

THE TOP FOUR

- COMMON SENSE
 - A failure to provide civic digital services which have a good user experience on smartphones damages user perception of value and advocacy.
- THE DIGITAL NATIVES ARE RESTLESS

 Understanding the privacy and data concerns of Generation Z is key to providing well received services to the most demanding generation of users out there,
- MEN ARE FROM MARS, WOMEN ARE FROM VENUS

 There's a consensus between women and men on all components of what should make a smart city apart from one. It's either exactly what you think and then not, read on for more.
- THE SNOWDEN EFFECT

 US citizens are wary of sharing private data, go figure.

1 COMMON SENSE

Takeaway: Digital civic-provided services should focus on providing great mobile user experiences. Done well, this will lead to an increased perception of value and in turn drive advocacy and adoption.

Top 5 locations by CITIZEN.E Advocacy Index with Sentiment Tags					
	Emotion Map Data		Sentime	nt Tag Data	
Location	Advocacy Index Value Index		Time Saver	Work on My Phone	
Michigan	81	70	67 %	67 %	
Hawaii	79	67	57 %	29 %	
Netherlands	76	76	60 %	40 %	
Sweden	74	56	67 %	67 %	
Alaska	73	68	50 %	38 %	

Bottom 5 locations by CITIZEN.E Advocacy Index with Sentiment Tags					
	Emotion	Map Data	Sentiment Tag Data		
Location	Advocacy Index Value Index		Easier to Call	Do Not Work on My Phone	
France	28	42	33 %	33 %	
Pennsylvania	30	51	29 %	29 %	
Maryland	41	81	33 %	33 %	
Georgia	42	70	33 %	0 %	
Australia	42	59	8%	17 %	

The CITIZEN.E **Advocacy Index** is a metric exposing willingness to share and advocate civic provided digital services. A perfect score is 100.

The CITIZEN.E **Value Index** is a metric exposing participant perception of value of civic provided digital services. A perfect score is 100.

2 THE DIGITAL NATIVES ARE RESTLESS

Generation Z, the generation sometimes referred to as the Homeland Generation or Digital Natives are the most connected, educated and sophisticated generation ever. They are early adopters, brand influencers and social media drivers.

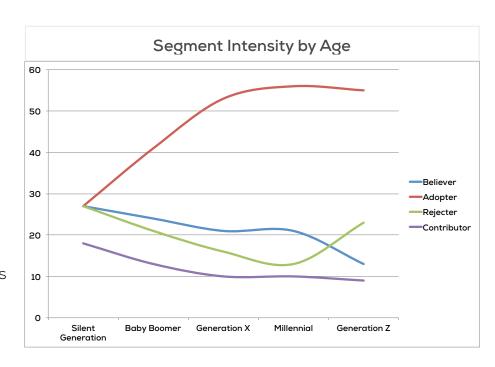
We assumed they would be more responsive to an implicit privacy/data-value exchange and more enthusiastic adopters of technology than the preceding generations. We were wrong.

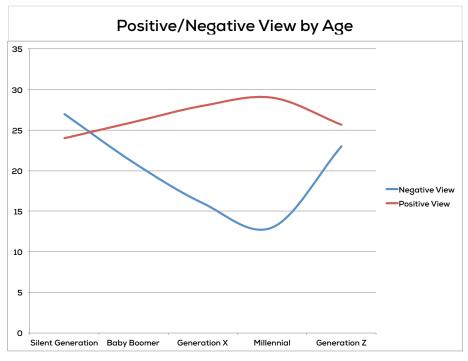
The CITIZEN.E data shows a contradiction to these assumptions and indicates a growing reluctance of Generation Z to adopt new technologies unless the value is clear and data privacy assured..

Generation Z participants were the first generation to express a net pessimism of what technology can do for them compared to the immediate preceding generation.

Takeaway: Generation Z they are the most cautious online users.

Delivering successful services to them depends on establishing trust and transparent value propositions,





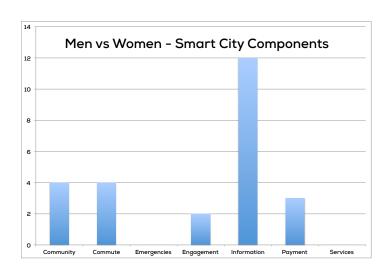
3 MEN ARE FROM MARS, WOMEN ARE FROM VENUS

We canvassed opinions on the relative importance of the following attributes of a smart city. Here are the CITZEN.E Emotion Map HeatMaps results for each attribute.

Information	Emergencies	Civic Services	Community I can connect better with my community	
Context relevant information is a tap away whenever I need it.	I am alerted in real time about any emergencies.	I can book any kind of civic service I require easily.		
13% 64% Believer Adopter 12% 11% Rejecter Doubter	21% 65% Believer Adopter 5% 9% Rejecter Doubter	17% 56% Believer Adopter 18% 9% Rejecter Doubter	17% 61% Believer Adopter 12% 10% Rejecter Doubter	
Engagement	Payment	Commute		
I can share my civic experiences and expect to be listened to.	I can use contactless payment for the civic services I consume.	My journey to work is fast and efficient.		
21% 49% Believer Adopter 16% 14% Rejecter Doubter	13% 67% Believer Adopter 8% 11% Rejecter Doubter	16% 66% Believer Adopter 12% 6% Rejecter Doubter		

WHAT WOMEN WANT

Takeaway: Breaking down each attribute for gender reveals almost no difference between men and women apart from one: access to real time contextually relevant Information. Whether or not this reinforces the stereotype that men are more likely to jump in to a situation without thinking we will leave to that discussion to the behavioural psychologists.



4 THE SNOWDEN EFFECT

Adoption of civic digital services relies heavily on a foundation of trust between the authority and the citizen: users will not share their data if they do not believe it will be taken care of in a secure manner and reused for purposes other than which it has been asked for.

This table shows the ranking of locations with a aggregated value of positive sentiment of sharing data and the perception of the value that the participant gets from sharing that data.

A short note about Sweden. The Swedish tax authority, Skatteverket, rolled out a simple SMS based tax rebate system decades before the advent of smartphones. A comprehensive adoption of which was one of the reasons behind the foundation of digital trust.

We should also make the point that Sweden has not experienced a cloud of hacking or government surveillance scandals in recent years.

In contrast the USA and to a lesser extent the UK have both experienced a long and continuing stream of negative data-orientated stories from expensive IT failures to the Facebook/Cambridge Analytica data breach.

Takeaway: Civic service providers must build trust between themselves and their users. Transparent value propositions are key.

		Positive
Location	Value	Sentiment
Sweden	74	133 %
China	71	122 %
Netherlands	56	80 %
Poland	59	67 %
Australia	60	62 %
Italy	37	33 %
Brazil	59	20 %
Belgium	49	13 %
Ireland	38	11 %
Argentina	56	0 %
Germany	53	-4 %
Mexico	48	-14 %
Turkey	42	-25 %
Canada	45	-33 %
Japan	57	-45 %
Colombia	37	-67 %
France	33	-67 %
United Kingdom	24	-117 %
USA	48	-291 %

? HOW DID WE GET HERE?

CITIZEN.E stems from a desire to understand how, as residents, we view the cities we live in today, how we would like to see them improve and the cost in terms of our private data we are willing to bear for those improvements. This led to four questions:

Your City Today: A juxtaposition of perceived value and availability.

Your City Tomorrow: Prioritisation of innovations and frequency of usage.

Civic Services Today: Perceived value and advocacy.

Privacy: Perception of value and probability of sharing.

CITIZEN.E is built using the <u>sensation.io</u> expression tools Emotion Maps, Multi-Actor Emotion Maps and Sentiment Tags. Emotion Maps ask two questions on a two dimensional grid. The participant considers both questions and selects a tile on the grid which represents how they feel. Multi-Actor Maps allow for multiple expressions.

Υοι	ır City - Today	our City - Tomorrow		
smo	er prompt: This question is about art cities. How aware are you of ovations where you live today and w much value are they to you.	User prompt: How do you prioritise Smart City functions? Tap an icon fo description and drag to express you opinion.		
Availability is poor	Availability is comprehensive	High priority Use often Use often		
	No benefit to me	Low priority		

Civic Services - Today

User prompt: This question examines the value you get from digital citizen services today and whether you recommend them to others or not.

Privacy

User prompt: This question is about privacy. Do you get value in exchange for the data you share and does it make you more or less likely to share in the future?





Sentiment Tags

- There is a good coverage of services in my city
- They are easy to use
- They save me time
- They work on my phone
- There is a poor coverage of services in my city
- They are difficult to use
- It's easier to call
- They don't work on my phone

Sentiment Tags

- The risks are too high
- The convenience works for me
- The benefits of sharing my data don't add up
- The benefits of sharing my data are clear
- I do not trust civic organizations with my data
- I trust civic organizations with my data
- I'm worried about my data integrity
- I'm not worried about my data integrity



Civic Digital Services: Advocacy & Perceived Value

Civic Digital Services: Top 30

Locations By Advocacy

Location	Advocacy
Michigan	81
Netherlands	80
Hawaii	76
Alaska	75
Sweden	74
United Kingdom	72
Florida	72
Massachusetts	71
Japan	69
China	68
Virginia	67
Louisiana	67
Canada	65
Texas	65
New York	65
Italy	63
Ireland	62
New Jersey	62
Brazil	62
Illinois	62
California	61
Turkey	61
Colorado	61
Argentina	59
Australia	59
Ohio	59
Germany	57
Delaware	56
Belgium	53
Mexico	52

Civic Digital Services: Top 30 Locations By Perceived Value

Locations by referred value			
Location	Value		
Ireland	82		
Maryland	81		
Netherlands	80		
United Kingdom	80		
China	77		
New Jersey	76		
Brazil	76		
Alaska	72		
Georgia	72		
Japan	71		
Michigan	70		
New York	70		
Italy	70		
California	70		
Turkey	69		
Virginia	69		
Texas	69		
Hawaii	67		
Louisiana	67		
Argentina	67		
Mexico	66		
Canada	66		
Australia	65		
Ohio	65		
Florida	64		
Colorado	62		
Belgium	60		
Germany	59		
Massachusetts	58		
Sweden	56		

Civic Digital Services: Top 30 Locations By Positive Sentiment

	Sentiment			
Location	Coverage	Easy	Time	Phone
Sweden	33 %	67 %	67 %	67 %
Virginia	20 %	60 %	60 %	60 %
Brazil	20 %	60 %	60 %	40 %
Netherlands	40 %	40 %	60 %	40 %
Argentina	33 %	33 %	33 %	67 %
Michigan	33 %	0 %	67 %	67 %
Louisiana	14 %	29 %	57 %	57 %
Turkey	25 %	50 %	50 %	25 %
Alaska	13 %	38 %	50 %	38 %
Kansas	33 %	33 %	33 %	33 %
Italy	0 %	33 %	67 %	33 %
United Kingdom	33 %	33 %	50 %	17 %
Hawaii	14 %	29 %	57 %	29 %
Florida	25 %	25 %	25 %	50 %
Colorado	23 %	31 %	46 %	23 %
China	11 %	33 %	33 %	33 %
Delaware	0 %	20 %	60 %	20 %
Canada	20 %	33 %	27 %	20 %
Illinois	9 %	18 %	36 %	36 %
New Jersey	20 %	0 %	40 %	40 %
Massachusetts	0 %	20 %	40 %	40 %
Ohio	17 %	0 %	33 %	33 %
Mississippi	25 %	25 %	0 %	25 %
Mexico	10 %	25 %	20 %	20 %
New York	21 %	17 %	25 %	13 %
Japan	0 %	27 %	27 %	18 %
Pennsylvania	14 %	29 %	29 %	0 %
Maryland	0 %	0 %	33 %	33 %
Georgia	33 %	17 %	17 %	0 %

Positive Sentiment Tags Key:

Coverage:

There is a good coverage of services in my city

Easy:

They are easy to use

Time:

They save me time

Phone:

They work on my phone

Civic Digital Services: Worst 30 Locations By Negative Sentiment

	Sentiment			
Location	Coverage	Easy	Time	Phone
Pennsylvania	14 %	29 %	29 %	29 %
Maryland	0 %	0 %	33 %	33 %
Poland	33 %	0 %	0 %	33 %
Arizona	33 %	0 %	33 %	0 %
France	0 %	0 %	33 %	33 %
Mexico	10 %	10 %	20 %	25 %
Brazil	20 %	0 %	20 %	20 %
Delaware	20 %	20 %	20 %	0 %
Florida	25 %	0 %	25 %	0 %
Ohio	0 %	0 %	17 %	33 %
Georgia	0 %	17 %	33 %	0 %
Australia	17 %	8 %	8 %	17 %
Germany	15 %	12 %	8 %	12 %
Kansas	0 %	33 %	0 %	0 %
Italy	0 %	33 %	0 %	0 %
Ireland	0 %	0 %	20 %	10 %
Japan	0 %	9 %	18 %	0 %
Turkey	25 %	0 %	0 %	0 %
Alaska	0 %	0 %	13 %	13 %
Mississippi	25 %	0 %	0 %	0 %
New York	4 %	8 %	4 %	8 %
Belgium	0 %	0 %	13 %	13 %
California	3 %	5 %	9 %	7 %
New Jersey	0 %	0 %	20 %	0 %
Massachusetts	20 %	0 %	0 %	0 %
Illinois	9 %	0 %	9 %	0 %
Colorado	0 %	0 %	8 %	8 %
Louisiana	0 %	0 %	14 %	0 %

Negative Sentiment Tags Key:

Coverage:

There is a poor coverage of services in my city

Easy:

They are difficult to use

Time:

It's easier to call

Phone:

They don't work on my phone

Privacy: Perceived Value and Willingness to Share

Privacy: Top 30 Locations By

Value

Location	Value
Michigan	85
Maryland	76
Sweden	74
China	71
Mississippi	63
Virginia	61
Australia	60
Brazil	59
Poland	59
Japan	57
Illinois	56
Netherlands	56
Argentina	56
Kansas	56
Arizona	56
New York	55
Louisiana	55
Germany	53
Belgium	49
Oregon	48
Mexico	48
Florida	47
Georgia	46
New Jersey	46
Canada	45
California	45
Texas	44
Turkey	42
Colorado	41

Privacy: Top 30 Locations By Willingness to Share

Location	Sharing
Poland	74
China	73
Netherlands	71
Italy	70
Colorado	69
Colombia	67
Argentina	64
New Jersey	61
Florida	61
Australia	60
New York	60
Ireland	58
Belgium	57
Mexico	55
Alaska	55
Brazil	54
Virginia	53
Louisiana	50
Japan	49
California	48
France	48
Germany	47
Texas	46
United Kingdom	46
Illinois	45
Hawaii	44
Sweden	44
Kansas	44
Turkey	42

Privacy: Top 30 Locations By Positive Sentiment

Location	Risk	Sharing	Trust	Data
Sweden	67 %	0 %	0 %	67 %
China	44 %	44 %	22 %	11 %
Netherlands	60 %	40 %	40 %	0 %
Poland	33 %	67 %	0 %	0 %
Australia	38 %	23 %	8 %	31 %
Louisiana	29 %	29 %	14 %	14 %
Illinois	25 %	25 %	8 %	17 %
Virginia	40 %	40 %	0 %	0 %
Michigan	33 %	0 %	0 %	67 %
Italy	33 %	67 %	0 %	0 %
Kansas	33 %	33 %	0 %	0 %
Oregon	33 %	0 %	0 %	33 %
Mississippi	33 %	0 %	0 %	33 %
Florida	25 %	25 %	25 %	0 %
New Jersey	25 %	25 %	0 %	0 %
Brazil	20 %	40 %	0 %	0 %
New York	23 %	15 %	15 %	8 %
Belgium	13 %	25 %	13 %	0 %
Ireland	11 %	11 %	0 %	11 %
Hawaii	25 %	38 %	0 %	13 %
Argentina	33 %	0 %	0 %	0 %
Texas	5 %	5 %	4 %	3 %
Germany	12 %	8 %	16 %	12 %
Colorado	15 %	15 %	8 %	0 %
California	11 %	9 %	7 %	5 %
Mexico	29 %	19 %	10 %	10 %
Turkey	25 %	0 %	0 %	25 %
Canada	7 %	0 %	13 %	20 %
Japan	9 %	9 %	0 %	0 %
Alaska	25 %	0 %	13 %	0 %

Positive Sentiment Tags Key:

Risk:

The convenience works for me

Sharing:

The benefits of sharing my data are clear

Trust:

I trust civic organizations with my data

Data:

I'm not worried about my data integrity

Privacy: Worst 30 Locations By Negative Sentiment

Location	Risks	Sharing	Trust	Data
Delaware	75 %	0 %	25 %	50 %
France	67 %	0 %	0 %	33 %
Michigan	67 %	0 %	0 %	0 %
Arizona	67 %	67 %	0 %	0 %
Italy	33 %	0 %	0 %	33 %
Ohio	33 %	33 %	33 %	33 %
Japan	27 %	18 %	0 %	18 %
New Jersey	25 %	0 %	0 %	0 %
Hawaii	25 %	38 %	0 %	13 %
Turkey	25 %	25 %	0 %	25 %
Maryland	25 %	25 %	0 %	0 %
Mexico	24 %	5 %	29 %	24 %
Netherlands	20 %	0 %	20 %	20 %
Brazil	20 %	0 %	0 %	20 %
United Kingdom	17 %	33 %	50 %	50 %
Georgia	17 %	33 %	33 %	33 %
Massachusetts	17 %	17 %	17 %	17 %
Colorado	15 %	8 %	15 %	8 %
Alaska	13 %	0 %	25 %	50 %
Belgium	13 %	13 %	0 %	13 %
Pennsylvania	13 %	38 %	13 %	13 %
California	12 %	7 %	11 %	16 %
Germany	12 %	16 %	12 %	12 %
Ireland	11 %	0 %	0 %	11 %
Illinois	8 %	8 %	0 %	8 %
Australia	8 %	15 %	8 %	8 %
New York	8 %	15 %	8 %	12 %
Canada	7 %	27 %	27 %	13 %
Texas	5 %	5 %	4 %	4 %
Sweden	0 %	0 %	0 %	0 %

Positive Sentiment Tags Key:

Risk:

The risks are too high

Sharing:

The benefits of sharing my data don't add up

Trust:

I do not trust civic organizations with my data

Data:

I'm worried about my data integrity

SAP HYBRIS, CITIZEN.E SXSW 2018

The SAP Hybris Public Sector team ran a global citizen engagement survey using the CITIZEN.E iPad survey tool in Austin at SXSW from March 9 - 12 2018.

A team of survey managers combed the streets of Austin collecting data from locals and festival attendees. 538 completed surveys were taken from representatives of 46 countries.

A subset of the results can be seen at https://sxsw.citizen-e.io.

MORE INFORMATION

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