City of San Jose Digital Strategy

Consolidated Insights & Recommendations

HBSCP Team

January 26, 2021

Agenda

Project Details
SJ & HBSCP Objectives and Summary of Work Performed

Executive Summary
High level summary of Observations & Suggestion Themes

Theme #1: Build key initiatives with Customer-Driven Design & Process Re-engineering

**Theme #2:** Use a Specialized & Targeted Approach for Equity & Inclusion

Theme #3: Adopt a Digital-First strategy focused on Leapfrogging & Resident Dialogue

Conclusion

OBJECTIVE
The City of SJ & HBSCP

The City of San Jose faces **new challenges with the global pandemic**, the ensuing economic downturn and a heightened call to ensure equity for its residents, sparking community and organizational discussions about its services. The City must transform at the pace of these challenges. One focus area is **how the City "tools" the organization to innovate** through data, responsive services, and upskilling City team members to drive change.
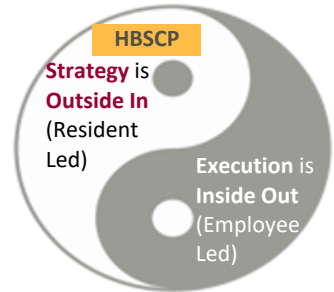
HBSCP was engaged to help the City:

1) Create a **digital strategy framework** to enable **repeatable processes** to digitizes core city services
2) Suggest **organizational designs** to manage challenges
3) Provide suggestions on **digital-first organizational mindset** in a way that causes re-engineering of City processes
4) Suggest **messaging and decision-making frameworks** would help drive City priorities to digital
5) Assess City's digital service & **recommend innovation areas** and structures

HBSCP

Strategy is **Outside In** (Resident Led)

Execution is **Inside Out** (Employee Led)

External (HBSCP)

High Level "Reality" of Residents of SJ priorities
(How they want to consume City Services)

Resident Aspiration for a "Digital First SJ"
(Art of the Possible based on Resident's Needs)

Internal (PbyP Team)

Priorities

City Strategy

Department X Strategy	Department Y Strategy	Department Z Strategy
Tactics, goals, metrics	Tactics, goals, metrics	Tactics, goals, metrics

Digital Strategy

Digital Initiative 1	Digital Initiative 2	Digital Initiative 3

Execution

HBS Community Partners

HBS Community Partners (HBSCP) is a nonprofit program offering curated volunteer experiences that enable HBS alumni to channel their skills & experience for social good.

Lani Ingram *IoT / Smart Cities*	**David O'Reilly** *Healthcare (Digital)*	**Niki Santo** *Education/Innovation*	**Ratnika Prasad** *Environ / Consulting*	**Arvind Satyam** *IoT / M&A / WEF*	**Carlos Marin Capriles** *Tech / Consulting*
President & BoD, Eclipz (Cybersecurity) CEO, Verizon Smart Communities; Sr. Dir, Cisco S+CC CFO, Cisco Globalization Cntr Board: Dialsource, SVTP, USC, Urbanova PwC	Co-founder/CEO, Dyad Therapeutics (Parkinson's disease) Chief Platform & Product Officer, Proteus Digital Health President, Catalyst Biosciences Chief Business Officer, Iconix Biosciences	Director, Chapman Univ UC Merced Innovation & Entrepreneurship Lab, Chair Advisory board SV Talent Partnership President, Harvard Club Silicon Valley	Dir. Energy Strategy, Environmental Defense Fund; World Bank Intern; Bain & Co Ops Mngr, Cornell Venture Capital HBS & Harvard Kennedy School	Chief Commercial Officer, Pano; Young Global Leader World Economic Forum; Board of Trustee, NewCities Managing Dir, Cisco S+CC Dir M&A, Cisco	Google Product Manager McKinsey, Consultant Sonder, Product Manager Cenovus, Mechanical Engineering

Summary of Approach and Work Completed

Review City Information
Studies, audits, resident reviews, roadmaps, etc.

22
City of SJ Interviews: ESD, PRNS, Animal Care, Police, DoT, Public Works, CIO, Racial Equity, Civic Innov, Planning, Fire, HR, etc.

Resident Survey
Digital survey sent in 5 languages & promoted with various city channels

11
NGO and CBO Interviews (focused on Vietnamese, Latino, unhoused, Muslim & Eritrean communities & on education services)

Outside of SJ Interviews
Studies reviewed & domestic/int'l cities & Smart City Expert interviews

>60
Reports and internal files reviewed: Auditor's reports, 311/911 support, roadmaps, smart city, UI/UX studies, priorities & strategic plans

City of SJ Interviews
Department leaders, project managers, key influencers

456
Resident Responses
- 377 English
- 17 Spanish
- 36 Vietnamese
- 19 Traditional Chinese
- 6 Simplified Chinese

NGO/CBO Interviews
Orgs supporting Latino, Vietnamese, Filipino, unhoused, Muslim, ESL, etc.

17
Domestic and Int'l cities and city experts

10
Studies Reviewed

The external analysis produced *common themes for approaches* the City could take to ensure their long-term digital strategy *bakes in the needs of San Jose residents*

1

Build key initiatives with Customer-Driven Design & Process Re-engineering

2

Use a Specialized & Targeted Approach for Equity & Inclusion

3

Adopt a Digital-First strategy focused on Leapfrogging & Resident Dialogue

Augmenting Culture & Empowering Employees to Execute

The external analysis produced *common themes for approaches* the City could take to ensure their long-term digital strategy:

1. *is empathetic to the needs of the residents* in different communities across San Jose,
2. *increases the effectiveness* of initiatives through process improvements, and
3. *circles back with residents* to evaluate effectiveness & promote continuous improvements.

PRIMARY THEME

1

Customer-Driven Design & Process Re-engineering Approach to Key Initiatives

SUB-THEMES

a

Customer Feedback Capture & Data Driven Project Mgmt

b

Internal Process Re-Engineering Focus

c

Develop a Post Project Closed Loop Process

EMPLOYEES & CULTURE

- Active recognition & reward for cross department collaboration, sharing of data, and process improvements
- Extensive Agile Project training and Execution Support
- Permission to Plan: Create a Ready Set Go mindset (vs Ready Go)
- Partnering w/ residents vs just taking care of residents

Goals & Recommendations

	Customer Feedback Capture & Data Driven Project Mgmt	**Internal Process Re-Engineering Focus**	**Develop a Post-Project Closed Loop Process**
GOAL	● Move from a high reliance on intuition based decision making to a data driven model. ● Create an affordable and scalable way of capturing and maintaining resident feedback across all departments	● Ensure critical projects start with process re-engineering to reduce the number of touch points & improve resident & employee experience ● Increase effectiveness of projects ● Reduce overall costs for automatable items & shift focus to more complex/high touch areas	● Ensure the initiative was effective from the resident's perspective ● Create a partnership dialogue approach with the residents - talk to them pre & post the project ● Enhance continuous improvement mindset from the eyes of the users

RECOMMENDATIONS

Specialized team focused on customer experience to "Crowd source" customer feedback:	**Central agile team deployed into various departments to support critical projects:**	**Include closed loop process in the common set of procedures & tools & reinforce in process:**
1) Support all the departments with a common decision support tools to capture customer feedback in one place (e.g Gimet, ZenCity) 2) Partner with departments to provide a holistic, cross department view of resident requirements 3) Incorporate data driven approach to problem solving and project development 4) Take a Pareto view and focus on key or critical resident feedback vs trying to capture all data	1) Proof points showing the effectiveness of agile processes is prevalent in industry & government 2) Advice from cities & experts confirm centralized team necessary to build skills & support depts 3) Team needs to be focused on employee training & buy-in by the depts, for sustainability of efforts 4) Create & promote a common set of procedures, processes & tools for all depts. Reinforce reqs in City roadmaps, budgets, approvals, etc.	

Resident Feedback Capture

- Data on resident personalities, needs and experiences is not routinely gathered and used upfront in project design
- Heavy reliance on intuition & anecdotal data to identify resident pain points and design solutions
- Dependency on City of SJ employee remaining in a position to maintain or drive customer service
- One-off data capture and analysis projects that are not integrated into work flow
- Lack of focus and tools to easily and routinely capture data from residents, without adding operational burden on departments

Process Re-Engineering

- Existing processes (incl. digital) can add to operational burden, making staff risk averse
- Lack of consistency of processes and changes across departments makes scaling services difficult
- Lack of expertise and culture of focus on process re-engineering, adds to address existing pain points

Create a Closed Loop Process

- User experience research and data capture occur with one-off projects and are not systematically integrated in operations

Resident Data Driven Project Mgmt

- Mismatch between impetus for data driven design and incentives + resources for operational staff
- Less availability of easy-to-use analytics-driven decision support tools to complement and help their day-to-day interaction

Support: *Pain Points, Feedback, Quotes*

"I sometimes wish I could leave comments/questions for mayor and council people on one site. Good way to give them a feel of issues that many of us have." (SJ Resident)

"defining business needs and tying them to corresponding core features increases a project's chances of success by minimizing the complexity of the technology solution." (Technology Deployment Audit)

"Leadership. Leadership. Leadership." *"The first level of leaders are important, but getting to the next layer of department leadership is critical for longevity." (Global Smart City Expert)*

"We survey about once/yr on our customer service & get some feedback on the website, but it would be great to get more consistent information. I don't have any reports or dashboards on how we are doing." (SJ City Leader)

"Our Community Development team suggested neighborhood walks and they have become an annual tradition for city leaders to ask about what's working and not working." (Other City Outside SJ)

*"We **need a cross-city, real product platform with product managers and a data team** to help grow and scale our digital services to go from one-off demonstrations to something that gets entrenched long term." (SJ Leader)*

*"There are still walls between getting a real flow of information from the field and acting on it in new processes and policies. The biggest thing **missing is an immediate feedback loop**." (SJ City Leader)*

*"**Staffing and resources is always tough when we do a new initiative** like our multi-lingual push. How do we sustain this? How do we build on and improve the initial things we put out there?" (SJ City Leader)*

*"We would love to use new and fancy IT and digital tools, **but its very hard to run through the RFP, scoping, budgeting and approval process** and have those things still be fresh and needed years later, let alone manage the implementation and then the improvement process after that." (SJ City Leader)*

*"**Institutionalizing agile processes into government operations is the only way to go.** Need a team of experts and leaders to support the departments." (Global Smart City Expert)*
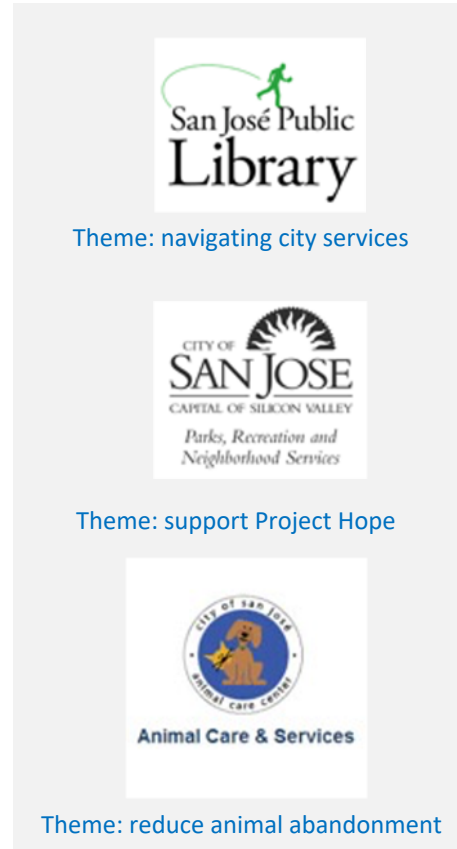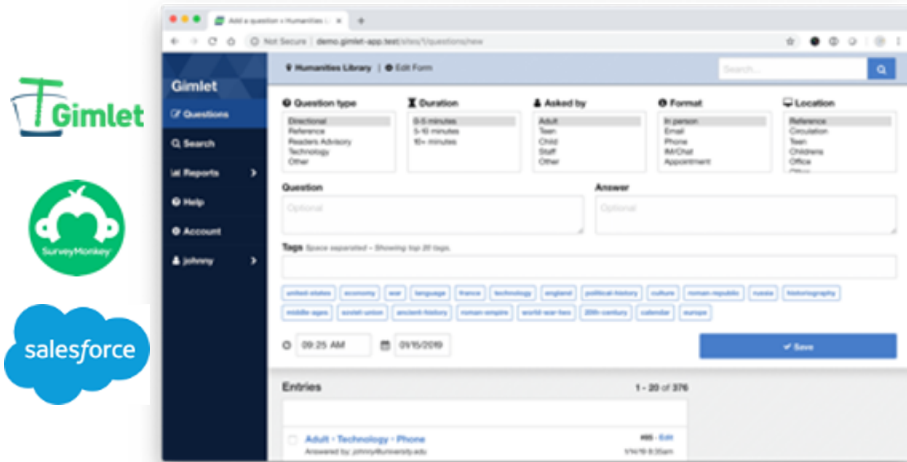
*"Most of the feedback we receive from residents is directly to our program leaders and over social media. We don't really track this or capture it over time. It's a resource issue and we don't have the tools to do it. We just try to keep the pulse of it, but its not **structures or systematic**. It is more feel based." (Rufino)*

"Centralized project management team was key to our success, but the team must approach the role with humility "if there is success it is always the department's success" (Other Cities Outside SJ)

Theme 1:
Demonstration project to capture resident feedback in standardized, continuous and analyzable way to facilitate service innovation

San José Public Library

Theme: navigating city services

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY
Parks, Recreation and Neighborhood Services

Theme: support Project Hope

Animal Care & Services

Theme: reduce animal abandonment

- Develop Simple Service Stats Tool/SSST (preferably mobile)
- Capture and logs all resident interactions
- Combine free text and tags to annotate questions/issues
- Standard and department-specific fields

- Core Product Team (PM/UX/Data/Dev) is primary user
- Maintains, improves, publishes from the SSST
- Works with departments to understand and use SSST data
- First focus on improved services based on selected themes

- Select 2-3 departments for first SSST beta test
- Define department themes for first application of analytics
- Build into staff training and data-driven culture development
- Align with departmental goals, metrics and incentives

Unique Challenges

HBSCP's focus was communities such as Latino, Filipino, Refugees, Immigrants, Muslim, the unhoused, community centers, youth services, etc.

The current approach of language translation resolves several issues, however, it does not take into consideration unique needs such as:

1. **Lack of trust** in government (refugees & immigrants especially nervous with recent national approach)
2. **Cultural or experience-oriented sensitives** are difficult to get right, even with advanced translation. Word choices and tone can make a significant difference.
3. **Natural forms of communication** for these communities are not often used to distribute info on key City services
4. **Navigating the complexities** with multiple city depts is especially complicated for these communities
5. **311 support in various languages falls short** when the agent directs the resident to another department that do not have language capabilities.

HBSCP interviewed SJ City and CBO leaders to ensure the voice of all communities were heard and their unique needs and solutions were understood.

Current solutions for these communities are traditional in nature, focused primarily on taking solutions that are made for the broader population and ensuring they are available in languages needed for the various communities.

There is an opportunity to turn this upside down and build a unique approach to these communities that can then benefit all SJ Residents in the long-term.

PRIMARY THEME

2

Specialized Approach to Address Inclusion & Equity

SUB-THEMES

a
One-Stop Shop

b
Leveraging CBOs

c
Language Transcreation

EMPLOYEES & CULTURE

- Treating unique needs separately allows for automation of the core and avoids being 'Paralyzed by the 20%"
- Desire to serve residents can inadvertently cause a 'parent-like' approach to delivering services, which can limit collaboration opportunities with the community
- Focus on breaking down the "City Employee vs Others Barrier" between govt and CBO to help drive deeper partnerships & better meet the needs of our most vulnerable communities

Goals & Recommendations

	One Stop Shop	Leveraging CBOs	Language Translation & Transcreation
GOAL	• To provide a specialized service to communities with the highest needs for specific City Services • Take the learning from this process to be able to benefit the community at large	• Tap into the CBOs natural communication channels, resident trust & depth of understanding of unique challenges • Effectively partner with CBO to maximize inclusion and distribute services and information to San Jose's diverse communities	• Build upon the current plan of Advanced Google Translate. Positive feedback exists for this tool for the broader services • Ensure specific messaging that is most important or sensitive to certain communities is transcreated for cultural & experience sensitivity

RECOMMENDATIONS	**Segment a select number of people in the 311 Call Center with native language skills to work with specific communities from issue-to-resolutions:**
	1) This specialized team to not only have native language skills, but they will also need to have a deeper understanding of key City Services most needed by these communities (i.e. Housing, Childcare & Ed, Food, Jobs, etc.)
	2) The learnings from this activity to go back to the process re-engineering team to help reduce complexity and improve service for all
		Create a systemic partnership approach with select CBOs:
		1) Name appropriate CBOs as stakeholders at the beginning of a technology deployment charter.
		  • Where appropriate, involve them in customer research and user testing
		  • Include CBOs in the rollout and marketing plan of services the City provides
		1) Leverage the "trust capital" inherent in CBOs to built strong relationships with vulnerable or marginalized populations
		2) Create a standardized "communication kit" that CBOs can distribute to their members based on natural channels (text, WhatsApp, community postings, phone chains, etc.)
			Using 80/20 rule, Advanced Google Translate is a good solution for a majority of people. Taking special effort for critical communications for certain communities will increase trust & allow residents to gain more from the service.
			1) Focus on language translation & transcreation for just the most needed languages (Spanish, Vietnamese & Chinese traditional & Chinese simplified)
			2) Use native language speakers and also people who have cultural and situational experience to transcreate for important materials for these communities and leverage CBOs for assistance as needed (immigrants, refugees, & residents who have experienced trauma)

One Stop Shop

- Universally, SJ Department leaders expressed a wish that services could be more seamless and "One Stop" for residents and clients.
- Solutions along these lines can be piloted within the existing 311 structure and the data used to gain insights into how to improve both back office business processes and front end interactions with customers.

Communication through CBOs

- Formally onboard trusted CBOs to roll out services to all target communities and enable them to provide information and referral to services.

Structured CBO relationship

- Solicit CBO input into development of city projects to co-create implementation and communications strategies

"Residents can do some processes online [with our department] but they are not 'two step' processes. It should be easy to start and complete something in one place." (SJ Department Leader)

"For the critical services they use the most e.g. food delivery, housing- transcreation of Vietnamese communication would be most useful. **If you engage the CBOs first, then create the communications so that CBOs are there to vouch for you, you are more likely to get people to trust this."** (Community Leader)

"**Releasing resources directly through CBOs could be highly effective**, since the people already have trust with us." (Community Leader)

"For any service in general, **there should be that ability to get information quickly and efficiently without having to go through layers of people---a 'one stop shop'.** Residents expect to be able to get to the knowledge that they need. They expect quick responses. From a customer standpoint, they want to get their business done quickly without having to call multiple people." (SJ Department Leader)

"**Lack of awareness of services seems to be the biggest issues.** Higher skilled imigrants may know how to ask for access while the undocumented/lower skilled and refugeeimmigrants may not know what the city provides." (Community Leader)

"**Need to educate people how to use digital services and to continuously upgrade with feedback versus one off development of something.** (Community Leader)

"People need seamless, simple, easy user experiences to get the information they need. And visibility to their request to see that it is done." (SJ Department Leader)

"It's great to have everything [on a website], but you need to have a way to push it out to community; **using trusted spaces & organizations will be a huge help**." (Community Leader)

"For language, it's not about the size of the population but actually about the **gap and the need**." (Community Leader)

Theme 2:
Demonstration projects to stand-up specialized approach to address inclusion & equity with CBO partners

San Jose Office of Racial Equity
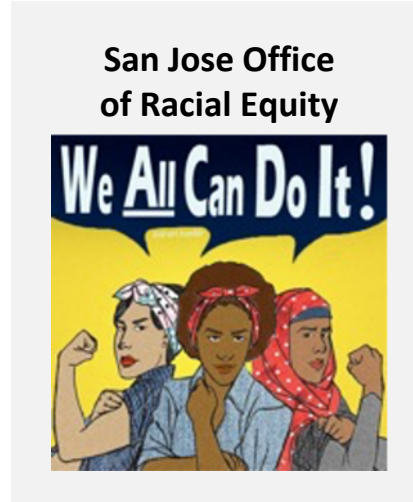
Core Product

- Dedicated and specialized call/text center
- Core Product Team builds dashboards and text AI tools to enable
- Focus on defined set of services and issues
- Emphasis on 2-way text exchange with residents
- Emphasis on language inclusivity

- Office of Racial Equity manages dedicated call/text center and partnerships with CBOs
- Works to establish new innovation and engagement structure to work with CBOs in this manner

- Selected CBOs partner with Office of Racial Equity
- CBO staff assign full team members to work with Core Product Team on product and service specs
- Joint services and solutions development and data sharing between City and CBOs
- Direct residents to and and help them with specialized call/text center

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The City has a very strong digital-first strategy and has made significant progress with their omni-channel approach. Our recommendation in the next phase of the City's strategy is to focus on:

1) delivering the right solutions on the right channels to the right audiences,
2) find mechanisms to drive more 2-way resident engagement, and
3) "skate to where the puck is going to be vs playing bee-hive soccer"
4) investing in City employees (training, empowerment, culture, etc.)

"Culture change is a funny thing. If ignored or approached improperly, it can derail the most innovative and profitable initiative and bring a project to its knees." - *Chief Editor, Control Design*

PRIMARY THEME

3

Digital-First w/ Emphasis on Leapfrogging & Resident Dialogue Approach

SUB-THEMES

| Omni-Channel | Focus on Resident Engagement & 2-way Dialogue | Leapfrog |

EMPLOYEES & CULTURE

- Scan all departments for forward thinking best practices and amplify them across different service areas.
- Driving the organization towards a digital culture that is customer-obsessed, empathetic, agile, experimental, and collaborative.

Goals & Recommendations

	Omni-Channel	**Customer Dialogue**	**Leapfrog**
GOAL	● Use the right channel for the right audience at the right time. Allow the channels to evolve according to changing resident needs. ● All channels are important but used for specific purposes based on customer segmentation for each channel type.	● Leverage platforms that enable two way dialogue between residents and City departments ● Develop data offering in formats that enable continued engagement, by enabling residents to build their own analyses	● Build for a future state rather than rely on existing patterns to drive service development. ● Radical innovations built for the future may be a better long-term approach to solving problems than small incremental innovations ● Leapfrogging can help generate enthusiasm for a cultural mindset of digital transformation

| **RECOMMENDATIONS** | **Development of the long-term digital architecture omni-channel approach:**

1) Detail of each channel:
  a) purpose & nature "what is it best at doing?"
  b) targeted audience "who really uses this channel?"
  c) level of interaction "how are they used to interacting with this channel?"
2) Based on #1 a planned approach for which services should be included in each individual channel | **Special focus on increasing services with a customer dialogue approach**

1) Mobile Applications - increase focus on adding or modifying services that can encourage a dialogue
2) Enhance Social Media usage (with Facebook, Instagram, Twitter, TikTok) for the right audience, with approach for dialogue (i.e. asking for feedback or highlighting community activity and prompting 2-way dialogue in the comments) | **"Skate to where the puck is going to be" vs "playing bee-hive soccer"**

1) Continue analysis on other cities approach to resident engagement strategies (domestic & int'l) to augment existing city data.
2) Prioritize the delivery of services enabled by mobile to reach the broadest audience possible and to create more capacity for city teams to serve high need populations
3) Business transformation requires redefining mindsets, processes, and enabling talent
4) Developing culture for digital transformation long before it becomes a barrier to the transformation. |

Omni-Channel

- "Right tool for the right audience for the right service"
- Increased focus on determining the resident's desired method of engaging on a service and then focusing the delivery of that service on the right platform to deliver it.

Focus on Resident Dialogue

- Initial research shows residents favor platforms that enable customer dialogue. Mobile apps better enable opportunities for customers to highlight issues as they see them and they get real-time resolution communications from the city.
- Additionally, our findings indicate that trusted methods of dialogue provide more access to underserved populations, such as groups that prefer to receive messaging from trusted sources through trusted applications. WhatApp, texting, and even phone chains from trusted sources can be very effective with certain communities

Leapfrog

- Looking at today's data and solving might be holding innovation back. Looking outside at how others are doing this can help to build for the future.

Support: *Pain Points, Feedback, Quotes*

"We don't capture feedback from community meetings and other sources in a way that allows us to do any analysis on it for trends and other insights." (SJPD)

"I would like anything we do with digital services to enlist residents and empower them. How can it be a tool to get a sense of ownership and stewardship by residents for the city?" (SJ Department Leader)

"The San Jose App seems like a great start, it's just stupid that it can only accept grafiti reports online. Everything should be available to be submitted online! The older app used to do that. Also, if I submit something to the wrong department, don't just close it! Forward it to the correct department." (SJ Resident)

It would be great to have meeting agenda topics, how to get more publicly involved, how to organize communities to build a better neighborhood, templates and tips to engage your local neighborhood, workshops that build community values, etc. (City Resident)

"Allow as many people as possible who are comfortable with it to have great self service options on their mobile and online, and you can free up resources to help people with high touch needs." (SJ Department leader)

"We know that most of these at-risk populations have smart phones. They are skeptical of government websites and social media, but they will respond to outreach like texts from organizations they trust, like churches, community health clinics and other community organizations." (SJ Department Leader)

"We tend to build systems and programs and layer in tech based on operations, we very rarely look at customer experience. We miss out and this causes frustration. All the way down to front line workers to we should see customer comments and feedback." (SJ Department Leader)

"On things like our website, text to 911, social media and the use of analytic tools the police department has always strived to be ahead. The next area may be the use of AI and we are evaluating that with a vendor who wants us to be an early adopter." (SJ Department Leader)

Theme 3:
Demonstration project for digital-first with emphasis on leapfrogging & resident dialogue approach
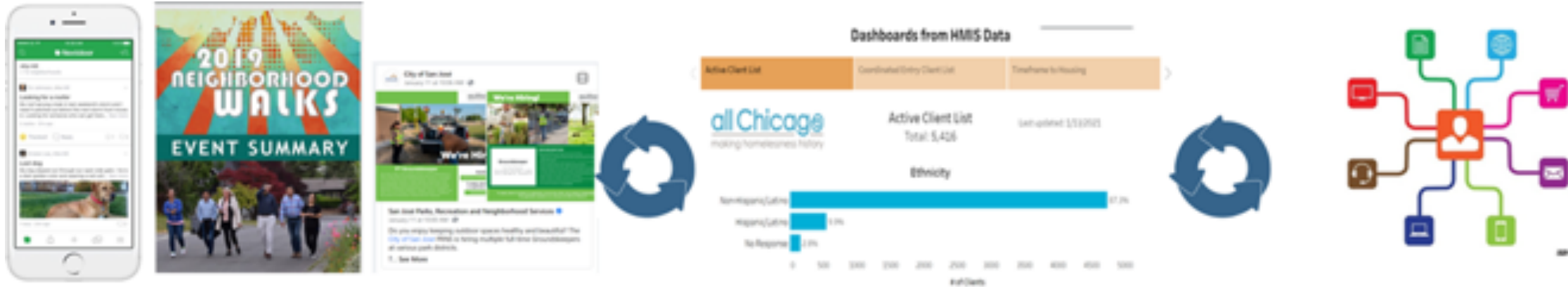
- **Use mixed approach for citizen information and engagement** e.g.live neighborhood specific updates on Nextdoor and Facebook with local fire department / street closure updated, planned content about city offerings/COVID on websites, unstructured in-person annual neighborhood walks

- **Develop data offerings in formats that enable continued engagement, by enabling citizens to build their own analyses**
- Provide public access to raw data (and not just department developed reports and outputs) on key resident concerns (e.g., homelessness, tax spending) and share citizen/ CBO developed own analyses to build bottom-up resident driven insights

- **Prioritize mobile first service offerings as complements to other services.** Prioritize mobile first development of services requiring limited cross-department interaction/ routine service requests (e.g. noise complaints) to reduce pressure on 311 and in-person engagement by most vulnerable populations

Conclusion

The City of San Jose, located in the heart of innovation for the world, is already a Smart City leader.

The approaches detailed here may help the City frame their long-term digital strategy in a manner that:

1. Keeps the customer needs at the center

2. Address Inclusion & Equity issues in a way that works specifically for these communities

3. Builds upon the digital-first mindset that the pandemic accelerated

4. Empowers employees and augments the culture to enable the next wave of progress

Thank You!

We sincerely enjoyed working with the amazing team in San Jose!

Special thanks to the core team & key influencers:
Kip, Rob, Kelli, Zulma Jerry, Swati & Trevor