors - Authorisation - A91546 & A91547

Submission to the ACCC by Dr David Glance, Director of the UWA Centre for Software Practice 9th September 2016

Contact: david.glance@uwa.edu.au

## **Executive Summary**

I would like to submit that the ACCC should not only reject the application for the banks to collectively negotiate on the matter of Apple Pay, but should actively encourage the banks to act in the interest of consumers by making Apple Pay (and Android Pay and Samsung Pay) available to their customers.

The banks' application¹ to the ACCC to collectively negotiate with Apple regarding its Apple Pay service is based on a number of claims that act directly against the interests of consumers. In the submission, they mischaracterise the nature of "digital wallets" and NFC functionality on Apple mobile devices, do not consider the development environment that implements third party functionality on these devices and overstate their own ability to innovate in this space compared to companies like Apple, Google and Samsung. The collective actions on delaying the advent of Apple Pay in Australia is acting against their own customers' desires, preventing them from benefiting from not only the added security that Apple Pay provides but also integration of Apple Pay and its use in web sites through the Apple Pay integration with the Safari browser.

If the banks are successful in their action, one potential outcome would be to deny consumers access to Apple Pay and leave them with offerings provided by the banks themselves which would be lacking in functionality and come with significant limitations. Finally, if the banks succeed in their collective action, consumers could be faced with charges for using the service that they do not currently face anywhere else in the world.

In summary, I would like to make the following points:

- [1] The banks' use of the concept "Mobile Wallet Applications", conflates the specific tap and pay payment mechanism that utilises NFC with all of the other functionality that is currently provided by mobile banking applications.
- [2] There are no limitations on the banks continuing to provide all of the functionality that typically reside in "mobile wallet applications" such as transaction details, balances, transfers etc.
- [3] There are no limitations of banks providing alternative payment mechanisms in their applications that utilise QR codes, bluetooth, wireless and other means.
- [4] The banks conflate access to the NFC wireless chip with what is actually at issue which is Apple's use of the combination of the NFC chip with other hardware such as the Secure Element, together with operating system level software. It is not correct to compare access to this specific set of hardware and software to access to general purpose hardware such as Wi-Fi, Bluetooth or the camera.
- [5] The banks claim that access to the specific NFC payment mechanisms in Apple mobile devices would lead to increased innovation has no basis because [a] this mechanism serves a specific

<sup>&</sup>lt;sup>1</sup> http://registers.accc.gov.au/content/index.phtml/itemId/1197444/fromItemId/278039//display/application

single process, [b] the banks do not have a history of "innovation" in the mobile space, in fact the reverse and [c] they are not in a position to benefit from the fact that they do not own, design or build the platforms on which these "innovations" would run.

[6] The banks actions not only lock customers out of using Apple Pay for tap and pay functionality but also from using it as a secure payment mechanism on web transactions through Apple's integration of Apple Pay with Safari.

[7] The entire action by the banks is based around an unwillingness to share in the transaction fees and worse, their desire to pass these charges on to customers. As society moves to an increasingly cashless mode, it is simply not acceptable to introduce new charges that are borne by the customer when they are already paying for credit cards, and in many cases already paying surcharges faced by merchants. Worse still, merchants, who are already confused by charges made by the banks for credit and debit card transactions, would not be in a position to handle the added complexity of the different forms of payment.

## The mischaracterisation of mobile wallet applications

The banks have equated the specific function of NFC-enabled tap and pay payments as being what a "mobile wallet application" is and does. This is misleading. It is a small part of what mobile wallet applications are and can do. Functionality such as details of transactions, analysis of those transactions, balances, transfers and payments using a variety of other mechanisms other than NFC are commonly available in these types of apps and as Apple have pointed out, the banks, as well as other companies like Paypal, Venmo, Walmart, Square have these types of applications. Coca Cola have their app QuickTap, which allows both NFC and QR code initiated payments. Starbucks' app also allows QR code initiated payments in their stores.

The banks and other merchants can indeed make use of Apple's actual wallet application Apple Wallet and include cards, tickets and other items in it through Apple's programming environment.

So, to clarify the claim, what the banks are actually arguing about is access to the specific NFC-enabled tap and pay functionality that includes other hardware and software access provided by the operating system. Everything else that may be equated with a mobile wallet application is freely available to them and indeed all of the banks have existing applications that provide this functionality.

So when the banks claim that they want to be able to negotiate around the fact that Apple may:

"otherwise preventing or impeding card issuers from developing, deploying or participating in any other mobile payment or mobile wallet services or Third Party Wallets on any mobile devices or platforms"

There is no case to answer because it is clear that nothing is preventing from doing what they want to do at the moment on the Apple platform.

## **Challenging Apple Pay**

The first thing to point out that is that Apple Pay is a major business strategy for Apple. It is used to market its phones<sup>2</sup> and will extend its integration into web and mobile apps<sup>3</sup>. Claiming that Apple should not be able to do this on their own devices with a mechanism that they have designed and

<sup>&</sup>lt;sup>2</sup> http://www.apple.com/iphone-7/

<sup>3</sup> https://developer.apple.com/apple-pay/

built has no basis in law as Apple have pointed out. The fact that Google has taken a different approach and made this open reflects the fact that [a] Google does not have control over the hardware part and so is not in a position to create the same type of solution as Apple and [b] has decided that it can commercialise the functionality through advertising and other revenues. It does not set a market precedent however. Technically, smart cards such as the cards that the banks use for credit and debit cards are more than capable of running more than one application on them for example - the banks would clearly not accept having any third party applications running on their bank cards for much the same reasons.

Central to Apple's Apple Pay strategy has been the mechanisms by which Apple onboard payment cards and provide secure NFC facilitated payments through specialised hardware and software which integrates with the operating system itself. Apple has decided that in order to maintain this level of security, uniformity of user experience and overall quality, it will not provide public programmatic interfaces to the on-boarding and payment mechanisms of cards. The attempts by the banks to equate this functionality with that of access to bluetooth, the camera and Wi-Fi is misleading. In these cases the functionality is general purpose, in the case of the NFC payment mechanism it is very specifically there for a single purpose, designed with a particular set of requirements in mind i.e. that access to this functionality would be by Apple only.

The chances of Apple changing the business model behind Apple Pay and the underlying hardware and software functionality to cater for the Australian banks is zero. There is nothing in Apple's history to suggest that it would cave on this point. It has stood up to the security services of the US<sup>4</sup> and is fighting an EU demand for US \$14.5 billion<sup>5</sup>. The likelihood that they would be influenced by 4 banks in a market as small as Australia's, collective bargaining or no, is again zero.

# What would happen if Apple gave the banks access to the NFC payment facility?

However, let us say for the moment that Apple did in fact decide to change its strategy and make the NFC payment system open to any financial institution that wanted to load their payment cards into it. What would this likely to look like given Apple's approach to customer usability, app development and application programming interfaces (APIs).

For the purposes of the current argument, the specific feature of Apple Pay that is under discussion is the ability to transact a payment using NFC. No other functionality is threatened or prevented by Apple Pay.

Setting aside these features, the only functionality that is really being discussed is:

- [1] the "onboarding" process of authorisation in adding a card to a mobile device
- [2] the payment process using the Secure Element, NFC capabilities of the mobile device, software in the operating system and the process of authorisation of that payment

In essence, there is very little way in which [1] and [2] could possibly differ if implemented by a bank as compared to Apple. This is because Apple typically implements its programmatic interfaces in such a way that the end-user experience is in keeping with the usability that is provided by its own apps. This is the case for all of its functionality and has been the case for some years with its Wallet application itself.

So when banks talk about access to the NFC, even if Apple were to provide access to it, it would be done in keeping with its general design and implementation philosophy of its development

<sup>4</sup> http://www.itnews.com.au/news/apple-defies-fbis-unlock-iphone-order-415325

<sup>&</sup>lt;sup>5</sup> http://www.reuters.com/article/us-eu-apple-taxavoidance-idUSKCN114211

environment which has been remarkably consistent over the years. For example, it is currently possible to pay using Apple Pay from the lock screen of a phone simply by holding a finger on the fingerprint sensor and holding the phone close to the payment terminal. Apple would not implement an "open" NFC payment mechanism for others that didn't support this because they would be diminishing the experience of their customers. They would not allow banks or other app developers to add any additional layers of different forms of authentication for example.

From a consumer perspective, they would see no difference between the way Apple implemented Apple Pay and the way that banks implemented it because Apple would specify how the banks could implement this functionality and would keep it consistent.

From a consumer perspective, this is what Apple users have come to expect from Apple devices. A consistent experience that is seamless.

So in the end, what would the banks have done by implementing the code to onboard the cards and access the payment mechanism? Absolutely no advantage whatsoever because Apple engineers the app experience to achieve a particular consistent standard.

However, customers could experience negative outcomes from this. The banks would be responsible for testing and updating the app if there were problems. The banks have not historically been particularly good at doing this even with their own apps<sup>6</sup>. The Commonwealth Bank for example struggled to update their early Tap and Pay app with each new release of Samsung phone. The banks would also not have any way of updating apps for beta versions of Apple's iOS software as that changed and it would be up to the banks to be specifically responsive to have new versions of their apps ready at the time new phone and operating systems became available.

There is no reasonable argument that can be made by the banks as to why Apple should alter their product strategy around the Apple Pay functionality in the same way that it would be unreasonable of Apple to demand that banks should change their ATM terminals to accept Apple Pay as a way of dispensing cash even though two US banks are doing exactly that<sup>7</sup>.

The argument of the banks against Apple Pay can't revolve around functionality and even the arguments about card on-boarding is weak given that the banks are currently involved in the process of authorising cards as they are added to Apple Pay. If banks want to individually vet each customer that adds a card over the phone, they are certainly at liberty to do so and some banks in the US have chosen to take this approach. It is again, disingenuous for the banks to claim that they have no control over the likelihood of fraud and they have not cited any direct evidence that fraud is being committed in a way that is a result of a particular weakness in the on-boarding process.

#### **Future innovation**

Contrary to the banks claim that not allowing access to the NFC-enabled tap and pay payment mechanisms will stifle innovation, blocking Apple Pay has a direct impact on consumers in a wider sense. Apple has released an integration of Apple Pay into Safari to enable commercial sites to accept Apple Pay, through the ease of biometric identification, as a payment mechanism for web transactions. Again, clearly the banks are not going to provide this type of functionality and so by actively blocking support for Apple Pay, there is an increasing amount of functionality that is lost to consumers who have invested in Apple's platform.

<sup>&</sup>lt;sup>6</sup> https://theconversation.com/why-the-accc-siding-with-the-banks-against-apple-will-not-be-in-consumers-interests-64220

<sup>&</sup>lt;sup>7</sup> https://techcrunch.com/2016/01/28/apple-pay-atm/

Blocking Apple Pay will stop consumers from using this platform to access transportation as cities around the world, including Australia<sup>8</sup>. Of course, the banks strategy is to play their own customer's frustration off at not having access to Apple Pay against Apple, something that would be facilitated by the endorsement of the ACCC to allow them to negotiate collectively.

## Passing on fees and charges to consumers

If this argument is not about functionality and "innovation", it is all about the banks not wishing to share interchange fees with Apple. This brings us into the murky area of customers, merchants, interchange fees and surcharge fees.

A full discussion of this area is beyond the scope of this submission but it is worth commenting on the nature of the use of cash and electronic payments as it pertains to systems like Apple Pay. The first thing to note is that Australia, like other advanced nations, is rapidly becoming cashless. Westpac has reported<sup>9</sup> that 53% of current payments are made electronically and predict a largely cash free society by 2022. Tap and pay transactions in particular have been adopted more comprehensively in Australia than in any other country with the banks' application to the ACCC quantifying this growth.

Because of this, the disparity between customers paying with cash vs using a credit or debit card is rapidly disappearing, and with it the rationale espoused by the RBA amongst others<sup>10</sup> for merchants imposing surcharges for customers who chose to use electronic payments, especially Tap and Pay. Clearly the demand is arising from customers wanting the convenience of using a single device to make payments rather than carrying a range of cards or even cash.

As the RBA has stated, the lack of understanding of merchant fees and the somewhat arbitrary nature of these fees imposed by the banks has led to wide disparities in how these charges are passed on to consumers.

The use of surcharges is understandable from a merchant's perspective but is ultimately short sighted as customers spend more on average when they are paying by card, especially premium cards, the use of a surcharge impacts negatively on the customer experience and overall, the encouragement of the use of cash impact on the overall economy<sup>11</sup>. In the Netherlands, the banning of the "no-surcharge rules" is a direct influencer of citizens use of cash at the expense of cards.

One can directly understand Apple's position then in not wanting banks to pass on to consumers the commission they pay Apple for Apple Pay transactions. In the first place, it would be an attempt by the banks to make public information that is commercial and in-confidence undermining Apple's ability to negotiate pricing with individual commercial customers both in Australia and internationally. Secondly, it would be an attempt to undermine the use of Apple Pay whilst potentially providing their own alternatives making Apple Pay less attractive to customers, especially if these fees were passed on to merchants. Banks, like telecommunications companies with roaming charges, are loathe to actually divulge the underlying costs of these services and the profits that they then make as a consequence. It seems therefore to be disingenuous to argue that the banks should be able to handle Apple's charges in this way.

<sup>&</sup>lt;sup>8</sup> http://www.itnews.com.au/news/adelaide-to-trial-smartphone-payments-for-public-transport-436267

<sup>9</sup> https://www.westpac.com.au/about-westpac/media/media-releases/2015/21-september/

<sup>&</sup>lt;sup>10</sup> http://www.rba.gov.au/payments-and-infrastructure/review-of-card-payments-regulation/

<sup>11</sup> http://www.sciencedirect.com/science/article/pii/S0378426609002416

#### Conclusion

Nothing about this battle being waged by the banks helps Australian consumers. I would argue that it actually doesn't help the banks who are deciding to expend time and money in avoiding paying Apple for functionality that could result in potential massive gains by engaging with their customers, and providing them with actually what they want.

Of course, customers are at liberty to move their accounts and business to ANZ and American Express and this anecdotally, this is what is actually happening. The decision by the ACCC to support the position being sought by the other banks would only accelerate this process. However, it would also slow down technological advancement and true innovation in Australia and ultimately will serve no purpose but to damage Australia's global standing and economy.

## Appendix A: Experience and Qualifications of Dr David Glance

Dr David Glance has spent 15 years in the software industry working for companies such as Tibco, IONA Technologies, Microsoft and in the finance industry working for The Royal Bank of Scotland, James Capel, HSBC and Salomon Brothers.

His experience has principally been in scalable distributed architectures including scaling web architectures at Microsoft and trading room technologies with Tibco.

At UWA, the Centre for Software Practice focusses on research and development of software relating to health but has involved the development and operations of commercial systems deployed in the cloud.

Dr Glance is a columnist for The Conversation, covering the interface of technology and society. He has written over 350 articles that have been republished regularly on sites such as the ABC, SBS, The Age, SMH, Washington Post, Lifehacker, Gizmodo and others.

Dr Glance's research profile can be accessed here: <a href="https://www.socrates.uwa.edu.au/Staff/">https://www.socrates.uwa.edu.au/Staff/</a> StaffProfile.aspx?Person=DavidGlance

## **Appendix B: Explicit Conflicts of Interest**

Dr David Glance is a share holder of Apple and banks (e.g. NAB) that are involved in this submission. He holds accounts at NAB, Westpac and ANZ.