Dynamic Dashboards:
Helping Solve Complex Social Problems

Presentation / Workshop
Immigrant Services Calgary / Gateway
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immigrantservicescalgary.ca

gatewayconnects.ca

IMMIGRANT SERVICES CALGARY

gateway
HERE TO CONNECT YOU

ISC / Gateway Presenters

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"It is a capital mistake to theorize before one has data."

Sherlock Holmes
"A Study in Scarlett"

Collecting and harnessing data to make better decisions and provide service excellence.

- *Data can be measured, collected, reported, and analyzed then transformed into information when it is viewed in context.*

- *Most non-profits are collecting data; however, few know how to properly extract maximum value to make decisions.*

Immigrant Services Calgary is using Business Intelligence (BI) tools to visualize data trends in order to improve service delivery and policies.

Focus of today's presentation.

Explore the various ways in which data can empower and lead to enhanced decision-making.
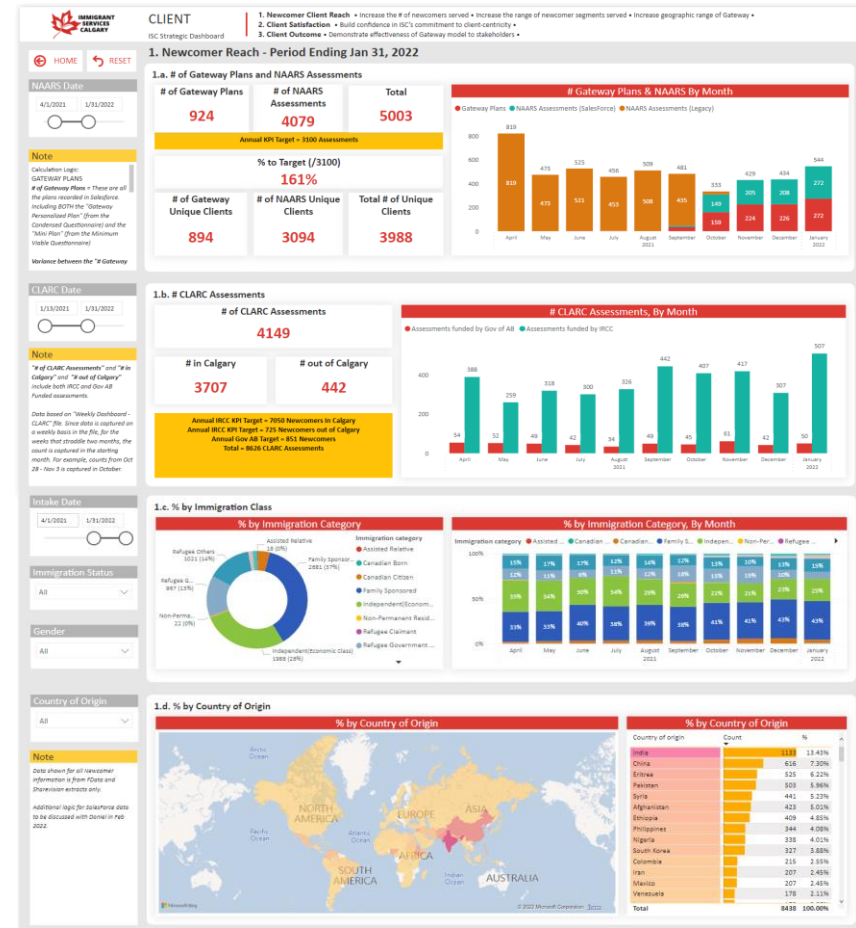
Example of a PowerBI Dashboard.

Gateway is transforming the way newcomers access the world of support services within the sector.

What is "Gateway"?

- A **collaboration** among organizations to **better serve and support newcomers** who choose to make Alberta their new home.

- It serves as a **personal guide** to help each newcomer through their unique journey, connecting them to **the right service at the right agency** every time – helping **unleash their economic, social, and civic potential.**

Benefits to Newcomers:

- ✓ Makes it easier for them to reach their goals.
- ✓ Focuses on individual journeys, rather than a one-size-fits-all model.
- ✓ Reduces the need for clients to navigate confusing amounts of services, attend unnecessary appointments, or endure the frustration of repeating their story.

Setting the stage.
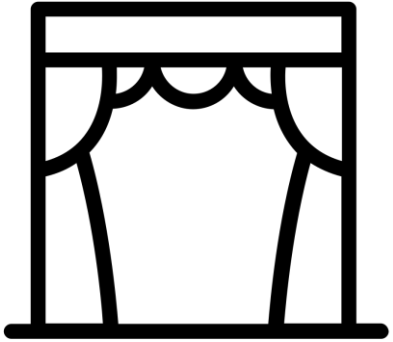
The Vision:

- Why collect Data?
  - Transformation compass
- How we plan on using data / dashboards:
  - Transparency
  - Evidence based project / program design
  - Hypothesis formation
  - Strategic and Policy insights

The Catalyst.

The Catalyst

- ISC has been collecting large amounts of newcomer data.

- Many initiatives throughout the organization to better serve newcomers.

- Finley & Associates facilitated strategic planning with ISC to create a Key Performance Indicators (KPI) Framework.

FINLEY + ASSOCIATES
STRATEGY. ACTION. IMPACT.

Getting the alignment between the Board and Senior Management on *"What matters"*.

	KPI Cluster	Rationale for Measuring	Measure Mechanism	Frequency of Review
CLIENT	1. Newcomer Client Reach	• Increase the number of newcomers served • Increase the range of newcomer segments served • <over time> increase geographic range of Gateway	a) # Gateway Plans	Monthly
			b) # CLARC Assessments	Monthly
			c) % by Immigration Class (vs. AB stats)	Quarterly
			d) % by Country of Origin (vs. AB stats)	Quarterly
			e) # Communities Served (scaling)	Annual
	2. Client Satisfaction	• Build confidence in ISC's commitment to client-centricity	a) Gateway Client Satisfaction Surveys (post service Net Promoter Score - NPS)	Per Service
			b) Language Assessment Client Surveys (post service NPS)	Per Service
			c) ITC Customer Satisfaction NPS	Per Service
	3. Client Outcomes	• Demonstrate effectiveness of Gateway model to stakeholders	a) <Client outcomes (IRCC) – Usman's work>	Quarterly
			b) <Program Efficacy>	
			Client follow-up rates (new)	Quarterly
STAKEHOLDER	4. Gateway Partner Engagement	• Demonstrate confidence in Gateway Model and ISC Leadership	a) # Gateway Partners (referral/ PSP; funnel progress)	Quarterly
			b) # Gateway referrals to Partners	Monthly

KPI Framework is broken into the following sections:

- Client
- Stakeholders
- Operations
- Finance

Each with various KPI clusters, and the rationale for measuring.

Each KPI cluster was then further broken down into measure mechanisms.

The Existing Gap.

The Existing Gap:

- Data was scattered, with varying levels of maturity in data available.
- Reporting data was a very manual process. Scattered throughout different departments.

The Opportunity.

The Opportunity:

- Utilize data analytics and business intelligence tools available to help ISC be more effective
  - Centralized Reporting
  - Data analysis capabilities to better understand newcomer data.

Objective:
Streamline /automate the process of reporting KPI Framework to the leadership team/ board by centralizing metrics in one place through the dashboard

Power BI

A way to look at data.

Data

Data Sorted

Data Arranged

Presented Visually
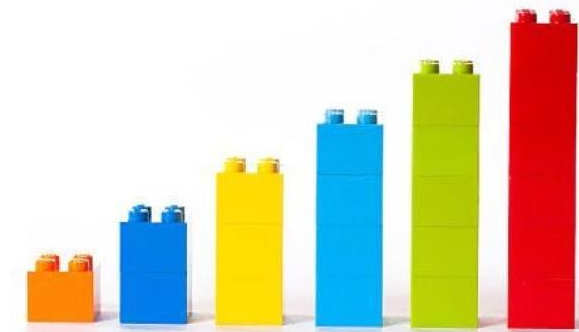
Actionable Tools

Explained with a Story

Getting started.

Phases of Dashboard Development

Roughly 3 months time.

Define the goal & people	→	Collect the Data	→	Process and Clean the Data	→	Model the Data, Build on the Data	→	Visualize and Present
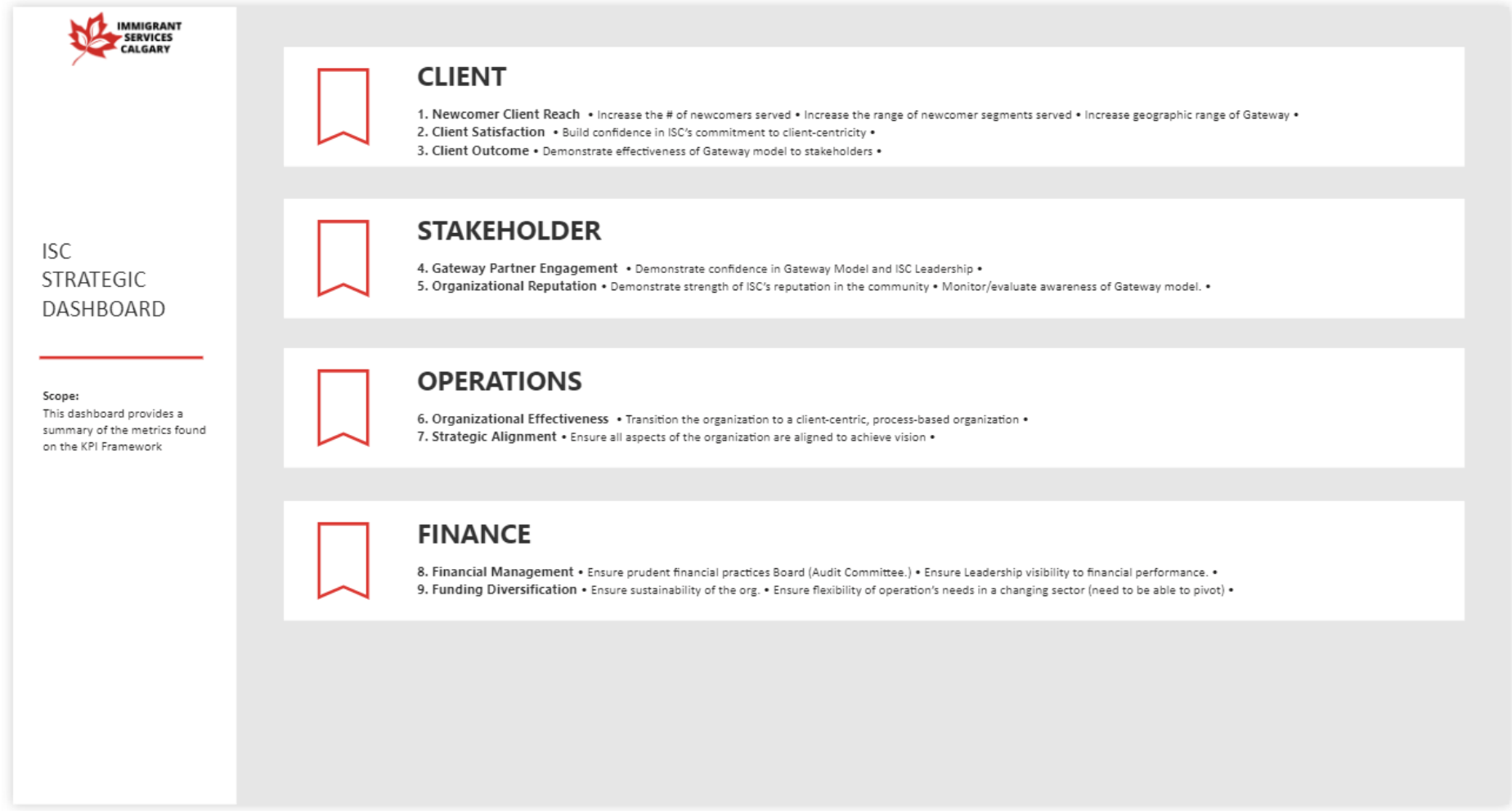
The Result?

The Result?

A Dynamic Strategic Dashboard.

IMMIGRANT SERVICES CALGARY

ISC STRATEGIC DASHBOARD

Scope:
This dashboard provides a summary of the metrics found on the KPI Framework

CLIENT

1. **Newcomer Client Reach** • Increase the # of newcomers served • Increase the range of newcomer segments served • Increase geographic range of Gateway •
2. **Client Satisfaction** • Build confidence in ISC's commitment to client-centricity •
3. **Client Outcome** • Demonstrate effectiveness of Gateway model to stakeholders •

STAKEHOLDER

4. **Gateway Partner Engagement** • Demonstrate confidence in Gateway Model and ISC Leadership •
5. **Organizational Reputation** • Demonstrate strength of ISC's reputation in the community • Monitor/evaluate awareness of Gateway model. •

OPERATIONS

6. **Organizational Effectiveness** • Transition the organization to a client-centric, process-based organization •
7. **Strategic Alignment** • Ensure all aspects of the organization are aligned to achieve vision •

FINANCE

8. **Financial Management** • Ensure prudent financial practices Board (Audit Committee.) • Ensure Leadership visibility to financial performance. •
9. **Funding Diversification** • Ensure sustainability of the org. • Ensure flexibility of operation's needs in a changing sector (need to be able to pivot) •

A Dynamic Strategic Dashboard.

1.d. % by Country of Origin

% by Country of Origin

Country of origin	Count	%
India	1133	13.43%
China	616	7.30%
Eritrea	525	6.22%
Pakistan	503	5.96%
Syria	441	5.23%
Afghanistan	423	5.01%
Ethiopia	409	4.85%
Philippines	344	4.08%
Nigeria	338	4.01%
South Korea	327	3.88%
Colombia	215	2.55%
Iran	207	2.45%
Mexico	207	2.45%
Venezuela	178	2.11%
Total	**8438**	**100.00%**

1.e. # of Communities Served

of Communities Served

120

Based on number of **unique** 'first 3 digits' of postal code.

of Communities Served, By Neighbourhood Cluster

Community	Count	%
⊟ Calgary	7573	90%
T3J - Martindale, Taradale, Falconridge, Saddle Ridge	910	11%
T1Y - Rundle, Whitehorn, Monterey Park	604	7%
T2A - Penbrooke Meadows, Marlborough	581	7%
T2E - Bridgeland, Greenview, Zoo, YYC	499	6%
T3K - Sandstone, MacEwan Glen, Beddington, Harvest Hills, Coventry Hills, Panorama Hills	414	5%
T3N - Northeast Calgary	307	4%
T3H - Discovery Ridge, Signal Hill, West Springs, Christie Estates, Patterson, Cougar Ridge	296	4%
T2Y - Millrise, Somerset, Bridlewood, Evergreen	290	3%
T3A - Dalhousie, Edgemont, Hamptons, Hidden Valley	264	3%
T2P - City Centre, Calgary Tower	262	3%
T3G - Hawkwood, Arbour Lake, Citadel, Ranchlands, Royal Oak, Rocky Ridge	249	3%
T3C - Rosscarrock, Westgate, Wildwood, Shaganappi, Sunalta	241	3%
T2K - Thorncliffe, Tuxedo Park	217	3%
T3R - Northwest Calgary	199	2%
T2Z - Douglas Glen, McKenzie Lake, Copperfield, East Shepard	192	2%
T2X - Midnapore, Sundance	190	2%
T2M - Cranston, Auburn Bay, Mahogany	179	2%
Total	**8438**	**100%**

1.d. % by Country of Origin

% by Country of Origin

% by Country of Origin

Country of origin	Count		%
India		366	40.22%
Pakistan		195	21.43%
Afghanistan		54	5.93%
Ethiopia		36	3.96%
Philippines		28	3.08%
Syria		26	2.86%
Eritrea		25	2.75%
Bangladesh		23	2.53%
Colombia		11	1.21%
Nepal		10	1.10%
Nigeria		10	1.10%
Cameroon		9	0.99%
Mexico		8	0.88%
Guatemala		6	0.66%
Total		**910**	**100.00%**

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of Communities Served

of Communities Served

1

*Based on number of **unique** 'first 3 digits' of postal code.*

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T2X - Midnapore, Sundance	190	2%
Total	**8438**	**100%**

1.d. % by Country of Origin

% by Country of Origin

% by Country of Origin

Country of origin	Count	%
China	32	11.03%
Philippines	23	7.93%
South Korea	23	7.93%
Nigeria	20	6.90%
Venezuela	18	6.21%
Iran	16	5.52%
Afghanistan	15	5.17%
India	15	5.17%
Mexico	14	4.83%
Syria	12	4.14%
Colombia	10	3.45%
Iraq	7	2.41%
Pakistan	6	2.07%
Bangladesh	5	1.72%
Total	**290**	**100.00%**

1.e. # of Communities Served

of Communities Served

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1

*Based on number of **unique** 'first 3 digits' of postal code.*

of Communities Served, By Neighbourhood

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T3M - Cranston, Auburn Bay, Mahogany	179	2%
Total	**8438**	**100%**

1.c. % by Immigration Class

% by Immigration Category

Assisted Relative 18 (0%)

Refugee Others 1021 (14%)

Refugee G... 967 (13%)

Non-Perma... 22 (0%)

Independent(Economic Class) 1988 (28%)

Family Sponsor... 2681 (37%)

Immigration category
- Assisted Relative
- Canadian Born
- Canadian Citizen
- Family Sponsored
- Independent(Econom...
- Non-Permanent Resid...
- Refugee Claimant
- Refugee Government ...

% by Immigration Category, By Month

Immigration category ● Assisted ... ● Canadian ... ● Canadian... ● Family S... ● Indepen... ● Non-Per... ● Refugee ...

	April	May	June	July	August 2021	September	October	November	December	January 2022
(top)	15%	17%	17%	12%	14%	12%	13%	10%	13%	15%
	12%	11%	9%	11%	12%	18%	15%	19%	10%	25%
	35%	34%	30%	34%	29%	26%	22%	21%	23%	
(bottom)	33%	33%	40%	38%	39%	38%	41%	41%	43%	43%

1.d. % by Country of Origin

% by Country of Origin

Arctic Ocean

NORTH AMERICA

Pacific Ocean

Atlantic Ocean

EUROPE

ASIA

AFRICA

SOUTH AMERICA

Indian Ocean

AUSTRALIA

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% by Country of Origin

Country of origin	Count	%
India	1133	13.43%
China	616	7.30%
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Syria	441	5.23%
Afghanistan	423	5.01%
Ethiopia	409	4.85%
Philippines	344	4.08%
Nigeria	338	4.01%
South Korea	327	3.88%
Colombia	215	2.55%
Iran	207	2.45%
Mexico	207	2.45%
Venezuela	178	2.11%
Total	**8438**	**100.00%**

1.c. % by Immigration Class

% by Immigration Category

Non-Permanent Resident
6 (1%)

Assisted Relative
4 (0%)

Immigration category
- Assisted Relative
- Canadian Born
- Canadian Citizen
- Family Sponsored
- Independent(Econom...
- Non-Permanent Resid...
- Refugee Claimant
- Refugee Government ...

Family Sponso...
391 (42%)

Independent(Econo...
456 (49%)

% by Immigration Category, By Month

Immigration category ● Assisted ... ● Canadian ... ● Canadian... ● Family S... ● Indepen... ● Non-Per... ● Refugee ...

Month	Independent	Family Sponsored
April	45%	47%
May	54%	41%
June	49%	44%
July	43%	51%
August 2021	49%	42%
September	47%	43%
October	35%	56%
November	32%	50%
December	44%	50%
January 2022	59%	31%

1.d. % by Country of Origin

% by Country of Origin

% by Country of Origin

Country of origin	Count	%
India	1133	13.43%
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Nigeria	338	4.01%
South Korea	327	3.88%
Colombia	215	2.55%
Iran	207	2.45%
Mexico	207	2.45%
Venezuela	178	2.11%
Total	8438	100.00%

1.c. % by Immigration Class

% by Immigration Category

Non-Permanent Resi...
1 (0%)

Canadian Citizen
2 (1%)

Immigration category
- 🟠 Canadian Citizen
- 🔵 Family Sponsored
- 🟢 Independent(Econom...
- 🟡 Non-Permanent Resid...
- 🟣 Refugee Claimant
- 🔵 Refugee Government ...
- 🔵 Refugee Others
- 🔴 Refugee Special Progr...

Independent(Economic Class)
238 (83%)

% by Immigration Category, By Month

Immigration category 🟠 Canadian ... 🔵 Family S... 🟢 Indepen... 🟡 Non-Per... 🟣 Refugee ... 🔵 Refugee ... 🔵 Refugee ... ▶

Month	Values
April	90%
May	88%
June	84%, 10%
July	89%, 11%
August	88%, 12%
September	56%, 25%, 13%
October	47%, 11%, 32%
November	53%, 11%, 32%
December	82%, 18%
January 2022	77%, 10%, 13%

(November: 11% Refugee Special Prog shown in pink)

1.d. % by Country of Origin

% by Country of Origin

CHAD
BURKINA FASO
Niamey
Bamako
N'Djamena
BENIN
NIGERIA
Abuja
Ogbomosho
CÔTE D'IVOIRE
TOGO
Ibadan
CENTRAL AFRICAN REPUBLIC
GHANA
Lomé
Porto-Novo
Accra
Lagos
CAMEROON
Abidjan
Yamoussoukro
Malabo
Bangui
Douala Yaoundé
Gulf of Guinea
EQUATORIAL

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% by Country of Origin

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Colombia	215	2.55%
Iran	207	2.45%
Mexico	207	2.45%
Venezuela	178	2.11%
Total	**8438**	**100.00%**

1.c. % by Immigration Class

% by Immigration Category

Refugee... 16 (4%)
Refugee Others 47 (12%)
Canadian Citizen 10 (3%)
Family Spo... 120 (32%)
Independent(... 1 (0%)
Refugee Government Spo... 184 (48%)

Immigration category
- Canadian Citizen
- Family Sponsored
- Independent(Econom...
- Refugee Government ...
- Refugee Others
- Refugee Special Progr...
- Unknown

% by Immigration Category, By Month

Immigration category ● Canadian ... ● Family Sp... ● Independ... ● Refugee ... ● Refugee ... ● Refugee S... ● Unknown

Month	Values
April	34%, 31%, 25%
May	11%, 26%, 58%
June	20%, 33%, 40%
July	35%, 12%, 47%
August 2021	27%, 64%
September	9%, 62%, 27%
October	64%, 28%
November	66%, 18%
December	19%, 22%, 59%
January 2022	18%, 11%, 31%, 40%

1.d. % by Country of Origin

% by Country of Origin

TURKMENISTAN, TAJIKISTAN, Dushanbe, Ashgabat, Mashhad, Tehran, Qom, Eşfahān, IRAN, Shīrāz, AFGHANISTAN, Kabul, Peshawar, Islamabad, GILGIT-BALTISTAN, Srinagar North, AKSAI CHIN, LADAKH, Jammu, Gujranwala, Amritsar, HP, TIBET, Lahore, Ludhiana, Chandigarh, Multan, PUNJAB, Quetta, Dehra Dun, Meerut, UK, HR, PAKISTAN, New Delhi, Amroha, Amrohal, NEPAL

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Iran	207	2.45%
Mexico	207	2.45%
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Excel vs. Power BI

Excel **Vs.** Power BI

- Great for small ad-hoc data analysis
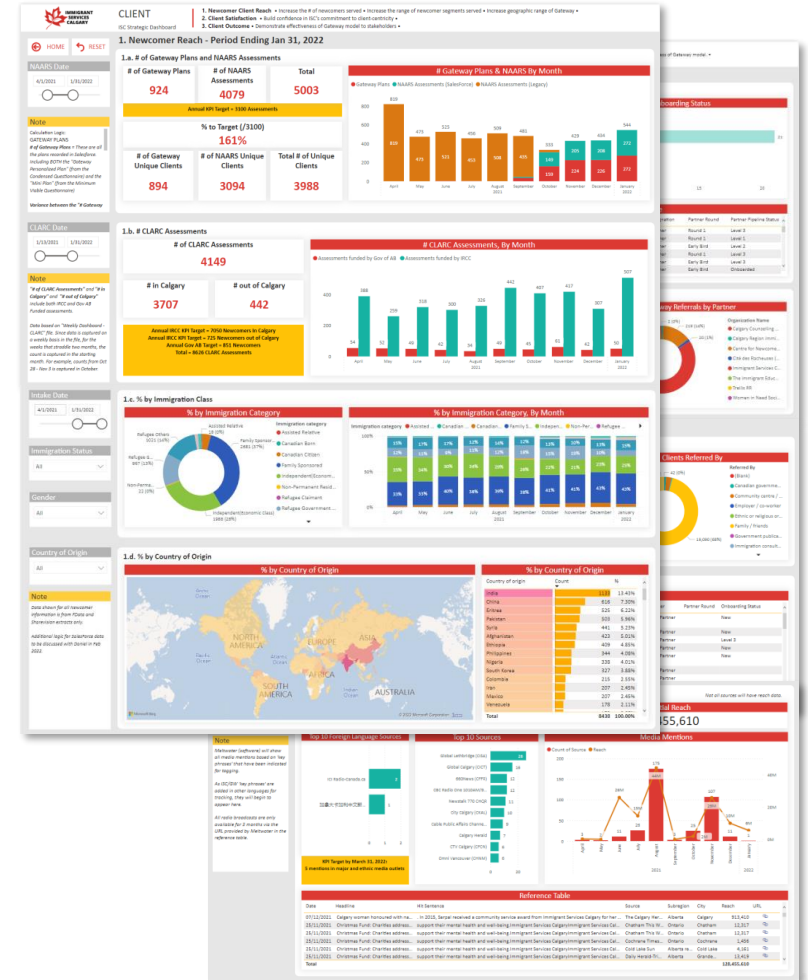- Easy to view data in a tabular format

- Built for data visualization & analysis
- Automate manual data analysis processes
- Can handle large amounts of data and computations
- Create relationships between data
- Cross filtering between visuals
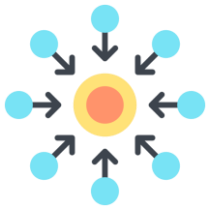- Schedule automatic data refreshes

In Summary

Benefits of Strategic Dashboard

Objective:
Streamline /automate the process of reporting KPI Framework to the leadership team/ board by centralizing metrics in one place through the dashboard.

Data and Metrics in one place

Data Driven Decision making

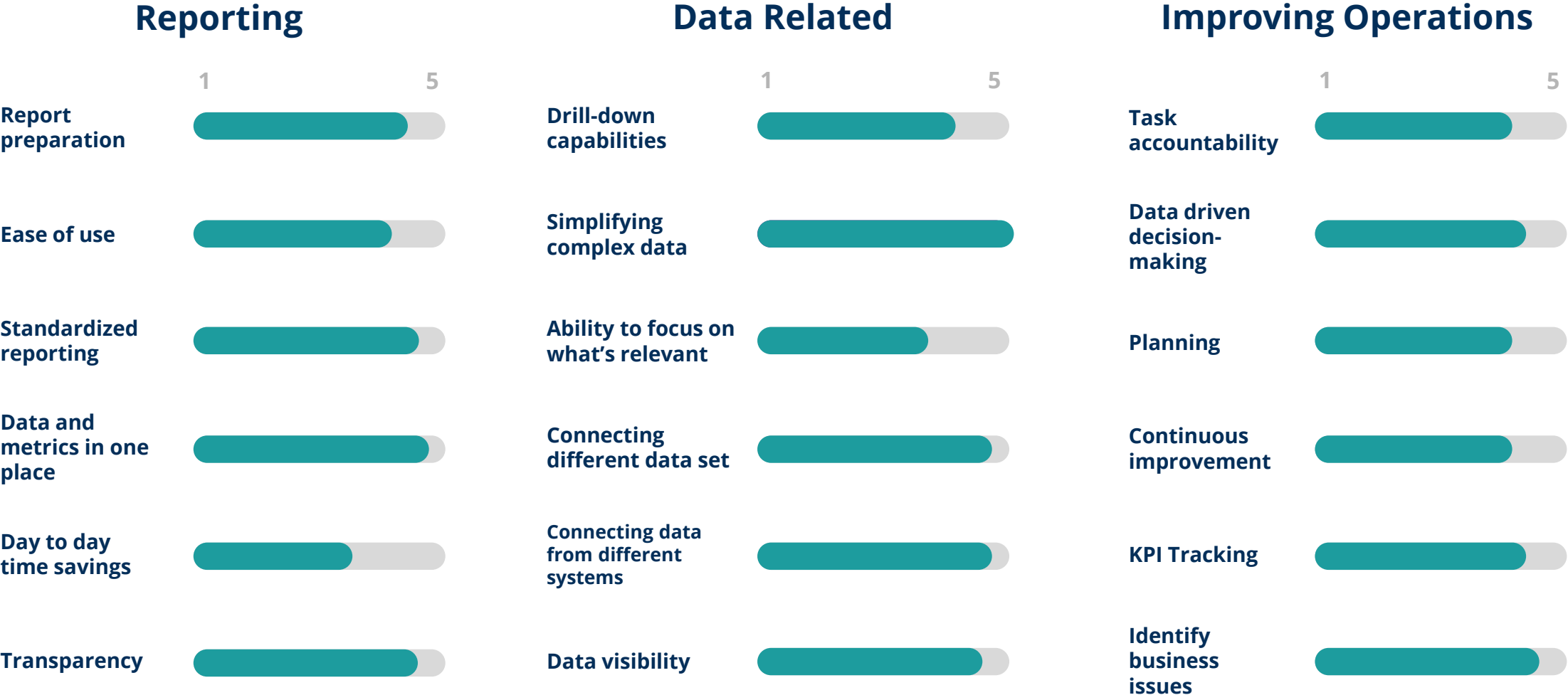**Report preparation efficiency**

Transparency

Drill down capabilities

Dynamic Dashboards – Other Benefits

When do you know you need a dashboard?

Reporting

	1 — 5
Report preparation	
Ease of use	
Standardized reporting	
Data and metrics in one place	
Day to day time savings	
Transparency	

Data Related

	1 — 5
Drill-down capabilities	
Simplifying complex data	
Ability to focus on what's relevant	
Connecting different data set	
Connecting data from different systems	
Data visibility	

Improving Operations

	1 — 5
Task accountability	
Data driven decision-making	
Planning	
Continuous improvement	
KPI Tracking	
Identify business issues	

1 = None at all, 5 = I love this

Data and Dashboards Maturity Model.

Business
Performance
&
System
Adoption

High

Low

Individual data points can also fall throughout this model

Dynamic Dashboards / Data Level

Level 1 – Ad hoc
Management of data and system is mainly person dependent and can change with people.

Level 2 - Defined
Defined but often not followed. Discussions continue over how much to standardize.

Level 3 - Managed
Used the majority of the time. Thus forms the basis of continuous improvement.

Level 4 - Optimized
Contains a higher focus on integration (including management systems) and optimization of the whole.

We are in the Knowledge Era – Information is King.

Forbes

Nov 15, 2019, 08:15am EST | 60,413 views

Data Is The New Oil -- And That's A Good Thing

Kiran Bhageshpur Forbes Councils Member
Forbes Technology Council COUNCIL POST | Membership (Fee-Based)
Innovation

POST WRITTEN BY
Kiran Bhageshpur
CEO at Igneous. Reinventing **unstructured data management**.

https://towardsdatascience.com/is-data-really-the-new-oil-in-the-21st-century-17d014811b88

"Data is the new oil. It's valuable, but if unrefined it cannot really be used. It has to be changed into gas, plastic, chemicals, etc to create a valuable entity that drives profitable activity; so must data be broken down, analyzed for it to have value." — Clive Humby, 2006

*"Information is the **oil** of the 21st century, and **analytics is the combustion engine.**"* — Peter Sondergaard, 2011

We are talking about existing proven tools that would advance the sophistication of your work.

What's coming next...

Gateway Partner Dashboard

- Partners of Gateway get a dashboard that shows their referral data.
  - Demographic data of their clients, such as country of origin, immigration status, age, gender.
  - Performance statistics like days to follow up, which programs they have been referred to.

ISC Client Dashboard

- Dashboard to detect internal trends and track internal KPIs and to provide internal ISC team with metrics that help them be more effective.

Knowledge Hub Dashboard

- Dashboard for sharing the anonymized newcomer data statistics in a simple to understand and digestible format.

ISC/ Gateway is advancing data collection, analysis and utilization for sector advancement.

Question & Answer Session