From Data Analyzer to Decision Enabler to Business Driver: How to Elevate Your Organization's Data Analytics Maturity

Jason Wang, CFA

August 7, 2024

Allstate Canada

Legal disclaimer

- The views expressed in this presentation belong to the speaker and not Allstate Insurance Company of Canada (AICC), its affiliates, or employees.

- Only mock data is used in this presentation for illustrative purposes.

- The "Allstate Canada" trade name and the "good hands" logo are the properties of AICC. Use without AICC's express consent is strictly prohibited.

Who's Allstate Canada

- Allstate Insurance Company of Canada is a member of one of the largest insurance organizations in the world – The Allstate Corporation.

- Allstate Canada has provided peace of mind and property and casualty insurance to Canadians since 1953.

- We deliver a full line of auto and home products in the provinces of Alberta, Ontario, Quebec, New Brunswick and Nova Scotia.

- Our network consists of over 60 community-based agencies and over 2900 Agents and employees.

Who's Jason

- Chief Risk Officer, Chief Data Analytics Officer, Advisor to 2 FinTechs
- >20 years of data analytics experience in the financial services industry in both Canada and the US
- MBA from New York University
- CFA charterholder

Agenda

01   Transformation is a journey

02   Start with assessing the current status

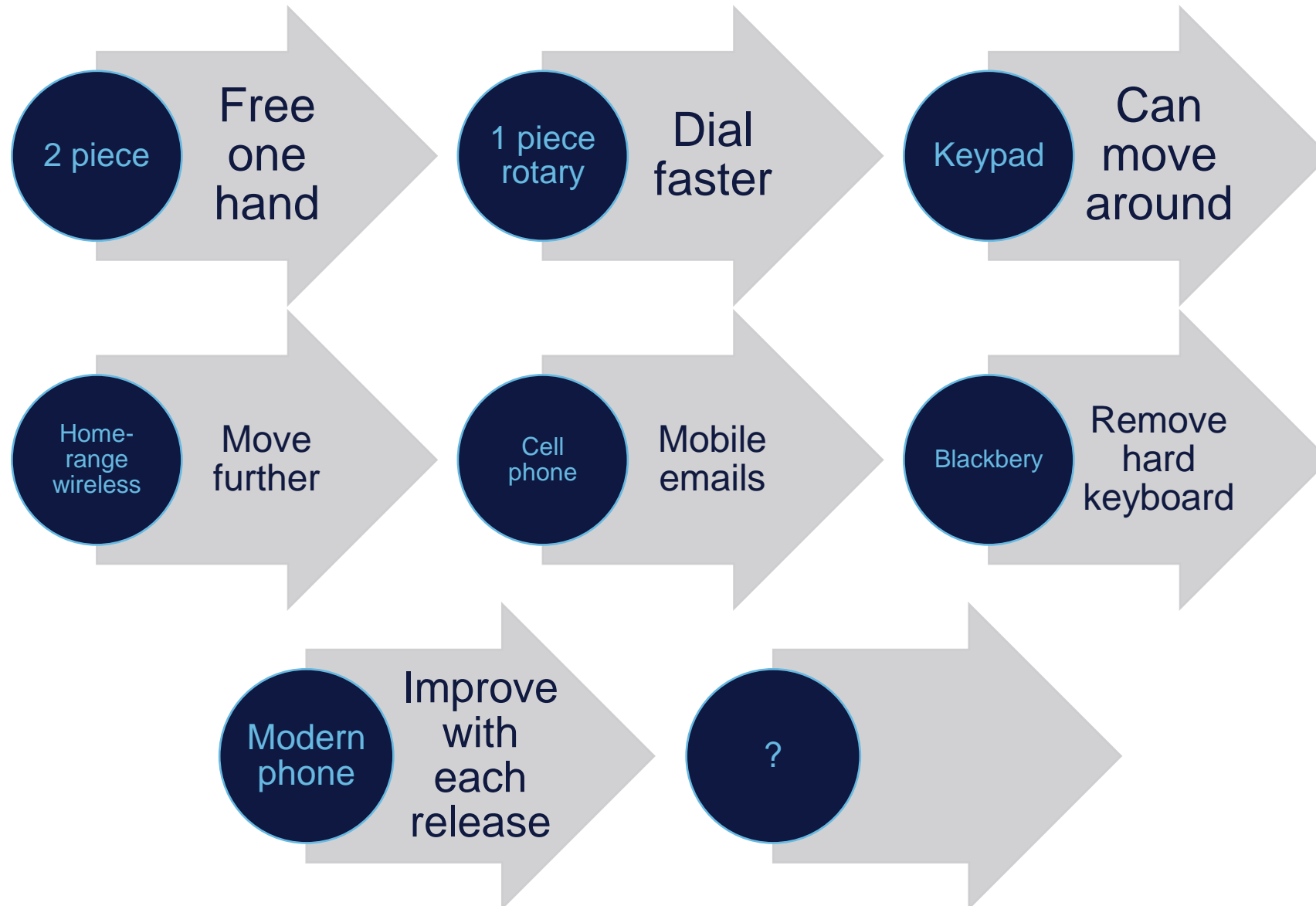**03**   Translate the gaps to your roadmap

1 Transformation is a journey

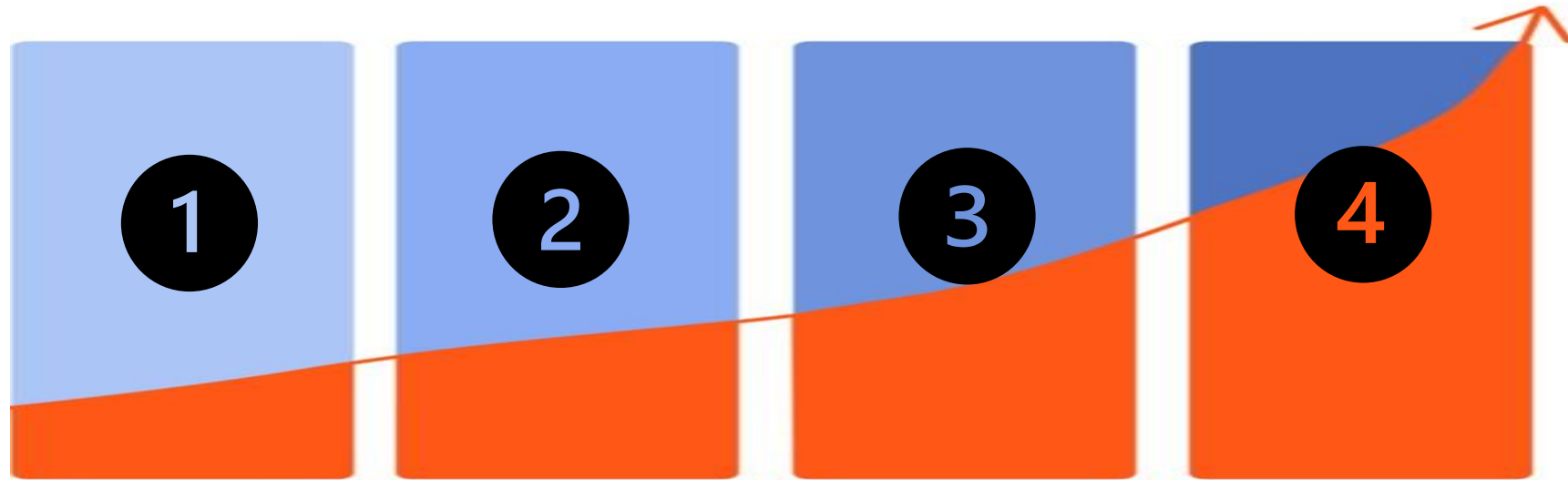# Transformation is not an "On/Off" switch

Photo: Still image from *2001: A Space Odessey*, courtesy of Stanley Kubrick Productions.

The history of the telephone is a perfect example of iterative improvements

**2 piece** → Free one hand

1 piece rotary → Dial faster

Keypad → Can move around

Home-range wireless → Move further

Cell phone → Mobile emails

Blackbery → Remove hard keyboard

Modern phone → Improve with each release

?

So is the journey to become a data-driven organization

1	2	3	4
Data Aware	**Data Proficient**	**Data Savvy**	**Data Driven**
• Manually compiles non-standardized reports from different systems • People: ad hoc reporting analysts • Focuses on building modeling capacities	• Standardized reporting on an organization-wide platform • People: Regular report maintainers • Focuses on building proficiency data quality and system integration	• Uses data to make critical business decisions • People: reactive problem solvers • Focuses on building advanced data capabilities and predictive analytics	• Embeds data into all business processes • People: Thought leaders that proactively advise the business • Focuses on self-service, scalability, agility, and security

Maturity models could vary, but all are iterative
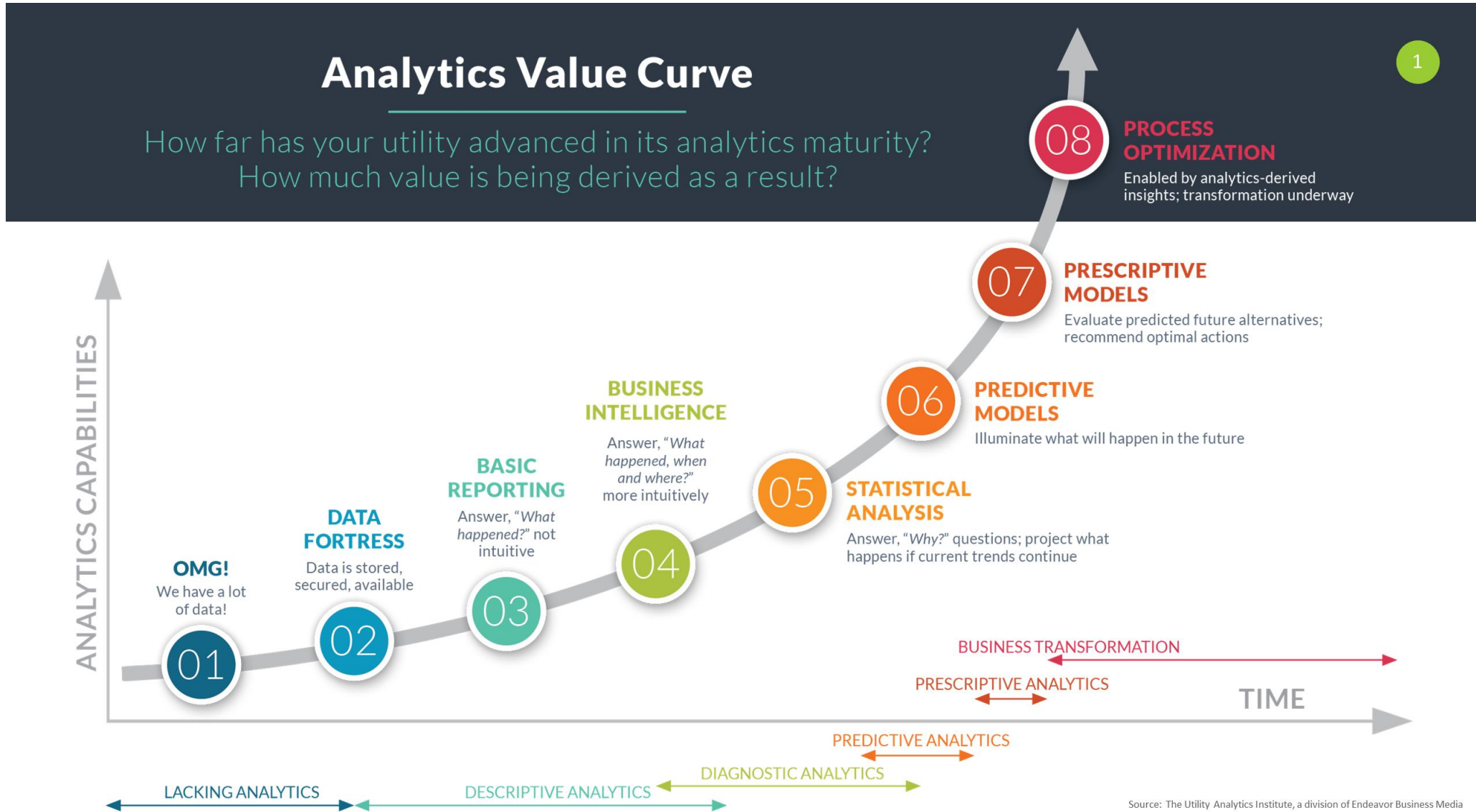
2 Assess the current status

Begin by assessing your current maturity level

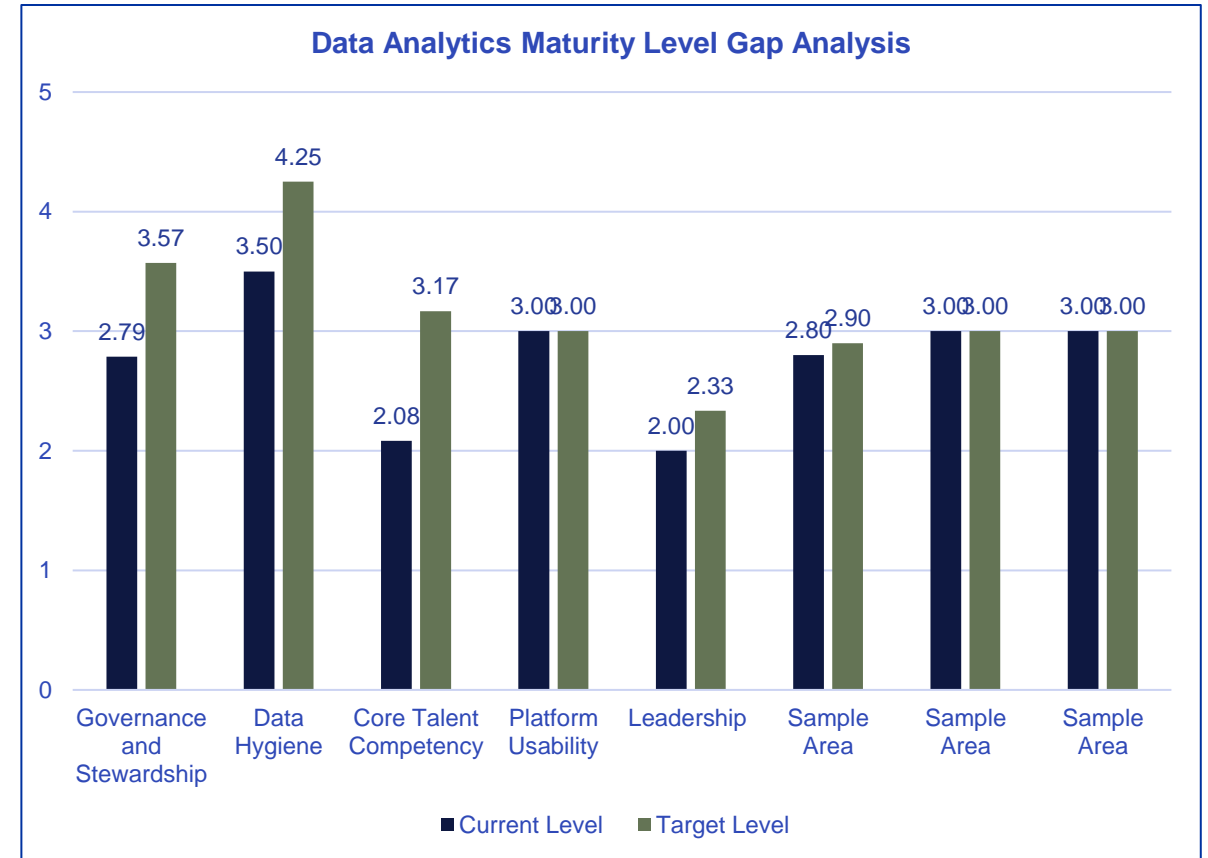**The assessment can use a bottom-up approach by answering a number of questions within these buckets**

- <u>Governance</u>: integrity and security, architectural design

- <u>Architecture</u>: mapping and cataloguing, enablement and curation

- <u>Literacy</u>: analytic competency, user understanding

- <u>Leadership</u>: sponsor support, org structure, change management
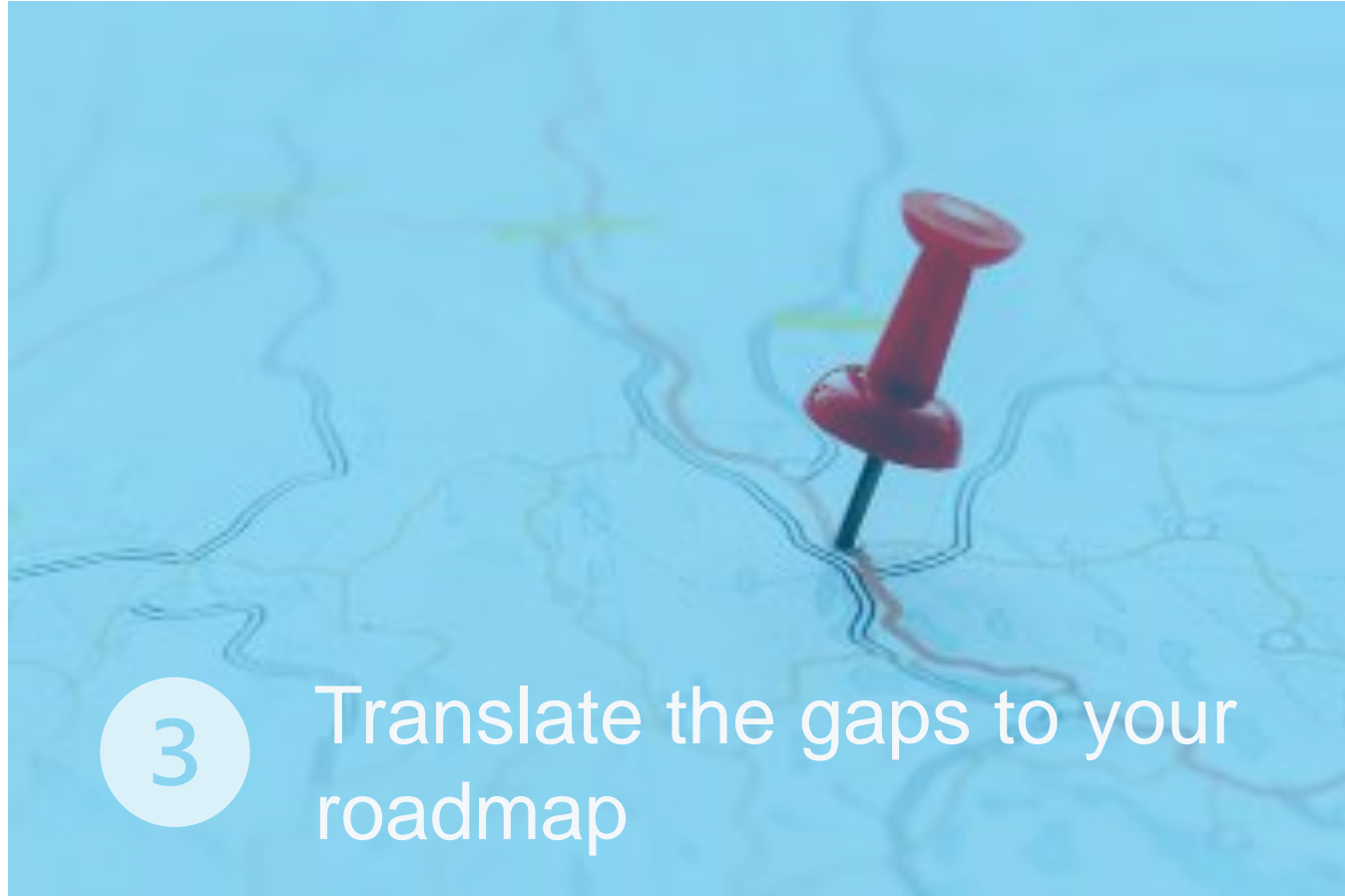
The assessment can be quantitative by assigning a numeric answer that corresponds to each maturity stage

1. <u>Initiated</u>
2. <u>Developing</u>
3. <u>Defined</u>
4. <u>Monitored</u>
5. <u>Optimized</u>

Assessment is best done using a bottom-up approach

- Conduct interviews with all stakeholders

- Use a detailed questionnaire – a set of questions within each category

- Ask not only the current maturity level, but also the target level. The target is not necessarily "5" in all questions

- The rest becomes a simple math exercise: Calculate the score of each category, and average it out to be the total maturity score

- Go through the same assessment questionnaire (possibly with a smaller audience) for a refreshed score and gauge progress

Data Analytics Maturity Level Gap Analysis

Category	Current Level	Target Level
Governance and Stewardship	2.79	3.57
Data Hygiene	3.50	4.25
Core Talent Competency	2.08	3.17
Platform Usability	3.00	3.00
Leadership	2.00	2.33
Sample Area	2.80	2.90
Sample Area	3.00	3.00
Sample Area	3.00	3.00

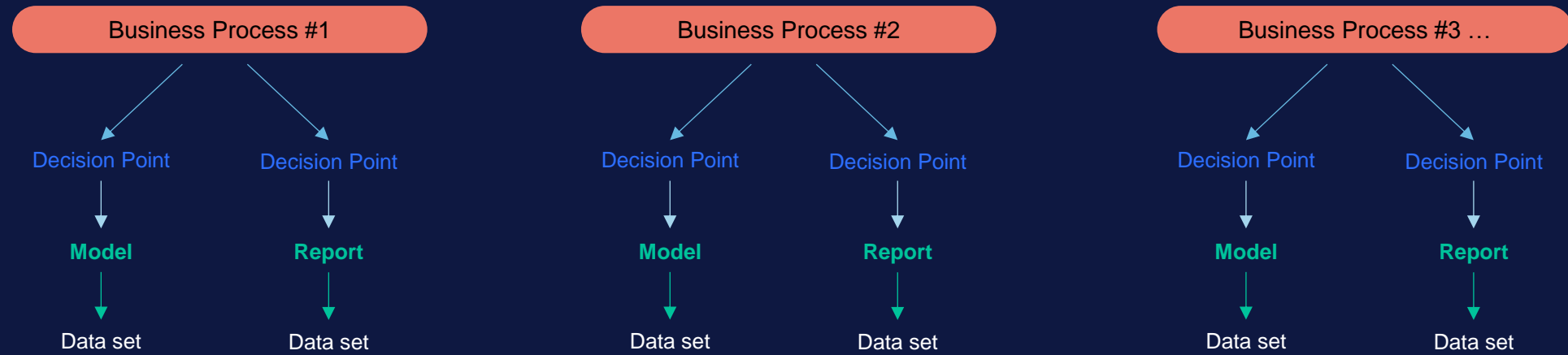■ Current Level ■ Target Level

3 Translate the gaps to your roadmap

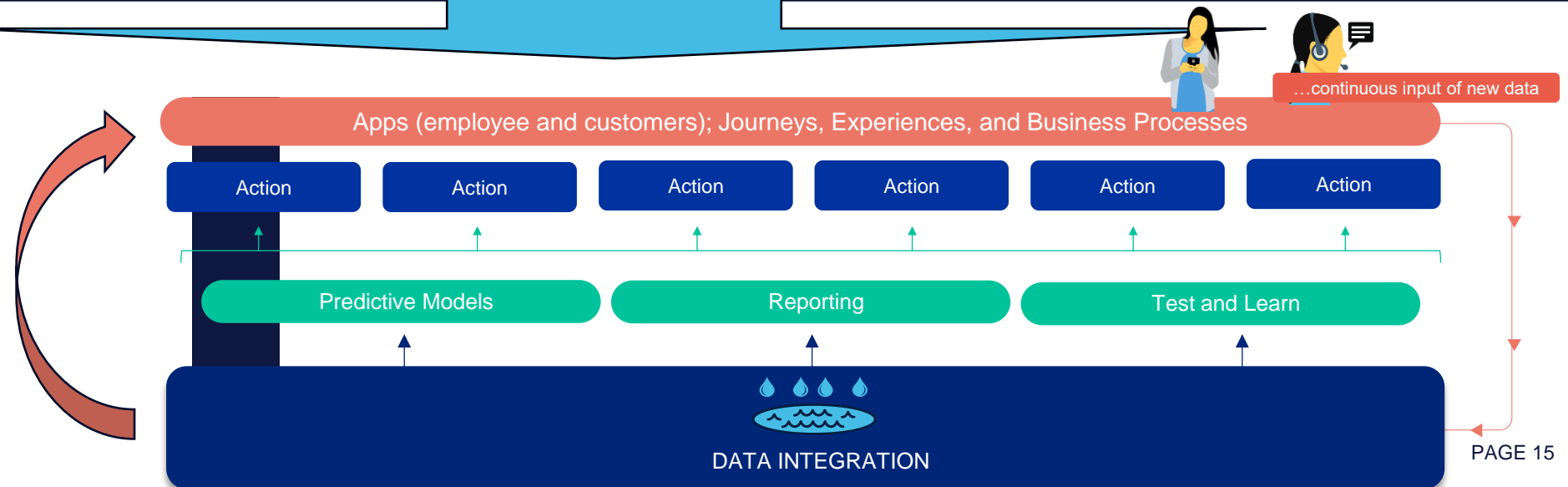# Set the vision for how the "point of arrival" looks

Process Driven

- Business processes are pre-established and presumed fixed

- Models and reports are developed to inform individual decisions in the process, and are triggered at specific points of the pre-established workflow

- Analytics is based on static subsets of data that represent only a fraction of Allstate's available data

Business Process #1

Decision Point → **Model** → Data set

Decision Point → **Report** → Data set

Business Process #2

Decision Point → **Model** → Data set

Decision Point → **Report** → Data set

Business Process #3 …

Decision Point → **Model** → Data set

Decision Point → **Report** → Data set

Prediction Driven Process

- The focus of analytics is on the core outcomes that drive the success of the business

- These predictions are continuously updated with each new bit of information

- With each reevaluation, each possible next action will be evaluated to determine which is best, and the system will automatically trigger that action

…continuous input of new data

Apps (employee and customers); Journeys, Experiences, and Business Processes

Action | Action | Action | Action | Action | Action

Predictive Models | Reporting | Test and Learn

DATA INTEGRATION

Define what's in between: Build a roadmap that includes measurable deliverables tied to specific timelines

Initiative	2023		2024				2025				2026			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4

Data governance & knowing our data

1. Develop & Communicate Data Governance framework
2. Managing data through its life cycle
3. Implement Data Governance tools (cataloguing)
4. Develop Data Quality Dashboard

- Hiring resources & Discovery (Q3 2023)
- Draft Framework (Q4 2023)
- Implement DG meeting (Phase 1 - Crawl) (Q1–Q2 2024)
- Implement DG meeting (Phase 2 - Walk) (Q3–Q4 2024)
- Activity of a Data Governance framework embedded in processes (Phase 3 - Run) (2025–2026)

Enable analytic capabilities

1. Implement Customer Data Mastering Capabilities
2. Integrate Predictive modeling capabilities into core systems and processes
3. Sanctioned Datamarts developed in Production environment to support Operations and Analytics teams

- Discovery (Q3 2023)
- MVP 1 – Implement 3 key data marts to support Process A Reporting (Q4 2023 – Q2 2024)
- Finalize all operational reports in Tool (Prod) (Q3–Q4 2024)
- MVP 2 – Implement database to support Processes B, C, and D (Q4 2023 – Q4 2024)
- Operational & Analytical reporting (Run – Capabilities embedded in a Production environment) (2025–2026)

Color coding for status: Completed | On Track | Planned

Q&A

Follow me