A **CENTER FOR DIGITAL GOVERNMENT** WHITE PAPER | TYLER TECHNOLOGIES

Creating a Unified Payment Experience

Modern technology improves constituent services and simplifies internal processes.

Introduction

Until recently, payment complexity was slowing down digital service expansion in Mobile, Alabama. Even though residents wanted more digital transactions and city departments wanted to provide them, internal accounting processes tied to multiple payment platforms simply created too much work.

"Departments would come to us and say they wanted to do online payments, and accounting would say, 'We can't take any more on,' and they'd have to wait," says Scott Kearney, chief technology officer for the city.

Mobile was hitting the wall on digital payments at a particularly inopportune moment — just as the city was preparing to annex neighborhoods that would increase its population by more than 20,000. The mayor went door-to-door to discuss the benefits of city services with prospective residents.

"When you're trying to sell city services, you better have good, streamlined ones," says Kearney.

With that in mind, the city is now replacing four separate payment systems with a unified payment platform that will streamline internal accounting and give residents a common payment experience for all city services.

"There may be more annexation opportunities to come," Kearney says. "We need to make sure we're strategic on the technology side and lined up with the mayor's strategic plan, which is all about engaging our residents."

Top Takeaways

- **Governments often use multiple department-level payment solutions to provide digital transactions for residents and businesses.**
- **These stand-alone systems create uneven payment experiences among different departments in the same government agency, causing user frustration and accounting bottlenecks.**
- **Unified payment solutions deliver a consistent user experience across government, provide wider payment options and streamline internal processes.**

The Payment Challenge

Mobile's experience isn't unique. Residents everywhere want more online transactions and expect multiple payment options — from credit cards and bank ACH transfers, to more modern payment solutions such as Venmo and PayPal, to in-person cash transactions.

While government agencies have offered digital payments for some services for decades, the online payments space has changed dramatically in recent years.

State and local governments collected a combined $3.6 trillion in general revenues in 2020, according to the Urban Institute.[1] That includes billions of individual transactions — from property levies and taxes, to permit fees and utility bills, to parking and event charges.

"A lot of local governments have seen the demand for online transactions and services increase," Kearney says. "The trend was happening before COVID, but the pandemic really exposed some of our weaknesses."

One of the biggest barriers to meeting rising expectations: departments have deployed their own siloed online payment services over the years.

"Residents will often have different payment experiences within the same municipality," says Jared Vinson, vice president of development for Tyler Technologies.

For example, a city's utility department may accept an American Express card, but the same city's tax department won't. Or one department's website might let users save payment information for later use while another's doesn't. In some cases, uneven payment processes across departments can create security concerns for users, which can discourage online payment adoption, Vinson says.

Behind the scenes, the challenges involved in managing online transactions are even greater. Online payments require seamless connections between resident-facing applications, online shopping carts, payment engines, and banking and credit card networks for funds to flow. "A transaction online involves a significant number of handshakes and players along its lifecycle," says Vinson. "There are a lot of hops in these transactions and a lot of steps to be sure fraud isn't introduced. It's not as simple as taking a bag of cash to the bank."

Managing transactions from multiple payment solutions — which must be downloaded manually or are batch processed at different times or with significant delays — can create massive headaches during the reconciliation process. "Accounting departments have to reconcile all these different variations and deposits and nuances of how these payments are coming in," Vinson says. "Systems that aren't well integrated can lead to differences and questions that are difficult to answer. The more solutions you bring into the mix, the more variances that are going to occur."

1. https://www.urban.org/policy-centers/cross-center-initiatives/state-and-local-finance-initiative/state-and-local-backgrounders/state-and-local-revenues

The Unified Payment Solution

Governments need solutions that streamline the payment lifecycle. Fortunately, technology providers now offer unified payment solutions that simplify the complex process of completing and verifying online payments.

Unified payment solutions offer a variety of benefits, including:

A better and more consistent user experience.

Routing multiple government applications or functions into a common payment platform gives constituents a common checkout experience across departments. "We're trying to make the user experience a little more streamlined," says Kearney. "We need more modern interface portals."

More payment options.

Modern unified systems let agencies accept credit cards and electronic checks, as well as Paypal, Venmo and other payment solutions. These systems can also autofill resident information, schedule payments or store payment information for future use. The systems can be configured to let residents log in with third-party credentials such as Google, Facebook or Apple. "These features bring the government payment experience up to par with commercial retailers," Vinson says.

Easier reconciliation.

A unified payment system reports all transactions in real time and integrates with other back-office applications to ensure funds are allocated properly. This streamlines the reconciliation process. In Mobile, for example, revenues from tennis and golf pro shops are required by statute to support capital projects, while fees for recreation programs and other activities are allocated elsewhere. "The money cannot be mixed, even if you're doing everything on one portal," Kearney says. "That can make the reconciliation process complex. You have to be careful."

Timely and accurate financial information.

Modern payment platforms integrate with ERP systems and other applications to provide a single source of truth for financial information. These integrations also support faster updates for public-facing services that rely on financial data. In Mobile, companies sometimes made duplicate business tax payments because a lag in payment processing made it appear the taxes were unpaid. "The city would have to issue a refund, and that takes staff time," says Udara Jayasena, deputy director of Mobile's Municipal Information Technology Department. "Now it's all in real time."

Streamlined vendor support.

A unified payment system gives the agency a single vendor to work with on support issues. "Dealing with multiple vendors can lead to some finger-pointing between parties when trying to diagnose problems," Vinson says. "It's more complicated if you have different vendors," adds Jayasena. "Now if we have a problem, there's just one contact and they take care of everything."

Simplified compliance.

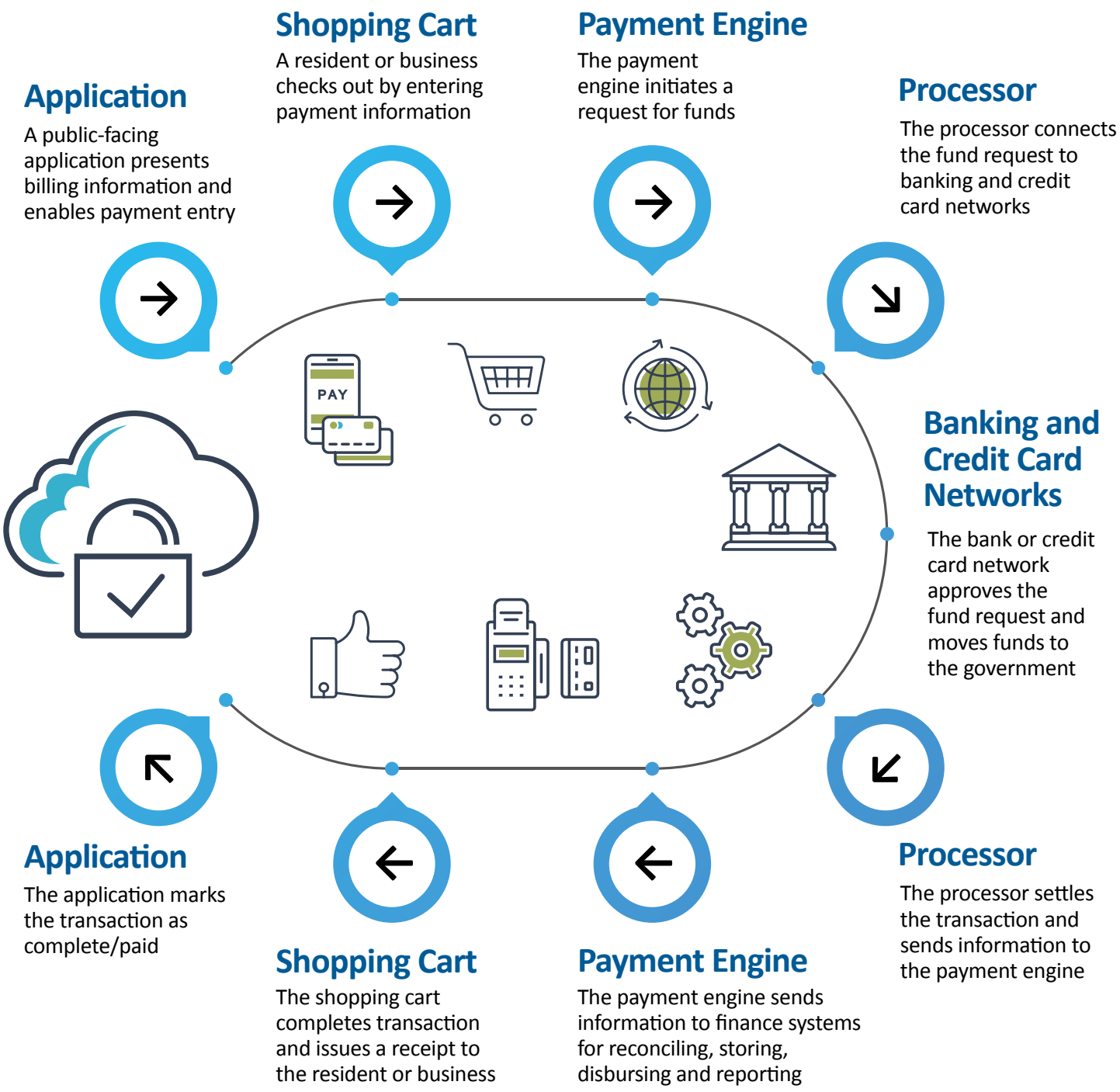
Unified solutions make it easier to meet security requirements such as the Payment Card Industry (PCI) Data Security Standard. They also help agencies create consistent service-level agreements.

Lower IT overhead.

When unified payment solutions are delivered through the cloud, agencies don't need to manage these systems themselves. They also gain the added benefits of reliability, scalability, redundancy and frequent updates. "With the cloud, you're always on the latest version," Vinson says. "Standing up cloud services is allowing us to make some of these changes more quickly and cost-effectively, and that's expanding the evolution of services coming online."

The Digital Payment Lifecycle

Processing a digital payment involves connections between public-facing government applications, payment engines, financial processors, and banks and credit card networks. This flowchart represents the lifecycle for a single payment. When agencies have multiple payment solutions and partners, payment processing occurs in multiple silos, adding complexity and making reconciliation more difficult.



Making The Transition

Implementing a unified payment solution requires local governments to take a strategic and enterprise-wide approach. "You need to start this process as soon as you can, as it can get complex with all the departments and integrations on the back end you are working with," Kearney says. "It takes time, and I wouldn't rush it because you will disrupt city services." Among the steps and strategies to consider:

Understand your payments inventory.

Survey all current digital payments across agencies and departments. Also examine traditional payment channels, including in-person and phone transactions and services for underbanked citizens. "It's important to think about the whole range of payers and the preferences they might have," Vinson says.

Engage internal stakeholders.

Make finance and accounting departments equal partners in the process from the start. This helps identify pain points with back-office functions and prioritize services and channels. "This can't be an IT project saying, 'This is what we're going to do,'" Kearney cautions. "You need to truly partner."

At the same time, IT leaders must challenge their peers to examine existing business practices. "You need to listen, but sometimes you have to push to find out if what they're telling you really can't be resolved," Kearney says. "There will be internal business processes that have to change and conform. It's true with any new software."

Make a plan.

Develop an implementation roadmap and prioritize features that align with your goals. For example, some agencies may focus on generating sophisticated back-end data and integrating payment solutions with existing applications and systems. Others may start by simplifying the user experience and providing a common payment interface.

Evaluate payment vendors and solutions.

Focus on companies that routinely work with public sector clients. "Government use cases are much more complicated than what you'd have for a traditional retailer," Vinson says. "There is no shortage of payment solutions, but most are not well equipped to meet the needs of local government."

Make sure solutions can support a wide range of payment options and comply with PCI security standards. They also must integrate with existing applications and systems, including ERP systems. "Having a highly flexible and configurable solution out of the box is critical," Vinson says.

Be strategic about transaction fees.

Agencies must decide if they want to absorb interchange and merchant processing fees or pass them on to constituents by adding a convenience charge at checkout. In some cases, local or state ordinances prohibit such fees for certain types of transactions. In others, agencies may choose not to add fees to encourage online payment adoption, which can save money in other areas. "It's an agency-by-agency decision," Vinson says. Vendors should understand the nuances of government fees and work with governments to determine the model that best meets their needs.

Work incrementally.

Begin with a pilot and roll out services gradually. "Work out all your issues before you start taking on additional payments, and be realistic about timelines," says Kearney.

What's Next

Creating unified payment experiences is an essential part of technology modernization for state and local governments. "The main thing is, always try to look for ways to improve the constituent experience," Kearney says.

Behind the scenes, unified payments simplify back-office operations in ways that improve government efficiency and help departments deliver better services.

Payment modernization also prepares governments to transform another aspect of constituent services: disbursements. Representing the other side of the financial equation, digital disbursements can include regular outflows such as child support and vendor payments or one-time payments like disaster relief, tax refunds and jury duty pay.

Digital disbursements enhance constituent experience by speeding up payments, while cutting administrative costs and reducing the risk of fraud. "It's an opportunity to take a highly manual process and digitize it," says Vinson, noting it costs governments an average of nearly $8 to issue a paper check. "This is the next wave of digital efficiency and resident service."

Ultimately, advances in payment technologies are making it easier for agencies to offer more digital interactions to residents and businesses while reducing cost and workloads for internal staff.

"We're seeing a dramatic expansion of different types of services and interactions — parking tickets, permits, court fees, licensing and more," Vinson says. "Any type of interaction you would have for your government can be enabled online."

City of Mobile Improves Payment Experience for Residents and Staff

In summer 2022, Mobile, Alabama, started phasing out its existing payment processing services and began moving to Tyler Technologies' unified payment solution running on the Amazon Web Services (AWS) Cloud.

The unified platform is replacing department-level services from four different payment processors that handle everything from business license fees and taxes to building permits and false alarm fines. The city launched the project by moving its cashiering process to the new system. Now it's integrating existing online payment systems in phases.

Mobile's goal is to provide a common experience where residents and businesses can conduct all financial transactions with the city in one place, says Chief Technology Officer Scott Kearney.

"You have city departments functioning as independent businesses. Sometimes you need a PhD in local government to figure out the process," says Kearney. "It's a reflection of how our internal business processes were set up over the years."

The use of multiple payment systems and vendors also required Mobile's accounting department to manually process transactions from some departments. The setup caused reconciliation issues because different payment processors sent reports at different times. "Matching numbers became a big headache for the accounting department," says MIT deputy director Udara Jayasena.

Now, Mobile's accounting department receives financial information in real time, which relieves reconciliation headaches and provides faster updates to citizen-facing applications. "Having a payment processing system so tightly integrated with our ERP was really attractive," Kearney says.

In addition, Mobile plans to connect the new unified payment solution with Tyler's Resident Access application to develop multi-department workflows. This will streamline things like getting approval to hold an event at a city park, which currently requires constituents to visit the police, traffic engineering, parks and recreation, and public works departments, each of which may require a permit or fees.

"That will make the citizen experience much better and really improve the city's image," Kearney says.

This piece was written and produced by the Center for Digital Government Content Studio, with information and input from Tyler Technologies.

Produced by: CENTER FOR DIGITAL GOVERNMENT

The Center for Digital Government, a division of e.Republic, is a national research and advisory institute on information technology policies and best practices in state and local government. Through its diverse and dynamic programs and services, the Center provides public and private sector leaders with decision support, knowledge and opportunities to help them effectively incorporate new technologies in the 21st century. **www.centerdigitalgov.com.**

Sponsored by: tyler technologies

Tyler Technologies (NYSE: TYL) provides integrated software and technology services to the public sector. Tyler's end-to-end solutions empower local, state and federal government entities to operate more efficiently and connect more transparently with their constituents and with each other. By connecting data and processes across disparate systems, Tyler's solutions are transforming how clients gain actionable insights that solve problems in their communities. Tyler has more than 27,000 successful installations across more than 11,000 sites, with clients in all 50 states, Canada, the Caribbean, Australia and other international locations. Tyler was named to Government Technology's GovTech 100 list five times and has been recognized three times on Forbes' "Most Innovative Growth Companies" list. More information about Tyler Technologies, an S&P 500 company headquartered in Plano, Texas, can be found at **tylertech.com**.

ADOBESTOCK

©2023 e.Republic LLC. All rights reserved.