

Response to Payments NZ Consultation on Payments for the Next Generation

Introduction

Auraya Systems (Auraya) is a global provider of voice biometric technologies to a wide range of organisations around the world. Our technology is used across a wide range of industry sectors, including incumbency within several senior government agencies in New Zealand.

We are pleased to offer the following comments on the consultation process relating to what a modern payments platform could look like for New Zealand. In providing these comments, we acknowledge that Auraya is not a payment service provider, but we would be considered a third-party service provider, given the definitions of stakeholders provided within the consultation paper.

Our comments are primarily focused on the introduction of digital identity services, and the need to prioritise safer payment processes, contained within Chapter 3 of the consultation paper.

We recently submitted a comprehensive response to the consultation paper released by the NZ Office of the Privacy Commissioner (OPC). This was a consultation process related to the potential introduction of a privacy code for the use of biometric technologies in New Zealand and fits perfectly into the Payments NZ consultation process, specifically in the areas of:

- Digital Identity and Verifiable Credentials
- Customer Onboarding
- Fraud Protection

Biometrics

As the roadmap for Next Generation Payments evolves, developing a true digital identity for New Zealand consumers is critical. Biometrics will play a key role in protecting a consumer's digital identity by offering a secure and convenient method of authentication. Unlike traditional methods like passwords and PINs, biometrics relies on unique physical and/or behavioural traits such as fingerprints, facial recognition, iris scans and voice patterns. These traits are difficult to replicate, making biometric systems more secure against unauthorized access, e.g. attempted fraud.

Biometric authentication enhances accessibility and security for customer interactions, and it will complement a consumer's experience within the proposed new digital economy by eliminating the need to remember complex passwords and knowledge-based questions. As a mature technology, biometrics is widely used across industries, from government services to banking and healthcare, to safeguard sensitive information and prevent identity theft. These are all mandatory requirements associated with the introduction of the proposed next generation digital payments capability.

The use of biometrics raises its own privacy and security concerns, requiring organisations to implement robust data protection measures and comply with regulatory obligations. The responsible use of biometric data has been addressed in our response to the OPC consultation paper.

Digital Identity and Verifiable Credentials

Strengthening the safety and security of payments, especially in relation to fraud and scam prevention, are key requirements identified in the consultation paper. In addition, creating state-of-the-art customer experiences and services is critical to ensuring the New Zealand community participates in the new digital economy. We believe that the start point for this participation is the introduction of a digital identity for New Zealand consumers.

It's widely known across New Zealand's technology circles, that over 70% of the adult population has their voiceprint enrolled with the Internal Revenue Department (IRD). Additionally, the percentages of callers being identified and verified using voice biometrics across Ministry of Social Development (MSD) and Bank of New Zealand (BNZ) are 90% and 85% respectively. These deployments of voice biometrics across New Zealand government could serve as the perfect platform to proliferate usage and create a true digital identity for all New Zealand consumers.

We consider that a consumer's digital voiceprint underpins the evolutionary path to the creation of a true digital identity. In line with the previously issued government verifiable credentials, a process would need to be implemented to add each of the additional biometric credentials required.

The role that Auraya plays in the development of a true digital identity for the introduction of next generation digital payments capability goes beyond the simple provision of voice biometrics software. It extends to providing guidance to support consumers and agencies in the areas of customer onboarding and fraud detection.

Customer Onboarding

In our experience, measuring the success of the introduction of new technologies and new operational methodologies can generally be assessed within the adoption rates. In principle, we believe accommodating the perceived level of effort required to onboard consumers is critical and is a huge contributor to success.

Consumers can be curious, yet suspicious, about the introduction of new technologies, so work would be required in conjunction with the nominated agency, to design an onboarding process that is secure, yet not invasive. We have a wealth of experience in the implementation of voice biometric systems with simple enrolment processes. For example, saying a telephone number 3 times provides enough audio to enrol a voiceprint, yet does not ask a consumer to provide personal information such as 'Name and Address' + 'Date of Birth' + 'Account Number'.

For the customer onboarding process, Auraya would provide the associated guidance to support the agencies, reinforcing the use of voice biometrics. This guidance would be important as we note that confidence in actions/initiatives taken is critical when implementing complex IT systems at scale, because the investments of effort in technology, procedural change, policy design and the various supporting infrastructure artefacts is considerable.

Fraud Detection

It's important to highlight that transformation projects, like the proposed introduction of a next generation digital payments capability, are executed over an extended period of time. These projects therefore aim to deliver as much benefit as possible for the agency, its customers and related stakeholders over the entire life of such an implemented system, at least as far as is practicable. For this reason, some of our guidance touches specifically on the amount of operational freedom available to support the agencies in retaining operational flexibility when implementing a system to perform biometric actions such as fraud detection.

For voice biometric systems designed to help detect fraud, typically the outputs are a set of indicators of likelihood that multiple acts were performed by the same person. These indicators are invariably merged with signals from other systems and meta-data from the technical ecosystem about the acts in question to produce measures to direct the attention of fraud investigation teams.

Therefore, we would reiterate that making available an alternative means of authenticating customer accounts through the introduction of a digital identity, will lead to those means being exposed to a greater proportion of fraud attack, at least in part because a fraudster will prioritise their own anonymity. The case for introducing voice biometrics is therefore consolidated, as the existing non-biometric mechanisms need to be bolstered to provide a comparable level of fraud detection and security performance.

Summary

We understand and acknowledge that the purpose of the consultation paper is to explore a next generation digital payments capability for Aotearoa in the future. Whilst considering the magnitude of the overall task at hand for Payments NZ, we would be remiss in not highlighting the critical importance of implementing and managing a digital identity for all New Zealand consumers.

To ensure that the next generation payments ecosystem provides the set of digital capabilities nominated, we believe that all New Zealand consumers will require the accessibility and security available with a biometric verification system, initially through voice biometrics. The priorities, as we understand them, are:

- to strengthen the safety and security of payments, especially in relation to fraud and scam prevention;
- to create a state-of-the-art customer experience;
- to improve customer certainty, control and comfort;
- to support economic growth and improved social outcomes; and
- to empower the payments ecosystem in Aotearoa to adapt new and emerging technologies.

Voice biometrics can initially be introduced through the telephony channel and leveraged across chat and web channels, utilising a single voiceprint enrolment and providing a full multi-modal experience for consumers.

The anticipated value proposition will be strengthened through the introduction of a digital identity, enhancing the overall payment experience and increasing security. How a consumer's digital identity is used in the future can/will be determined by specific use of a consumer's verifiable credentials, as the nominated use case requires.

There will be a flexibility in deployment options once the digital identity is created, ensuring consumers have confidence to use the next generation digital payments capability.

We (Auraya) believe that we can play a pivotal and critical role in the evolution to Aotearoa's end-state, and we welcome the opportunity to elaborate further on our recommendations at a time that is convenient for Payments NZ.