Customer payments to government strategy

Final

April 2016

V1.0.2

OFFICIAL - Public

Document details

Security classification	OFFICIAL - Public				
Date of review of security classification	April 2016				
Authority	Queensland Government Chief Information Officer				
Author	Department of Science, Information Technology and Innovation, One-Stop Shop Strategy and Implementation Office				
Documentation status		Working draft		Consultation release	☑ Final version

Contact for enquiries and proposed changes

All enquiries regarding this document should be directed in the first instance to:

Queensland Government Customer and Digital Group, Department of Housing and Public Works QGCDG@hpw.qld.gov.au.

Acknowledgements

This version of the *One-Stop Shop customer payments to government strategy* was developed and updated by the One-Stop Shop Strategy and Implementation Office.

Feedback was also received from a number of agencies, which was greatly appreciated.

Copyright

One-Stop Shop customer payments to government strategy

Copyright © The State of Queensland (Department of Science, Information Technology and Innovation) 2016

Licence

Information security

This document has been security classified using the Queensland Government Information Security Classification Framework (QGISCF) as OFFICIAL - Public and will be managed according to the requirements of the QGISCF.

Contents

Background

This document sets the strategy around customer payments to Queensland Government. It discusses the drivers, determines the gaps by exploring the future state and analysing the current state. A set of guiding principles have been stated which summaries the analysis in order to support a consistent, efficient and effective method for receiving customer payments.

One of the objectives of the One-Stop Shop program is to make government services simpler, clearer and faster for Queenslanders. The *Channel management strategy* was developed which aims to 'Provide secure and trustworthy payment processes'.

Customers were consulted about their needs and expectations around payment options, including type of payment and channels. This research highlighted the need for a consistent payment strategy across government and a preference for online payment options. Furthermore, customer journey mapping supported the inconsistencies customers face when making payments to the Queensland Government; including methods, fees, processing times and receipting. From the customer's perspective, current payment activities are not customer centric, nor in-line with industry standards that customer expect, are familiar with and have adjusted their payment transaction behaviour to.

An analysis of industry drivers and industry trends around payments as identified by Australian Payment and Clearing Association (APCA) align to the customer experience uncovered during the customer research phase. The transition to digital payments, particularly online, are now common place and expected by customers.

The gap between the current customer experience and the changing global payment landscape was assessed and the initiatives required to bridge the gap were identified. A range of issues from a customer perspective, service counters, online channels, operations and client agencies were studied. It was noted a large number of issues could be addressed by formulating certain strategic principles in relation to payment processes such as adoption of standards, improving effectiveness and efficiency adhering to standards etc.

This strategy paper discusses the development of the *Customer payments to government strategy* and lists the principles which have emerged as a result of this analysis.

1 Purpose

This strategy outlines the principles of customer payments to government as a response to the evolving payments landscape for inclusion in Customer payments strategy.

1.1 Audience

This document is primarily intended for:

- senior officers
- business owners delivering services
- business analysts
- project managers
- service delivery providers
- ICT solution providers
- chief finance officers.

1.2 Applicability

This strategy applies to all Queensland Government departments (as defined by the Public Service Act 2008). Accountable officers (not already in scope of the Public Service Act 2008) and statutory bodies under the Financial and Performance Management Standard 2019 must have regard to this strategy in the context of internal controls, financial information management systems and risk management. Please see the Applicability of the QGEA for further information.

References to www.qld.gov.au includes all franchises including Business and Industry Portal (BIP) www.business.qld.gov.au.

1.3 Scope

1.3.1 In scope

Simple customer payments *inwards* to government which are largely in relation to customer or invoice driven payments.

1.3.2 Out of scope

- Customer payments *outwards* from government
- all forms of taxation revenue.
- *complex* payments *inwards* to government i.e. certain revenue lines that have complex individual calculations
- *Government revenue collection managed through third party contracts on behalf of Government*.

2   Changing payments landscape

2.1   Industry drivers

The global payment landscape is rapidly changing and subject to the same disruption as the broader digital landscape. Mobile banking services are expanding from checking account balances to remotely initiating account transfers and bill payments, and most recently, to mobile proximity payments. Banks and financial institutions are increasingly turning to mobile services to enhance customer loyalty, increase payment processing opportunities and open new markets.

The payment industry is progressing towards the development of a new payments platform (NPP) which primarily focuses on settlement of real-time entries as far as possible. The NPP will comprise a basic infrastructure, which all financial institutions, and through them businesses and consumers, connect to. Payment channel is largely shifting to the online channel in response to customer behaviour.

Some of the payment industry trends identified by Australian Payments Clearing Association (APCA) are represented below. Source: Breaking Ground 2014 Report from APCA http://www.apca.com.au/.

CHEQUES
- 2014 recorded a 46% decline in the usage compared to 2010.
- 17.1% increase in the average value per business day in 2014.
- Removing physical transport of cheques and introducing digital cheque clearing.

CASH
- Cash usage predicted to drop below 20% by 2018
- Most expensive form of payment method.

DEBIT CARDS
- Extraordinary increase in transactions and value at POS terminals 10.4% and 7.1% respectively.
- Decline in ATM Withdrawal by transactions and value 6.1% and 3.2% respectively.

CREDIT CARDS AND CHARGE CARDS
- Marginal increase in number of transactions (1.2%)
- 5.2% decrease in total value of transactions

DIRECT DEBITS AND DIRECT CREDITS
- Average number of transactions increased per business day – 6% for direct credits and 8.3% for direct debits.
- Marginal increase in the value of transactions between 1.7% ~ 3.6%

2.2   Customer experience – payments

The retail landscape has shifted consumers' behaviour to an online environment and making payments for products and services digitally is now commonplace.

While the Queensland Government has transitioned many services online over the last few years and enabled online transactions to take place, there remains significant opportunity to improve the payment experience for customers. Exploratory research with customers highlighted that extended online payment options using credit, debit and BPAY options would be well received. In addition, complimentary research relating to the My Account project, suggested that cross-agency payments and single receipts for multiple services e.g. camping and fishing permits, would enhance the customer experience substantially.

This was further supported by a quantitative survey with 500 Queenslanders, where one in two rated the ease of dealing with the Queensland Government as difficult or average. They suggested it was complicated and slow when making a service request, a payment or requesting information. This indicates a significant opportunity to improve the customer's experience when making payments to government.

Making payments online via BPAY or credit card were the most preferred options for residents. While mentioned by only one in ten Queenslanders, PayPal was also noted. Few preferred cash and the research showed that if cash was not an option, the majority would be unaffected. This is in line with industry trends, which show a clear shift away from cash. However, counter transactions may still need to support this payment option, as cash was noted by a number of survey respondents as a preference, especially for in-person transactions and older customers. Regional differences were not apparent.

In keeping with the government's customer experience principles, a less complicated, quick, integrated online payment process would greatly assist Queenslanders wanting to make payments. BPAY, credit and debit card payment options in the first instance that are secure, consistent and supported across agencies that will improve the customer payment experience.

3   Gap analysis

In order to bridge the gap between the current state and the future state, key improvements to the business, information and technology aspects are required. This section discusses those improvements in detail.

GAP ANALYSIS – HIGHLIGHTS

View Point	Current State	Future State	Gap Analysis
Customer	Conventional payment channels and payment types	Wider choice of digital payment channels and payment types	The wide gap needs to be strategically and operationally addressed in a holistic manner.
	Lack of consistent information across channels	Consistent information across a wider variety of channels	A set of six principles, two of which are customer facing and four of which are
	No provision to make payments on the spot	Provision to receive and process payments on the spot	related to the back

View Point	Current State	Future State	Gap Analysis
	Speed of payment processing at the counters is average or slow across multiple receipting systems	Faster payment processing at the counters	office have been derived as a result of the analysis.
Industry	Decline in the usage of cash as a payment type	Non-bank players offering new payment types	A set of 15 initiatives, eight of these initiatives are customer facing initiatives and the remaining seven are back office initiatives have been identified to implement the strategic principles.
	Decline in the usage of cheques as a payment type	New Payments Platform by 2017	
	Consumers preferring online payment types	Real time settlement of direct entries	The set of principles and initiatives should realise the future state and provided consistent and smooth transition to achieve customer satisfaction*.
Back Office	Different models and agreements in relation to service level agreements	Consistent and simpler but effective service level agreements	
	Complex interdepartmental billing model	Simplified interdepartmental billing model	*One Stop Shop can provide an overview of the initiatives for more information.
	Delayed transmission of payment information	Instantaneous transmission of payment information	
Information	Limited information standards or guidelines with specific reference to payments	Strategic payment principles adopted across government	
Technology	Discrete search	Centralised and robust search	
	Lack of integration between payment gateways, POS solution and some EFTPOS	Omni-channel capable POS solution with suitable integrations across peripherals and agency systems	
	Legacy technologies preventing adoption of new payment types	Omni-channel capable POS solution which is built using API technologies which is scalable, reliable and robust	

3.1   Information

Into the future, it is envisaged that there will be consistent payment card industry data security standard (PCI-DSS) compliance arrangements. It is envisaged that PCI-DSS compliance is mandated in the relevant QGEA standards in future.

Queensland Government should move towards the adoption of Global messaging standards ISO 20022 across the board. These standards will assist in the adoption of the New Payments Platform in 2017 and provide guidance around interaction of technologies with the respective banks.

Consistent service level agreements (SLA), operating level agreements (OLA) and key performance indicators (KPI) need to be developed and adhered to from a whole-of-government perspective.

Additional work is required to determine interdependencies of QGEA policies and the move towards these information needs.

It is envisaged that agencies will adhere to Queensland Treasury's banking arrangements.

3.2   Technology

In future, the Queensland Government's payment platform needs to be significantly modified in order to achieve a seamless, consistent customer experience. The frontend of the infrastructure needs to be opened up to be accessible through a large variety of devices ranging from smart phones, websites, portals, kiosks, phone channels, while also receiving payments by mail. This infrastructure should be built using an application programming interface (API). A centralised payment platform at the backend should house all the functionality required for the frontend. The payment platform using APIs should interface the Online Payment Gateway.

The frontend devices should interface with the backend agency systems services (such as an Enterprise Service Bus (ESB). Assessment will be performed on a case by case basis to determine if the agency system is capable of interfacing with the centralised point of sale (POS) system, and the cost will need to be estimated and budgeted for. If the agency systems are legacy systems, it may not be cost effective to build the interface straight away. Agency systems product roadmaps will need to be considered to assess this further. Service oriented architecture (SOA) and governance will need to be used to implement this infrastructure.

The backend of the POS platform should use software-as-a-service (SaaS) and be scalable, reliable and secure (and hosted within Australia). This platform should interface with reconciliation and disbursement systems (RADS) and agency SAP systems. Where possible agencies should investigate and leverage of existing capabilities across the government.

4 Principles for implementing the customer payments strategy

These are the strategic principles that need to be adhered to in order to achieve a successful transition to the future state. As part of the discovery phase, over 70 issues were identified which were preventing or inhibiting the efficiency of payment were processing. The principles below are a consolidated response for addressing the identified issues at a strategic level.

Six strategic payment principles have been derived. These principles can be grouped into customer facing and back office principles. The first two principles are directly relating to the customer while the last four principles relate to the back office.

It is recommended that agencies leverage existing capabilities to adopt and implement these principles. The principles also to support adoption of multiple payment providers (such as Australia Post).

4.1 Customer facing principles

4.1.1 Enable payments through a variety of existing and new payment channels and payment types.

Highlights	- New payment channels could include mobile-POS, kiosk-POS and customer-POS (app on customer phone). - Adoption of new payment types should enable processing of digital payments using near field communication (NFC) and host card emulation (HCE). - This will improve customer convenience thereby contributing to receiving payments in a timely manner. - Adoption enables preparedness and responsiveness to customer expectations.

4.1.2 Adopt digital technologies to move towards consistent Omni-channel payment experience.

Highlights	- Building payment platforms using API technologies will ensure easier integration to systems which in-turn can provide consistent payment information across systems. - The digital solution should be robust, secure and scalable in the background, but provide adequate flexibility for innovation and attractiveness in the foreground.

4.2 Back office principles

4.2.1 Improve the efficiency of the payments receivable process across all channels.

Highlights	- Agencies should be encouraged to move towards less cash and set certain limits regarding the amount that can be received at counters (depending on the agency's business needs and the geographical location of the service counter). - Client agencies should be encouraged to move towards high value cheques (and away from low value ones) and set certain limits regarding the amount that can be received at the counters (depending on the agency's business needs and the geographical location of the service counter). - When setting any limitations, agencies must consider the impact on customers, particularly where such limitations could discriminate or disadvantage groups of people (e.g. due to geographical location, age or circumstance). - Manual transportation of cheques should be avoided and digital cheques clearing should be embraced.

4.2.2 Embrace simplified interdepartmental billing model.

Highlights	- There are a number of ways in which departments bill agencies such as flat fee, per second billing etc.; this complicates the business processes as well as the associated technical process. - A simplified and consistent interdepartmental billing model should simplify existing processes thereby improving the efficiency of payment processing.

4.2.3 Deliver payment services by adopting standards.

Highlights	- Several standards such as the ISO 20022 – Global Messaging Standards are recommended to be adopted to connect terminals to financial systems. - Adoption of standards will make it easier to communicate financial information between people and systems. It streamlines communication for payments, securities, funds, foreign exchange trading and credit card sectors. It also significantly reduces risk. - At the information layer there is inconsistent PCI-DSS Compliance across technologies, agencies and services. Although privacy laws, right to information, financial and performance management standards, and policies documented in the Queensland Government Enterprise Architecture (QGEA) touch on information and security aspects of information. Into the future, it is envisaged that there will be consistent PCI-DSS compliance arrangements.

	• Adoption of association for retail technology standards (ARTS) standard should significantly reduce the cost of technology through standards.

4.2.4 Adopt a consistent service delivery operating model across all service agents.

Highlights	• Adopting consistency to operating model will enable consistent delivery of government services which in turn brings about customer experience and can significantly addresses gaps across omni-channel experience. • This principle applies to any channel or location where services from multiple agencies are provided that is impacted by the fragmented approach.

5 Implications

Adoption of the principles will assist in bridging the gap between the current state with a move towards the industry standards and future. It would improve the efficiency and effectiveness of the payment processes in general. A cost-benefit assessment implies significant qualitative and quantitative benefits to Queenslanders. Benefits can be realised at all levels inclusive of the customer, service centre agents, counter staff, technical support staff. If these principles are not adopted the disparity widens and the cost for the government increases significantly.

6 Definitions

Name	Definition
APCA	**Australian Payments Clearing Association** – The self-regulatory body set up by the payments industry to improve the safety, reliability, equity, convenience and efficiency of the Australian payments system. APCA has nearly 100 members including Australia's leading financial institutions, The Reserve Bank of Australia, major retailers and other principal payments service providers. (http://www.apca.com.au/).
API	**Application programming interface** – a set of programming instructions and standards for accessing applications and data. Example: When someone buys a movie ticket online and enters credit card information, the movie ticket website uses an API to verify credit card information.
ATM	**Automated Teller Machine** – A computer terminal that takes the place of a human bank teller and allows the user to access basic bank services, such as making deposits and cash withdrawals from remote locations, twenty-four hours a day
BIP	**Business and Industry Portal**: https://www.business.qld.gov.au
cPOS	**Customer point of sale** – A point of sale system used by the customer, such as on their mobile device, or on a kiosk.

Name	Definition
Cross-channel	Multi-channel means having a presence on more than one channel or platform. For example, marketing products on website, in person, via catalogs etc. Cross-channel means seamlessly and interchangeably using multiple channels to market, sell, and interact with customers.
CIDM	Customer identity management
QGOV	Queensland Government
MIS	**Management information system** – this is one of the current Point of Sale solution administered by DSITI
QWIC	**Queensland Wired and Interconnected Courts -** DJAG's Queensland Wide Interconnected Courts (QWIC) partly undertakes the POS functionality.
SMS	**Short message service –** is a text message component of phone.
CX	**Customer experience** – The sum of all interactions, both positive and negative, that a customer has with a service.
Direct entry	Direct entry is a convenient, safe and reliable way to send and receive payments. It is an electronic payment system typically used by businesses to send or collect regular payments from large numbers of their employees or customers. Payments collected from customers' banking accounts in this way are known as "direct debits" and payments sent to customers' banking accounts are known as "direct credits"
ecommerce	Commercial transactions conducted electronically on the Internet
EFTPOS	**Electronic Funds Transfer at Point of Sale** – an electronic payment system involving electronic funds transfers based on the use of payment cards, such as debit or credit cards, at payment terminals located at points of sale.
ESB	**Enterprise Service Bus** – a software architecture model and/or product used for designing and implementing communication between mutually interacting software applications
ICT	Information and communications technology
IVR	**Interactive voice response** – a technology that allows a computer to interact with people over the telephone via the phone keypad.
KPI	Key Performance Indicator
mPOS	**Mobile point of sale** – A mobile point of sale, usually a smartphone, tablet or dedicated wireless device that performs the functions of a cash register or electronic point of sale terminal
NBN	**National Broadband Network** – Fast, reliable and affordable phone and internet services from a range of providers

Name	Definition
NPP	**New payments platform** – new infrastructure for Australia's low-value payments to be released in June 2017. It will provide Australian businesses and consumers with a fast, versatile, data-rich payments system for making their everyday payments
OLA	Operating level agreement
Omni-channel	A multichannel approach to service to provide the customer with a seamless experience whether the customer is online from a desktop or mobile device, by telephone or in a bricks and mortar store.
OSS	One-Stop Shop
OSSSIO	One-Stop Shop Strategy and Implementation Office
PCI DSS	**Payment Card Industry Data Security Standard** – a proprietary information security standard for organisations that handle credit cards.
POS	**Point of sale** – the time and place where a retail transaction is completed. It is the point at which a customer makes a payment to the merchant in exchange for goods or after provision of a service.
QGAP	Queensland Government Agent Program
QGSC	Queensland Government Service Centre
RADS	**Reconciliation and disbursement system** – Smart Service Queensland's system to reconcile and disburse funds collected by SSQ and One-Stop Shop on behalf of client agencies
SaaS	**Software as a service** – a software licensing and delivery model in which software is licensed on a subscription basis and is centrally hosted
SAP	A common Enterprise Resource Planning system
Settlement	The time when funds enter the recipient's bank account
SLA	**Service level agreement** - A written agreement between a service provider and customer/s that documents agreed service levels for a service.
SOA	**Service oriented architecture -**A way of designing IT and business systems such that they are made up of a set of independent components that can be plugged together in a variety of ways. Each component is self-contained and does not need to understand the internal workings of any other component but can simply invoke them through their service interface.
HCE	**Host card emulation** It enables the secure element used for an NFC transaction to be stored in the cloud rather than on the SIM (Source: APCA).
NFC	**Near field communication** Tap and Go technology used to communicate with terminals.