

Report to Council



Date: May 1, 2023
To: Council
From: City Manager
Subject: Digital Transformation Program
Department: Information Services

Recommendation:

THAT Council receives, for information, the presentation from Information Services dated May 1, 2023 regarding the city's digital transformation initiatives.

Purpose:

To provide an overview of the City's digital transformation initiatives

Background:

Information Services (IS) provides technology services throughout the City, including YLW. Technology services include online citizen services, internal support for service providers, and contributing to / enabling the growth of the technology community in Kelowna.

The pandemic forced an unforeseen need to adopt technologies at an accelerated rate. As a result, local governments across Canada had to pivot, and Kelowna was no different. The shift was significant, creating solutions that enabled a much more responsive and mobile workforce with services available 24/7.

While these changes were made in response to COVID-19, uptake and continued interest from residents to interact with the city more effectively and efficiently remains. As people continue to do more of their interactions online, whether it is their banking, shopping, or communicating, it makes sense many would prefer to do their interactions with the city online as well. While offering more services online can help with customer convenience, it can also help City staff with support and intake – ensuring that staff spend less time on lower-value activities. To ensure successful solutions are developed, the IS department has placed a design focus principle around its tools, prioritizing the customers' user experience (UX) while iterating with staff to ensure what's developed also best supports their needs.

Overview:

Many solutions are made possible by moving to be a cloud-first organization. Over the past three years the city has moved over 30 per cent of on-premises systems to cloud-based systems, with a goal of achieving over 50 per cent by 2025. The cloud brings cutting-edge technology to our environment, such as Artificial Intelligence (AI), machine learning (ML) and predictive analytics. Services in the cloud are

based on consumption, which allows the City to use innovative technology without increased capital investments.

A few examples of new solutions that improved access and efficiencies include:

- The introduction of E-signatures has shortened the execution period of contracts in procurement by eight days.
- Shifting the business licenses and permitting processes to an online experience resulted in the following for 2022:
 - Building permit volume:
 - Of 3,221 building permits issued, 24% (785) were applied for online, 20% of those were completed after hours
 - Building permit revenue:
 - Of \$7.5M in permit revenue, 13% was collected online
 - Business licensing
 - Of the 2,459 applications for new business licenses received, 81% were submitted online

As we continue offering more building permit support online, we expect the proportion of online permits and applications to grow significantly over the next few years.

Currently, we are designing and developing a new system to simplify the Permits, Licensing and Land (PLL) application process for our customers and streamline current workflows for staff, allowing for greater collaboration across departments and improved service delivery to the public.

There is an opportunity for the city to provide more customer support using AI. The city received a grant through UBCM to develop an AI chatbot to accelerate the building and development permit process, guiding users on how to qualify for specific building or development permits and how to begin their applications. This will help us achieve better submissions and higher quality data, reduce staff time, and increase efficiency while allowing residents to interact with the city 24/7.

Our chat/voice bots (digital assistants) have seen significant growth, and the potential to provide a better citizen experience is now here. Some major service areas that have benefited from our digital assistants include YLW, property taxes and utilities, and winter maintenance.

In the case of the airport, the bot played a significant role in informing fliers during COVID about the latest rules and regulations around travel and COVID testing, in addition to flight status and security line wait times. Property Taxes benefited from answering questions that staff receive frequently and, with the integration into our phone lines, saw 20% of calls answered without staff involvement. We anticipate this number growing as we introduce more self-serve options. For example, the team integrated an internal system to provide time estimates based on road prioritization to address winter maintenance issues related to snow plowing. As a result, we saw a 75% conversion rate where staff did not need to field calls on plow availability.

Upcoming chatbot/digital assistant projects:

In developing and managing our chatbots, the team has leaned on design thinking principles to understand our residents' needs to ensure we meet their expectations. The team just launched a chatbot

and voice assistant for the Landfill that will incorporate FAQs for Landfill operations and integrate with the Recycle Coach application used by the RDCO to provide information about trash collection and recycle pickup dates, accepted recycling materials and where materials can be disposed of or recycled. This solution will also strive towards providing wait times at the Landfill through an automated process. The Landfill bot will be released in Q1.

The team is also working on a Bylaw Services chatbot and voice assistant to replace the after-hours call centre service. This bot will save the Bylaw Services department \$8,250 annually for the call centre alone. In addition, the team is working to integrate the bot with the existing service request system so users can submit a complaint or request and check on the status of existing requests over the phone or on the chatbot on kelowna.ca.

Improving on the existing YLW chatbot, the team is developing a standalone digital avatar that will live in the airport to assist travellers in person. This avatar will have separate information from our existing YLW chatbot specific to questions travellers may have once they are in the airport terminal, such as wayfinding and assistance-finding services. Unlike our existing chatbots, the experience will be more like speaking with a human customer service agent – a need that was shared with us by our users.

Enhancing the Citizen's Online Experience

We will continue to evolve and expand our online service offerings, making it easier for citizens to access services. New initiatives such as a Citizen login, single-sign-on (with your BC Services card) and improvements to the service request system will help create a personalized experience through kelowna.ca, making it easier for citizens to connect and engage.

Data Governance Strategy

The team is developing a corporate data strategy for improved data quality for data-driven decision-making. The strategy will help us standardize data in business areas across the city to make aggregating and sharing information faster, easier and more consistent. This will also benefit our ability to report on key performance indicators. The data team is employing data governance principles to use automation and validation to streamline data entry and update processes in several areas: utility service connections, fire hydrant updates, parcel updates, imagery subscriptions, chatbot integrations, and record drawing intake.

Model City – A data-driven planning solution

A digital twin represents a real-world system that serves to emulate an actual system. Model City is Kelowna's digital twin. It was created to provide staff and Council with consistent and trusted data for informed decision-making. Our goal in 2023 is to take this information and continue to make it easy for our development community and public to use. When deciding on the city's future growth, city staff can see the growth, tax and environmental effects on the community.

Data and climate change

An area the City has become a leader in is our EOC and flooding dashboard. Flood risks are a yearly concern for City and regional staff. The City has developed an award-winning dashboard that pulls data from snow pillows, rivers, creeks and lakes. This data supports staff efforts in an emergency and for future planning purposes. The dashboard has predictability capabilities to help staff understand when a flood event may happen. The dashboard is available to our regional partners and continues to evolve.

Planning for a City of the Future

The city is currently undertaking an Innovation Assessment and Digital Transformation Strategy to understand pain points to innovation and areas of opportunity for automation and business transformation. This will allow the city to prioritize projects with the most significant impact. Past examples include the automation of drafting processes or the current project with the Rogers Create Lab to address how we can best manage and create revenue from the loading zones in our downtown core. Another example is the shelter vacancy dashboard which allows front-line responders to quickly identify available spaces to connect people experiencing homelessness with shelter. The city developed an application used by Journey Home that enables shelter operators to update available beds in real time. This allows front-line staff to quickly match people sheltering outside with available beds. Our ability to work with like-minded partners to address complex organizational needs is essential to meeting our goal of becoming a City of the Future.

Considerations not applicable to this report:

Legal/Statutory Authority:

Legal/Statutory Procedural Requirements:

Existing Policy:

Financial/Budgetary Considerations:

External Agency/Public Comments:

Communications Comments:

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