神戸スマートシティ

Evidence-Based Policymaking in Kobe City: Leveraging Big Data for Local Governance in Japan

December 4, 2025

Chief Financial and Human Resources Officer, City of Kobe
MASAKI Yusuke

Biography

神戸スマートシティ

MASAKI Yusuke

Chief Financial and Human Resources Officer
City of Kobe

Project Associate Professor
Graduate School of Public Policy
University of Tokyo

Consulting Fellow
Research Institute of Economy, Trade and Industry
Government of Japan

2007: Junior Researcher, Political Funds Regulation Division, Ministry of Internal Affairs and Communications
Analyst, Municipal Finance Division, Yamaguchi Prefectural Government

2009: Policy Planner, Administration Improvement Division, Ministry of Internal Affairs and Communications

2010: Policy Planner, Decentralization Reform Office, Cabinet Office

2011: Senior Policy Planner, Decentralization Reform Office, Cabinet Office
Deputy Director, Energy Policy Division, Kumamoto Prefectural Government

2013: Deputy Director for Policy Coordination, Governor's Office, Kumamoto Prefectural Government

2014: Director, Environmental Policy Division, Kumamoto Prefectural Government

2015: Director, Finance and Prefectural Assembly Division, Kumamoto Prefectural Government

2016: Master's Program at Harvard University Graduate School (International Fellow, Nippon Foundation)

2018: AM, Graduate School of Arts and Sciences, Harvard University
Deputy Director, Local Administration Management Assistance Office, Ministry of Internal Affairs and Communications

2020: Associate Professor, Graduate School of Public Policy, University of Tokyo

2022: Chief Digital Officer, City of Kobe

2024: (Concurrently) Project Associate Professor, Graduate School of Public Policy, University of Tokyo

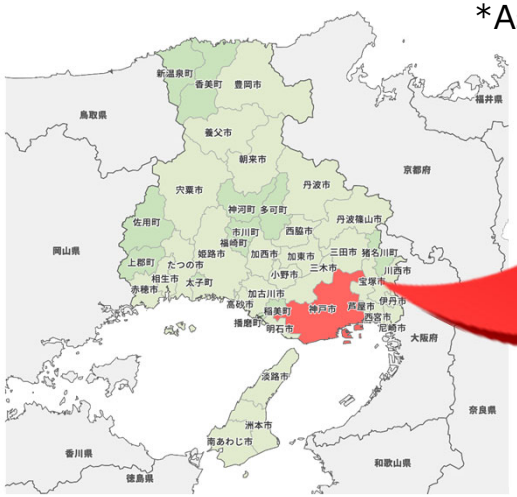
2025: Chief Financial and Human Resources Officer, City of Kobe (current position)

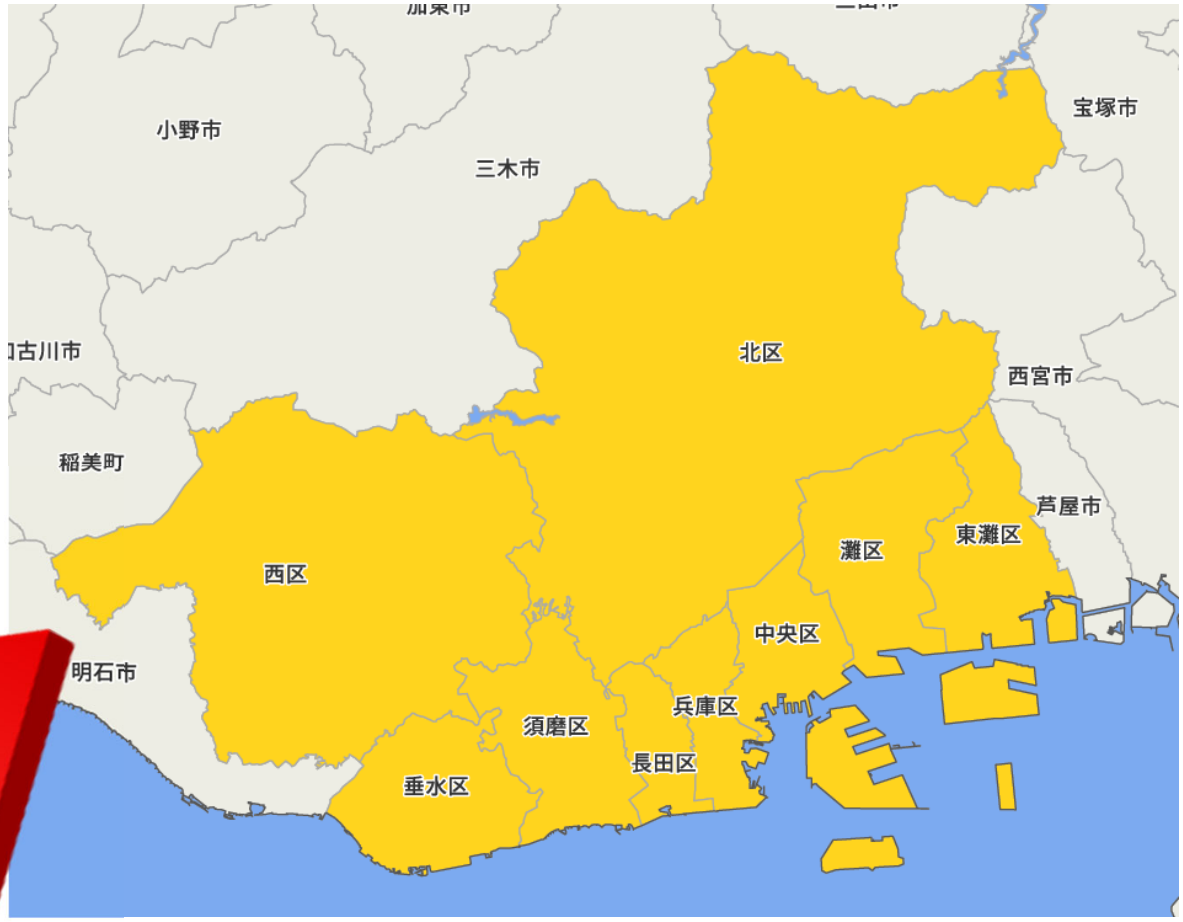
Overview of Kobe City

神戸スマートシティ

Government-Designated City
(9 Administrative Wards, 10 Ward Offices, 2 Branch Offices)
Population: 1,488,568 (7th among designated cities)
Area: 557.05 km² (9th among designated cities)
*As of May 1, 2025

Number of Staff: 21,514
General Administration and Enterprise Accounting: 10,317
Education: 9,690 (including 7,731 teachers)
Fire Department: 1,507
*As of April 1, 2024





Map-It マップイット(c)

Tourist Attractions in Kobe City

神戸スマートシティ


Meriken Park


Former Foreign Settlement


Kobe Beef

BE KOBE Monument

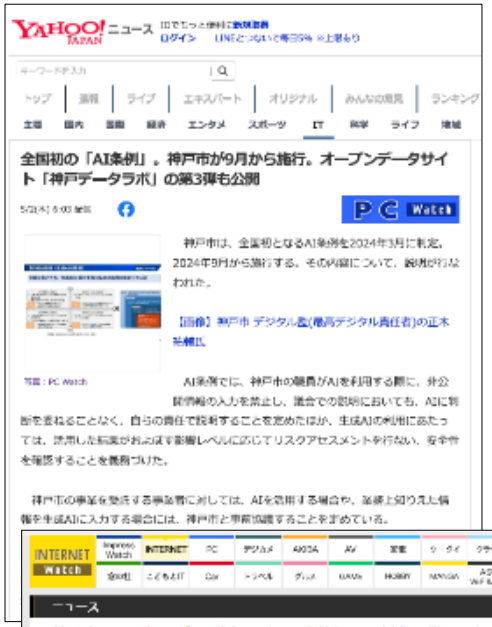

Arima Onsen


Rokkō Arima Ropeway


デジタルツイン スパコン富岳を活用した災害時避難シミュレーション
オープンデータ 148データセット
SaaS型都市OS
スマートこうべ 年間115万PV
7分野 35プロジェクト
スマートシティプロジェクト
ペーパーレスの推進（無線LANの導入）
紙使用量（2017年比）57.8%削減
業務効率化
ドローン 測量・点検・広報・防災
AI
RAG搭載 庁内FAQ 1,500アクセス/日
生成AIチャットを12,000人で利用
キャッシュレス 172か所
包括的AI条例
神戸データラウンジ 全庁共有ダッシュボード 163件
データ利活用方針策定
政策効果分析 Rユーザ 93人
統合型GIS 利用職員数 1,500人/月
Data StaRt Award 3年連続受賞
データアナリスト 530人達成
データ利活用 EBPM
住基データによる独自将来人口推計
神戸スマートシティ
神戸市のDXの取組
2025.04 ver.
DX人材
内部人材育成 DXリーダー 142人
外部人材活用 25人
スマート自治体 フロントヤード・バックヤード改革
スマート区役所 バックヤード業務集約
行政手続のスマート化 スマート化率（オンライン化）68.7%
業務アプリの内製 2,000アプリ
e-KOBE 利用者アカウント 43万 職員アカウント 2,400
RPA 業務削減 17,849時間（年間）
システム標準化 7分野でのカスタマイズ全廃
デジタルデバイド対策 支援数22,176人

Kobe City's AI and Data Utilization Initiatives Featured in Various Media

神戸スマートシティ



Kobe City's AI and Data Utilization Initiatives Featured in Various Media

神戸スマートシティ

Print Media

- PRESIDENT (published 2024.05.03)

- Vaccination patterns have become complex, and providing detailed communication to each target group has been challenging.
- By utilizing generative AI, all personas for eligible vaccination patterns were identified, and ideas for appropriate information provision for each persona were generated.
- Tasks that previously took multiple staff members several days were reduced to half a day's work, and high-quality persona generation was achieved without preconceived notions.
- By having generative AI create drafts for newsletters and social media posts tailored to each persona, both the quality and efficiency of the work improved.

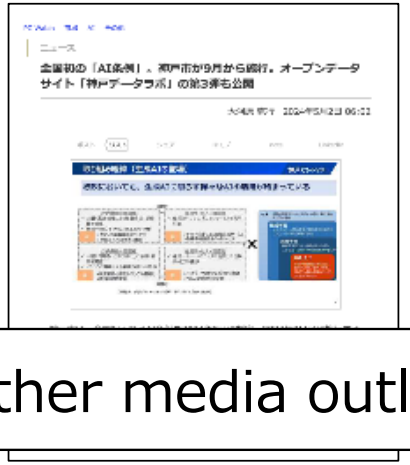
Websites

- The commencement of in-office use of generative AI and the enactment of the AI ordinance have been featured on various websites.

- Nikkei XTECH (2024.03)

- The Nikkei (2023.12)

- Pcwatch (2024.05)



- CNETJapan (2024.05)

Also featured in various other media outlets

Numerous Requests for Inspections, Lectures, Interviews, and Speaking Engagements

神戸スマートシティ

○ **In FY 2023, there were 175 requests for inspections, lectures, interviews, and speaking engagements.**

○ **As of January 9 in FY 2024, there have been 200 requests for inspections, lectures, interviews, and speaking engagements.**

2023 AWS Summit Keynote Speech: Mayor's Appearance

Digital Agency's Chief Digital Officer Asanuma: Inspection of Kobe Smart City Initiatives

Data StaRt Award

Award for Utilization of Statistical Data in Local Governments

神戸スマートシティ

Organized by: Ministry of Internal Affairs and Communications
Overview: An award system for local governments that advance outstanding initiatives utilizing statistical data.

6th Edition (2021)

● **Director-General of SBJ Award**

Healthcare Data Integration System
Kobe City Health Bureau, Health Planning Division

Overview:
Aiming to enhance citizen services by promoting health projects based on scientific evidence, we have newly established the "Healthcare Data Integration System." This system links and anonymizes data previously held by various departments, such as medical and nursing care receipt data and health examination data, enabling the analysis of comprehensive data with high completeness.

7th Edition (2022)

● **Minister of Internal Affairs and Communications Award**

DIY Data Analysis: Kobe Data Lounge
Kobe City Planning and Coordination Bureau, Policy Division

Overview:
To swiftly respond to the rapid changes in the external environment surrounding administration, we embraced a **DIY spirit** of "**doing what we can ourselves without relying solely on external experts**." This involved building an in-house data integration platform to collect data necessary for analysis, creating an environment for data utilization where dashboards made by staff using BI tools can be safely shared internally, and disseminating easy-to-understand information to citizens. Additionally, staff took the lead in advancing the development of human resources skilled in data utilization.

8th Edition (2023)

● **Special Award**

Population Strategy Created Through EBPM
Kobe City Planning and Coordination Bureau, Policy Division

Overview:
Focusing on a population strategy based on the two perspectives of "mitigation" and "adaptation" to population decline, we conducted an analysis of factors contributing to population growth using multiple regression analysis with "R." Additionally, we developed original future population projections for Kobe City and created a dashboard overlaying population decline with public services. This has enabled a comprehensive view and discussion of administrative services in relation to population size.

Young Staff Featured in Digital Agency's Owned Media

神戸スマートシティ

○ **Young staff members were featured** in the Digital Agency's owned media, released on platforms such as **"Digital Agency News."**

＃１ “Four Kobe City Employees Discuss the Reality of ‘Administration × Data Utilization’ ” (Released on May 23)

＃２ “What Are the Tax Collection Reforms × Data Utilization Practices Implemented by Kobe City?” (Released on June 20)

Introduction of Kobe City's Initiatives on the Websites of the Digital Agency and MIC

神戸スマートシティ

■Digital Agency Website

デジタル庁

神戸市 企画調整局 政策課

神戸市データラウンジ ダッシュボード

神戸市は、内部人材による行政データの利活用を推進しています。神戸市職員が各基幹系システ
象加工をしたうえでデータを保管・蓄積するなどして、90種類以上のダッシュボードを作成して
共有する仕組みを構築しています。

神戸市データラウンジダッシュボード

ダッシュボード導入による変化

Before

データの収集・加工・分析に多大な時間がかかる

かつてはベテラン職員の経験値から情報を得たり、大量のデータ集計・加工作業を元に現状把握・課題特定を行っていました。

データの収集・加工・分析に多大な時間を要してしまい、チーム内での政策議論に割く時間が限られていました。

After

データ収集や分析が効率化され、政策議論が充実

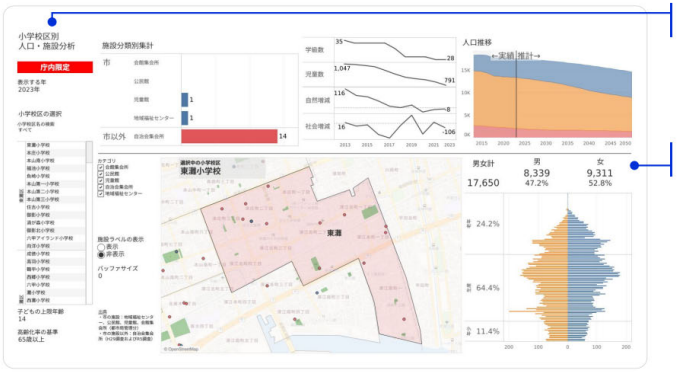
全神戸市職員は、業務用PCから「神戸データラウンジ」上ダッシュボードにアクセスが可能。わざわざ外部にデータを取り寄せる必要や集計・加工する必要がなくなりました。BIツールで作成した資料をブラウザ上で共有できるため、資料作成の時間が大幅に削減され、議論に長い時間を割くことができています。

詳細なデータを活用し、きめ細やかな政策を検討

人口の動態を区単位で見たり、さらに細かく小学校区単位で見たりすることで、きめ細やかな政策をしやすくなったという声もあります。人口減少時代のインフラの維持をどうしていくのか、将来推計人口や人口構成を見ながら検討を行っています。また、自らダッシュボードを作りたいという職員が全庁で増えてきました。

©2024 Digital Agency 5

神戸市データラウンジダッシュボード (1/3)



確認したい分野と指標を表示

このダッシュボードでは、小学校区を選択することで、その地域の人口の状況を把握できます。他の地域と比較しながらその地域の施設の配置、公共サービスの充足状況等を簡単に分析することができます。

データを組み合わせて傾向に気づく

人口増減率と各指標など、データを組み合わせて項目別に表示することもできるため、状況把握がしやすくなり、違いにも気づきやすくなります。

神戸データラウンジ内にて90種以上のダッシュボードを共有

可視化された人口や世帯分布データを見ることができ、現在では約90種類のダッシュボードが実装されています。

参考：<第7回>総務大臣賞「データ分析をDIY～神戸データラウンジ～」（2022年）

©2024 Digital Agency 2

■MIC Website

New ＜3．内部DX＞ バックヤード（内部事務）③内部業務 ダッシュボードの活用 人口：30万人以上

31 行政データの統計加工・ダッシュボード化を行い、データドリブンな行政運営を実践【兵庫県神戸市】

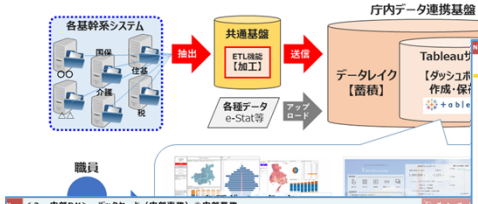
Point
- 行政データの統計加工・ダッシュボード化により、データ収集・分析等に要する時間を削減
- 様々な政策議論でダッシュボードを利用し、データドリブンな行政経営を実践

事業の概要

○ 各基幹系システムのデータを、**個人情報を特定できない形に加工のうえ抽出し、ダッシュボード等で可視化**

○ **専門知識を持たない職員でも直感的な操作でデータ分析**ができるようにするとともに、作成したダッシュボードを安全に共有できる環境（神戸データラウンジ）を実現し、**データ収集・分析等に要する時間を大幅に削減**

［サービスイメージ］



Kobe City's initiatives were clearly and thoroughly detailed!
(Distributed to local governments nationwide)

Also featured in the "Advanced Case Study Textbook" of the Ministry of Internal Affairs and Communications' Local Autonomy College

Smart City Summit in Kobe

神戸スマートシティ

An event primarily for local government officials to experience administrative digital transformation (DX) and learn from advanced case studies nationwide, the "Smart City Summit in Kobe," was held on October 22-23!

Program Overview (Excerpt)

- Keynote Speech & Panel Discussion
- Generative AI Cross Talk
- Drone Cross Talk
- Tableau Cross Talk
- Drone Flying Experience and Case Study Introduction
- kintone Cross Talk
- Data Integration Platform (City OS) Cross Talk
- Data Analysis Workshop Using BI Tools
- Tableau Hands-On Session
- kintone Hands-On Session

...etc.

Participation Data

The number of applicants was 445.
(Actual in-person participants: 142; online viewers: over 300)

所属	申込者数（団体数）
政令指定都市	109（16）
市町（県内）	47（19）
市区町村（県外）	94（59）
都道府県	46（16）
国	13（3）
民間企業	118（70）
その他	18（13）
計	445（196）

Breakdown of Event Applicants

3 ministries, 110 local governments,
3 universities, and 80 organizations!!

Today's Agenda

神戸スマートシティ

- Practice of EBPM in Kobe City
  - ✓①EBPM Regarding the Current Situation
  - ✓②EBPM Concerning Policy Effects
- Preparation of Usable Data
- Development of Personnel Skilled in Data Utilization

神戸スマートシティ

Practice of EBPM in Kobe City


デジタルツイン
スパコン富岳を
活用した災害時避難シミュレーション
オープンデータ
148データセット
SaaS型都市OS
スマートこうべ
年間115万PV
7分野
35プロジェクト
スマートシティプロジェクト
ペーパーレスの推進
（無線LANの導入）
紙使用量（2017年比）
57.8%削減
業務効率化
ドローン
測量・点検・広報・防災
AI
RAG搭載 庁内FAQ
1,500アクセス/日
生成AIチャットを
12,000人で利用
包括的AI条例
キャッシュレス
172か所
神戸データラウンジ
全庁共有ダッシュボード
163件
データ利活用
方針策定
政策効果分析
Rユーザ
93人
統合型GIS
利用職員数
1,500人/月
Data StaRt Award
3年連続受賞
データアナリスト
530人達成
データ利活用
EBPM
住基データによる
独自将来人口推計
神戸スマートシティ
神戸市のDXの取組
2025.04 ver.
DX人材
内部人材育成
DXリーダー
142人
外部人材活用
25人
スマート自治体
フロントヤード・バックヤード改革
スマート区役所
バックヤード
業務集約
行政手続のスマート化
スマート化率
（オンライン化）
68.7%
業務アプリの内製
2,000アプリ
e-KOBE
利用者アカウント
43万
職員アカウント
2,400
RPA
業務削減
17,849時間
（年間）
システム標準化
7分野でのカスタマイズ全廃
デジタルデバイド対策
支援数22,176人

Policy on Data Utilization in Kobe City

神戸スマートシティ

To Flexibly Respond to Rapid Changes in the External Environment...

DIY: Do It Yourself

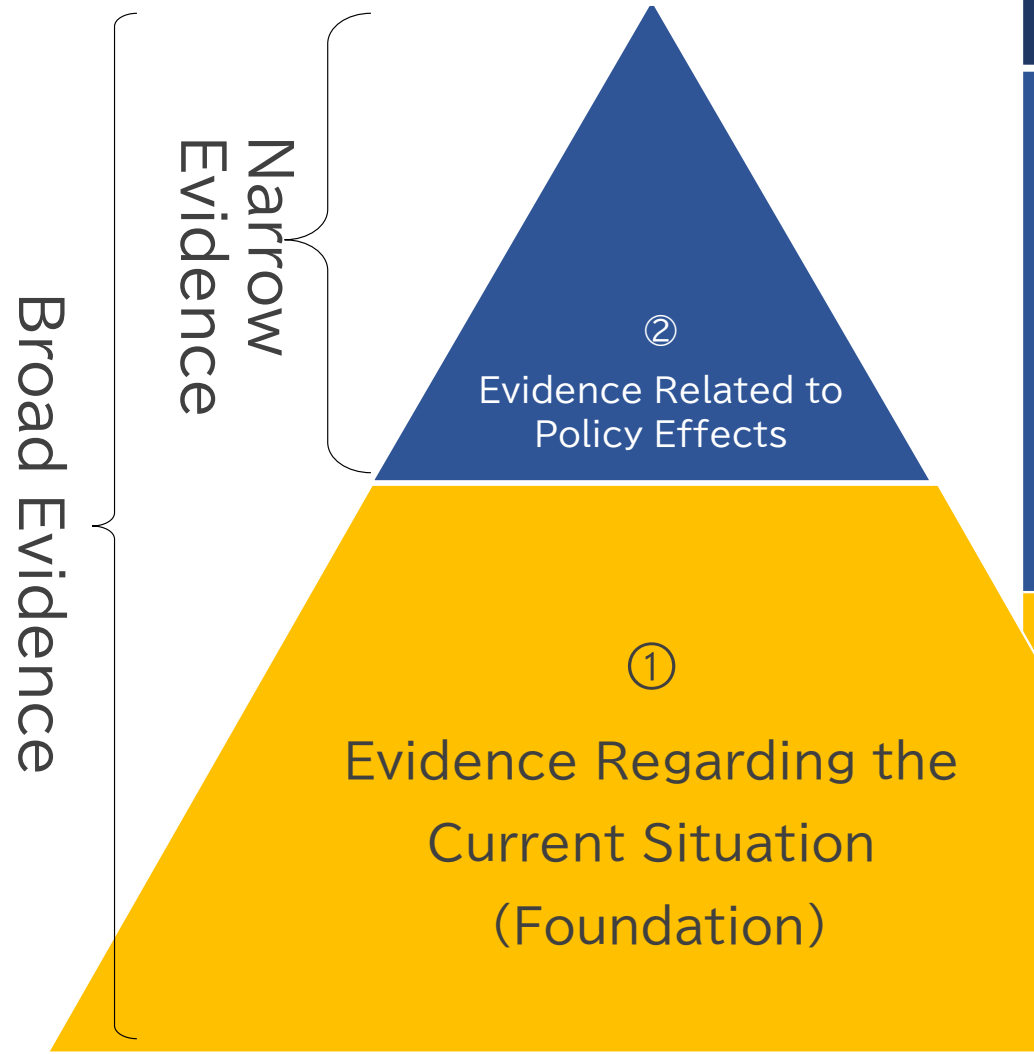
Don't Rely Solely on External Experts

Let Staff Take the Initiative!!

In-House Development
Using Low-Code Tools

Types of Evidence

神戸スマートシティ



Scope of Application	Analytical Tools	Major Analytical Methods
Narrow (Constraints such as the availability of sufficient data)	**R** Python Stata	**Causal Inference Based on Econometrics** ・RCT ・Difference-in-Differences Analysis ・Regression Discontinuity Design, etc.
Broad	**R** Python Stata Excel	**Factor Analysis, Prediction, M L** ・Regression and Correlation Analysis ・Clustering ・Decision Trees
	Tableau Power BI	Visualization Through Graphs

Progress of EBPM in Kobe City

神戸スマートシティ

② Evidence Related to Policy Effects

① Evidence Regarding the Current Situation

FY2020–2021	FY2022	FY2023	FY2024・25
	Utilization of Existing Evidence	Utilization of Academic Papers on Statistical Causal Inference	Enhanced Time for Sharing Issue Awareness with Relevant Departments
	Creation of New Evidence	Initiated 23 Analyses Using R	Focusing on the Health and Welfare Sector
		R Training / Introduction (Lectures)	Building a Framework through the Recruitment of Doctoral Students, University Collaboration, and Utilization of In-House Side Work
		R Training / Practical Application (Exercises)	
Promotion of EBPM Using BI Tools (Individual Analysis and Group-Level Dashboard Sharing)			Proactive Support for Each Bureau
Development	"Kobe Data Lounge" (Internal Dashboard)		Enhanced for Better Visibility
	"Kobe Data Lab" (Public Dashboard)		Publication of Future Population Projections
Tableau Training			Utilized in Policy Meetings by Each Bureau and in Formulating the Next Fiscal Plan
		Creation of Original Future Population Projections	Exploring the Utilization of the Vision in Management

①EBPM Regarding the Current Situation

Challenges in Main Telephone Exchange Operations

神戸スマートシティ

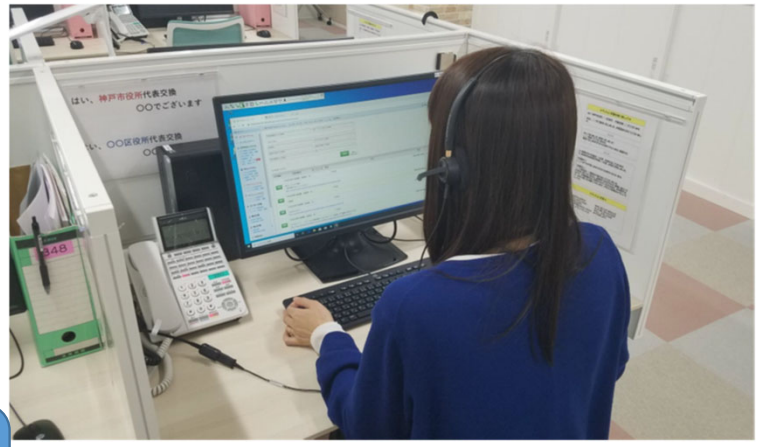
- Kobe City has outsourced the main telephone exchange operations for its 1 city office, 10 ward offices, and 2 branch offices to a private company.

【Overview】

Operating Hours	City Office: Weekdays from 8:45 AM to 5:30 PM Ward Offices: Weekdays from 8:45 AM to 5:30 PM (until 8 PM on Thursdays)
Number of Incoming Calls	Annually: 1,937,622 calls
Number of Answered Calls	Annually: 1,599,002 calls (Response rate: 82.5%)

Kobe City does not publish direct phone numbers for departments, so incoming calls are centralized (resulting in a higher volume of calls handled).

【Operation Booth】



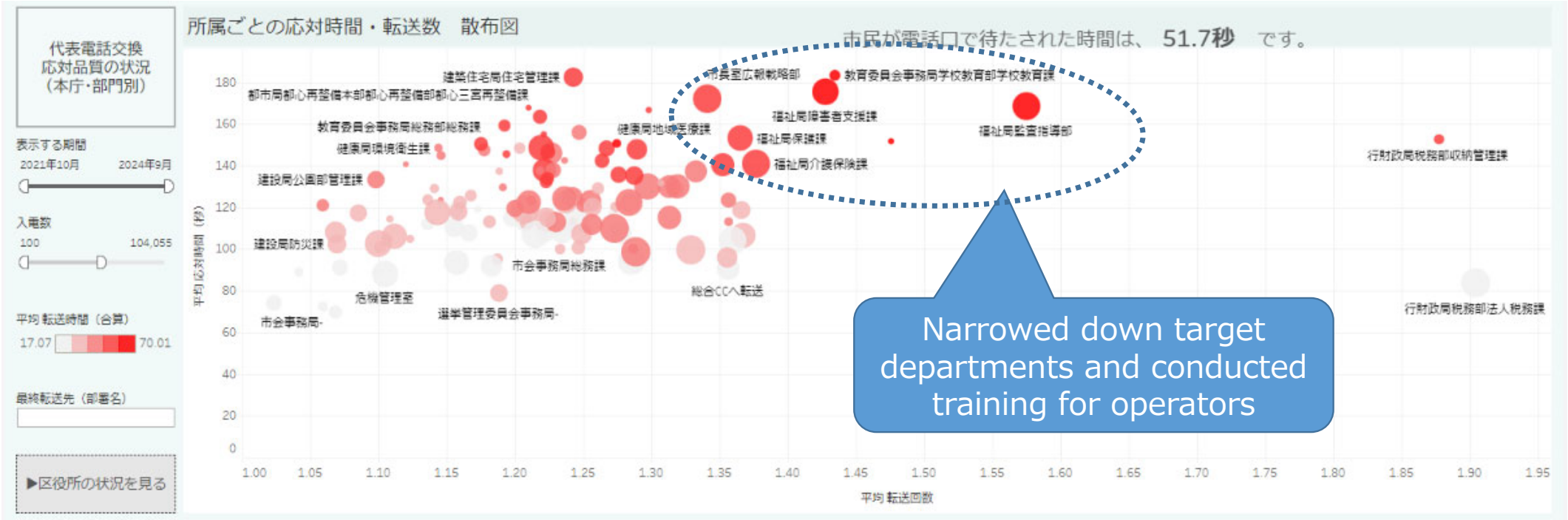
- There were frequent complaints about issues such as “long wait times” and “being transferred from one department to another.”

⇒ The decision was made to identify the issues and consider countermeasures based on data analysis.

Visualization of Response Quality (Identification of Problematic Departments)

神戸スマートシティ

- Response quality was visualized in near real time by linking data from the main telephone exchange system (PBX) to Tableau.
- The situation of each responsible department was visualized and shared, to be utilized for data organization and improvement requests.



Verification of Countermeasure Effectiveness (City Office)

神戸スマートシティ

- A common target value of 120 seconds for “average response time” was set with the contractor, and the daily situation was monitored. (Response time refers to the duration from when the operator answers the call to when it is successfully transferred to staff.)

Before the improvements, response time exceeded 150 seconds (2.5 minutes)...

Average reduction of 35 seconds!

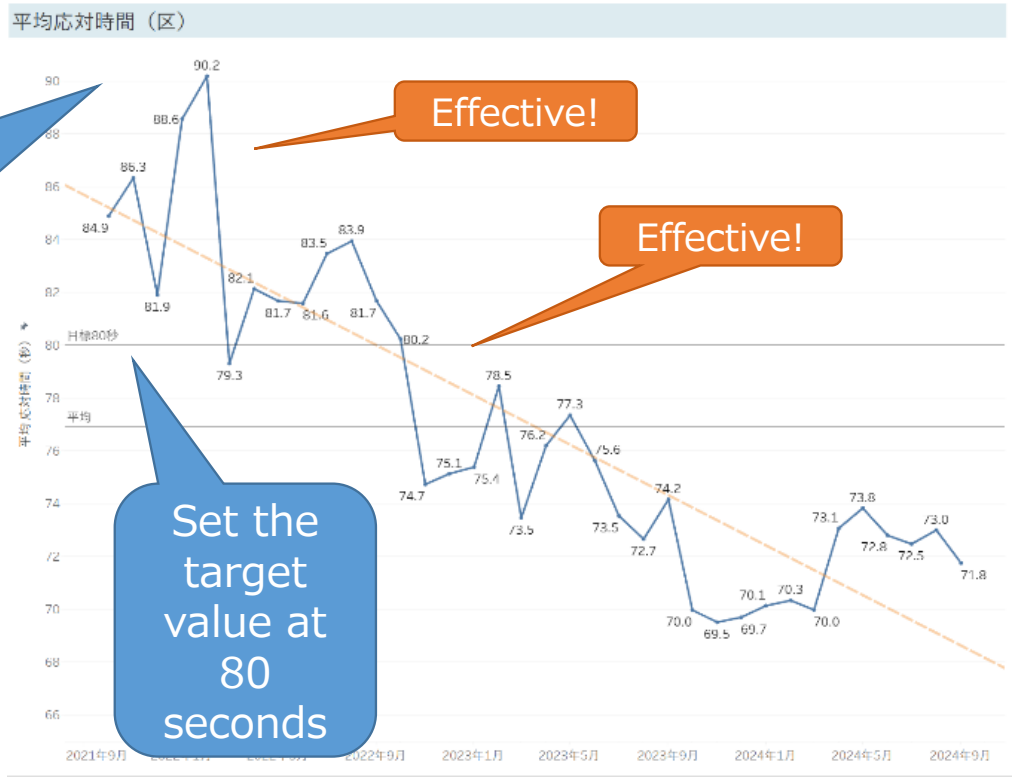
Currently, the target value is consistently being achieved!

Verification of Countermeasure Effectiveness (Ward Offices)

神戸スマートシティ

- As services at ward offices are more limited than those at the city office, the target value was set at a shorter 80 seconds.
- While verifying the effectiveness of the countermeasures, we continuously rolled out the next initiatives.

Before the improvements, response time exceeded 90 seconds (1.5 minutes)...



Average reduction of 15 seconds!

Currently, the target value is consistently being achieved!

Summary of Effectiveness

神戸スマートシティ

- City Office: Average reduction of 35 seconds per call
- Ward Offices: Average reduction of 15 seconds per call

⬇

- Citizen Waiting Times (Monthly Estimates)

City Office = 35 sec. × 9,000 calls = 5,250 min.

Ward Offices = 15 sec. × 107,000 calls = 26,750 min.

Time Citizens Were Not Kept Waiting

⬇

32,000 min.

(533 hours)

Kobe Data Lounge

神戸スマートシティ

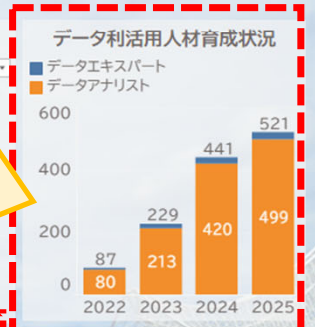
○**Full-scale operation began in June 2022 (shared across the entire organization).** Staff can access "Kobe Data Lounge" via the Desknet's software.

"Kobe Data Lounge" accessible via Desknet's!

Status of Development of Personnel Skilled in Data Utilization and Ongoing Training Opportunities

・Information on the status of development of personnel skilled in data utilization and available training opportunities is posted.

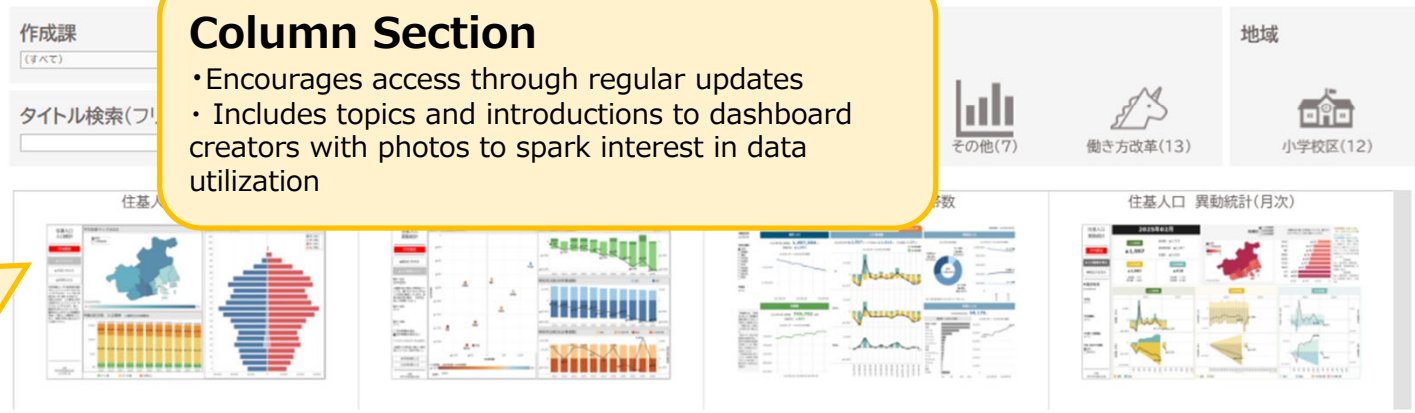
・Encourages training participation to promote the development of personnel skilled in data utilization



Column Section

・Encourages access through regular updates

・ Includes topics and introductions to dashboard creators with photos to spark interest in data utilization



Thumbnail Display

・Improved searchability (easier to search than a list)

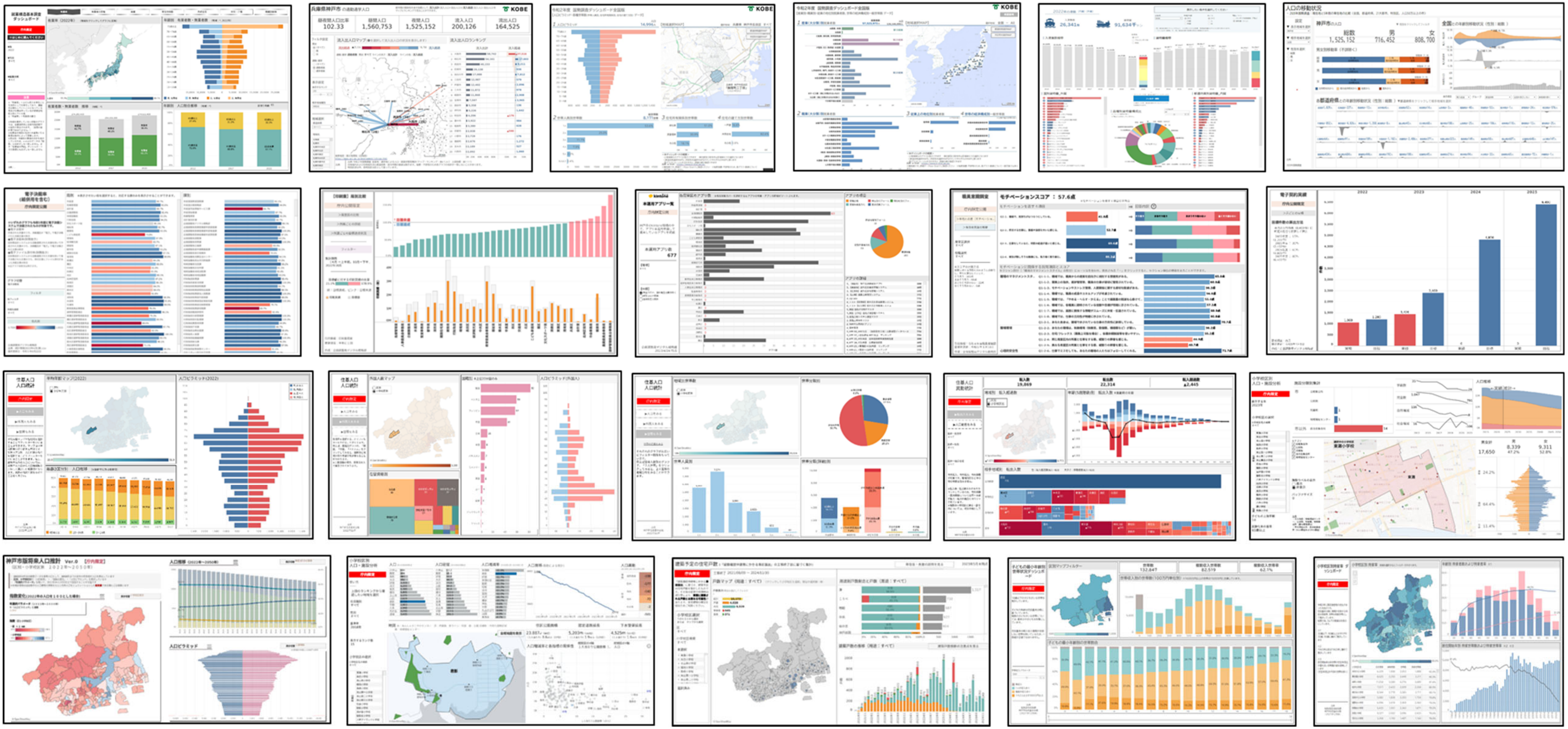
・Makes first-time viewers want to explore

・Thumbnails like those on YouTube are more enticing to click.

Shared Dashboards

神戸スマートシティ

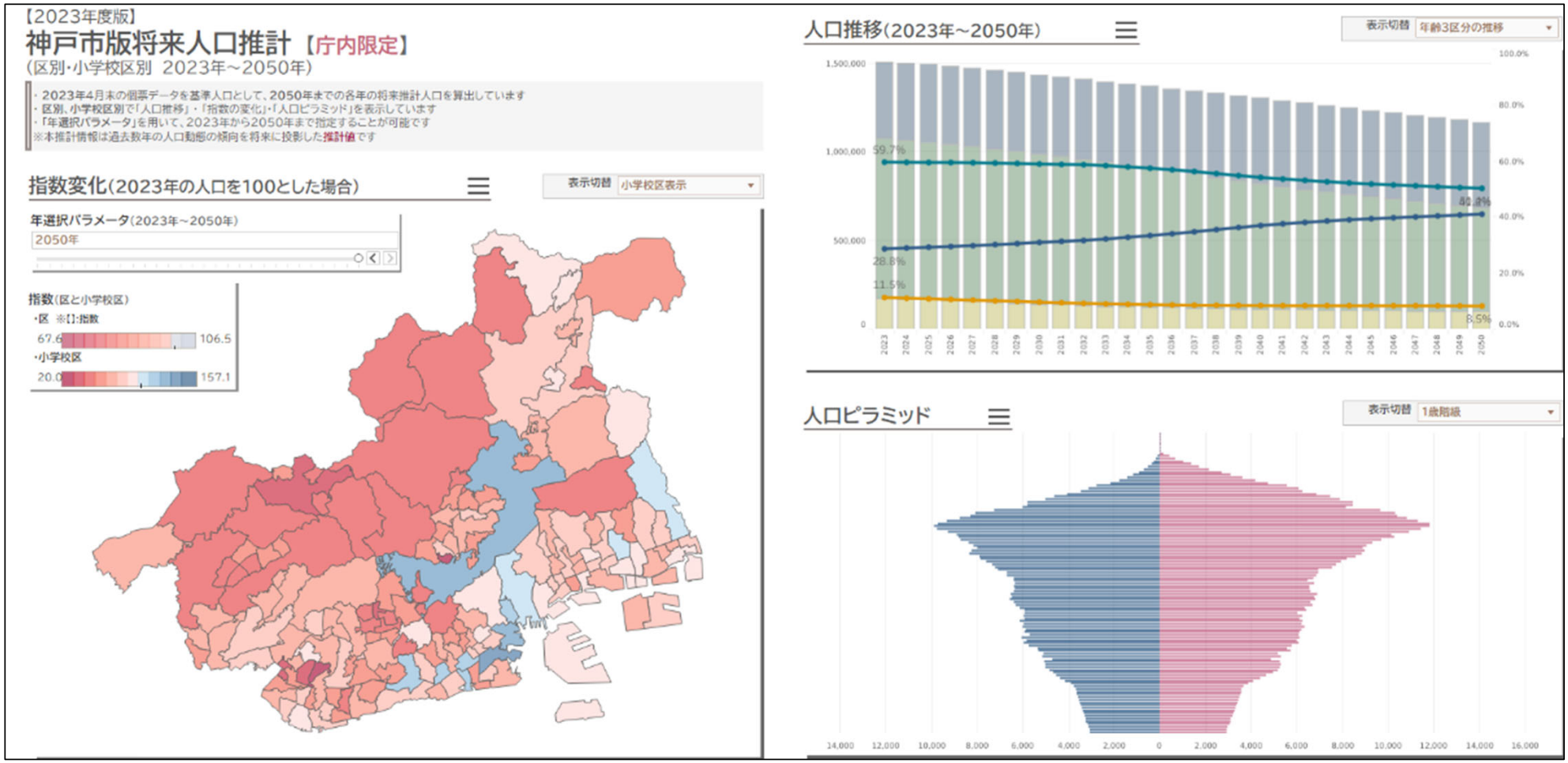
〇Currently, **about 160 dashboards are posted on "Kobe Data Lounge"** and shared among staff.



Dashboard of Future Population Projections by Elementary School District

神戸スマートシティ

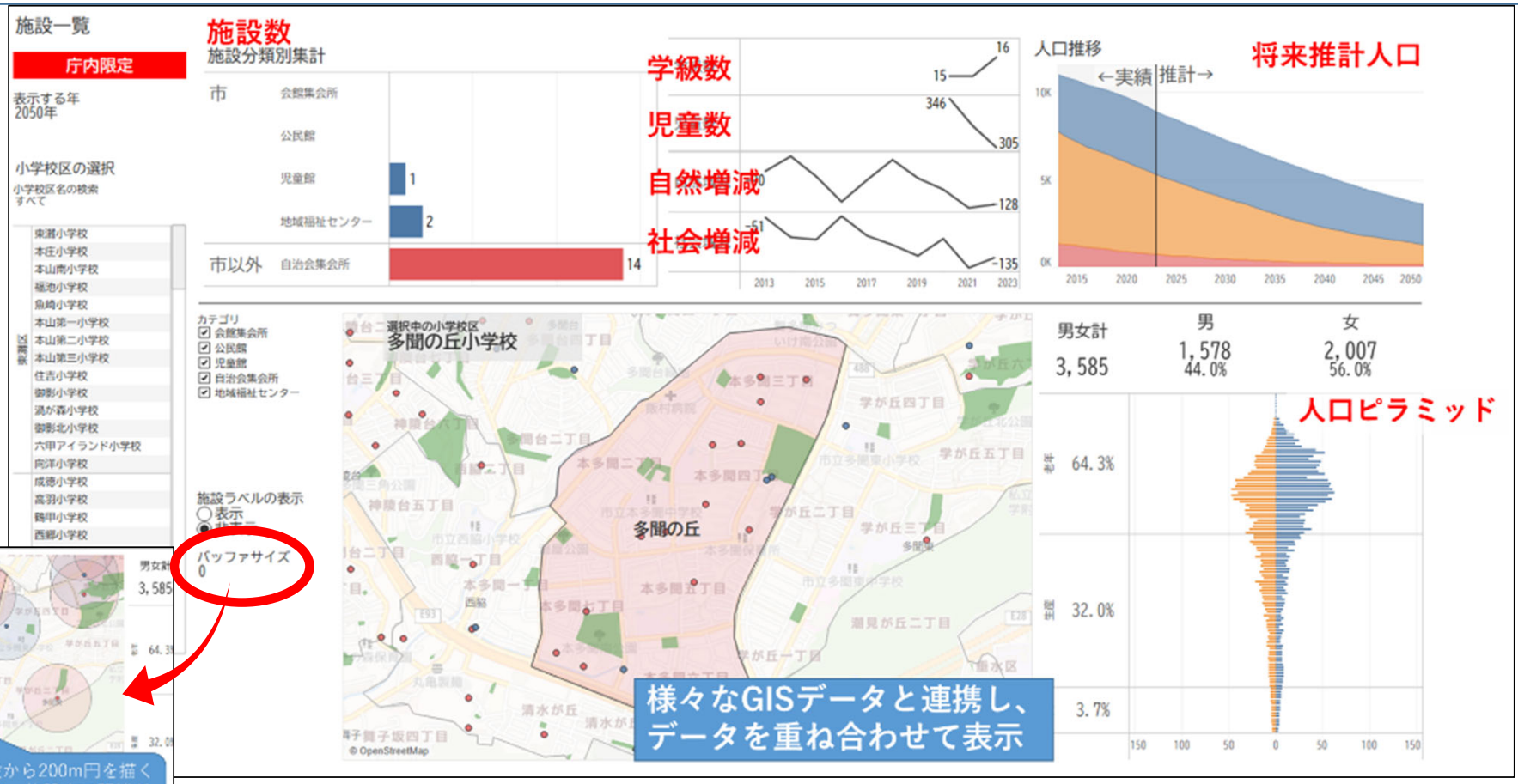
○ **Utilizing resident registration data, Kobe City independently calculates future population projections by age group and elementary school district, updating them annually.**

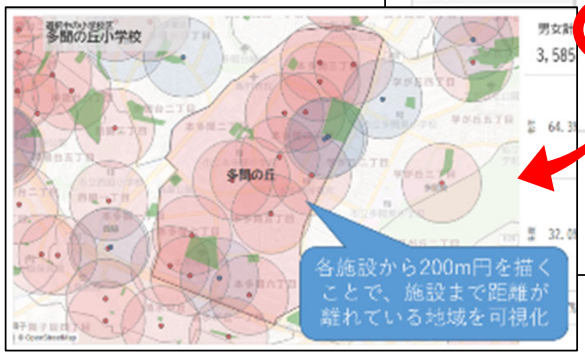


Dashboard Showing Public Facility Placement in Relation to Population Conditions

神戸スマートシティ

○ Created and shared a dashboard that allows for the verification of **population conditions** and **public facility placement** for each elementary school district.

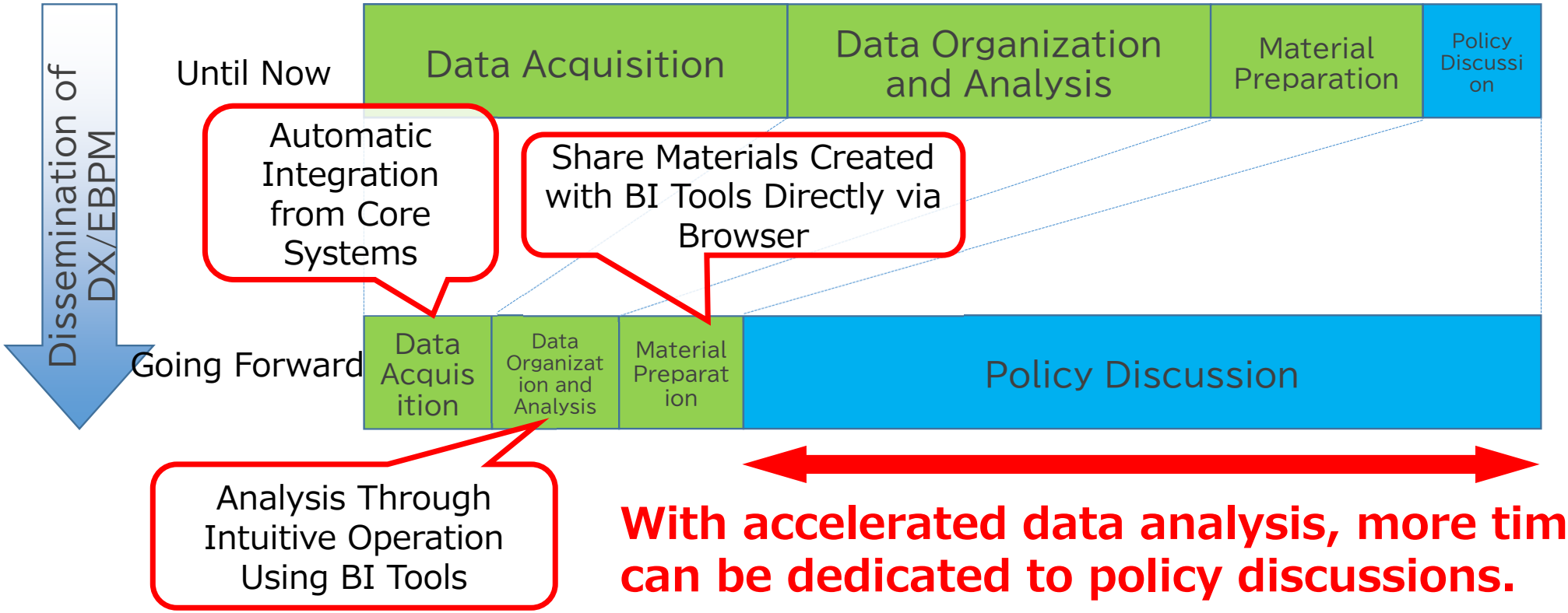




Acceleration of Data Analysis Enabled by Kobe Data Lounge

神戸スマートシティ

○ Intuitive **Analysis and Sharing** Using BI Tools
○ **Data Organization** Through Integration with Core Systems



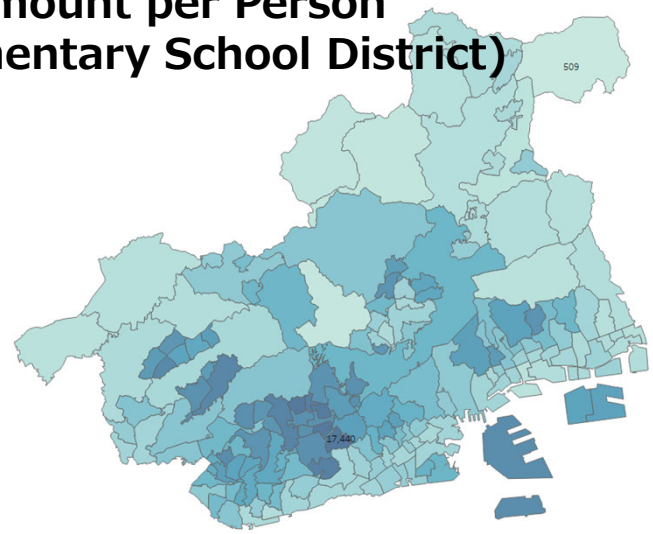
With accelerated data analysis, more time can be dedicated to policy discussions.

Specific Policy Formulation Example ①: Annual Usage of the Senior Citizen Pass

神戸スマートシティ

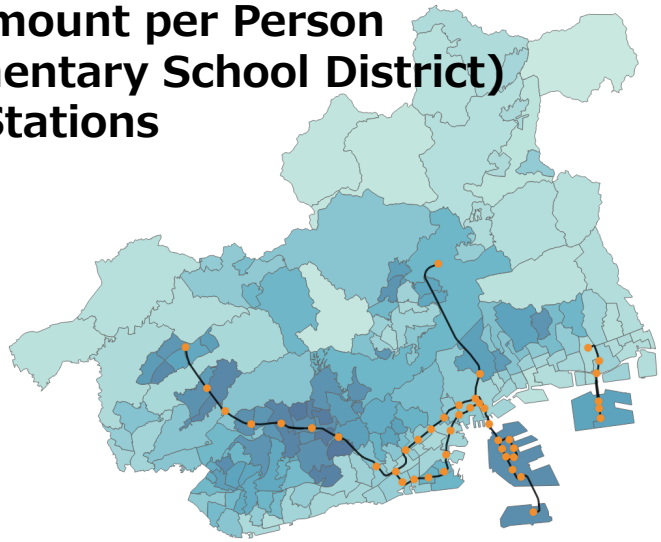
○When observing the annual usage amount per person, it was found that there is about a 34-fold difference, ranging from 509 yen to 17,440 yen, and areas around train stations have consistently higher usage.
○Going forward, the Welfare Bureau will consider measures to ensure the fairness of system usage, such as setting usage limits.

Usage Amount per Person (By Elementary School District)



It is evident that the Senior Citizen Pass is used with a range of 509 yen to 17,440 yen per person annually. Additionally, there is variability in usage amounts across different elementary school districts.

Usage Amount per Person (By Elementary School District) + Train Stations

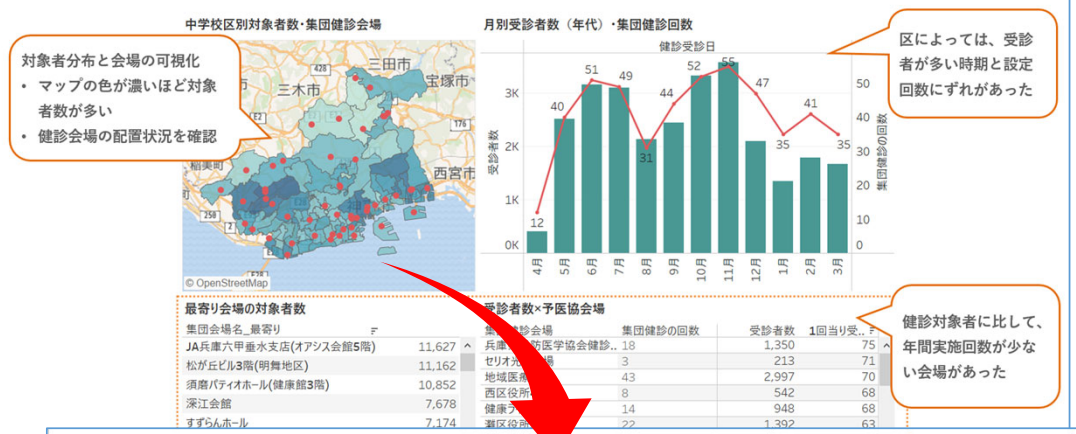


Overlaying train stations where the Senior Citizen Pass can be used on the map reveals that the annual usage amount per person is higher in elementary school districts located near train stations.
⇒**It can be inferred that using trains is highly convenient, and residents living near stations benefit more from the pass.**

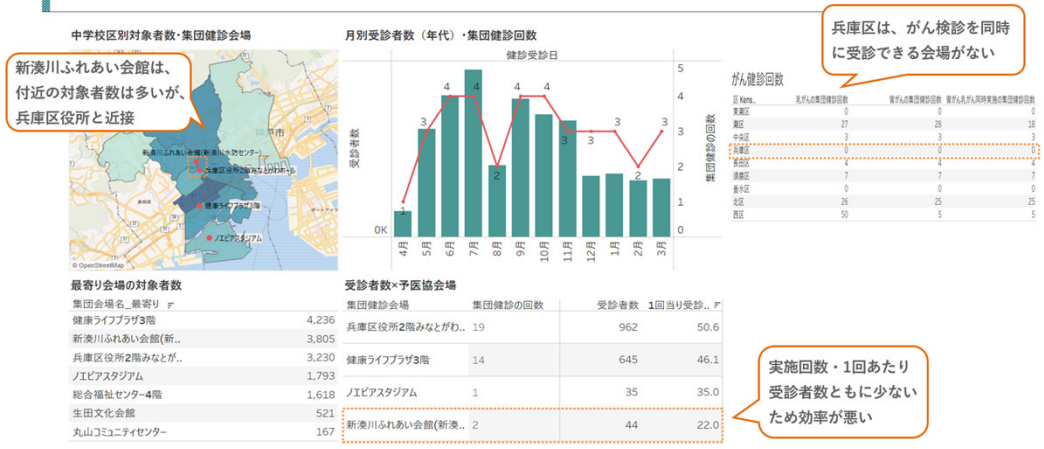
Specific Policy Formulation Example ② : Implementation Status of Specific Health Checkups

神戸スマートシティ

集団健診会場に関するデータの可視化（ダッシュボード化）



1．健診会場・日程の見直し　＜例：兵庫区＞



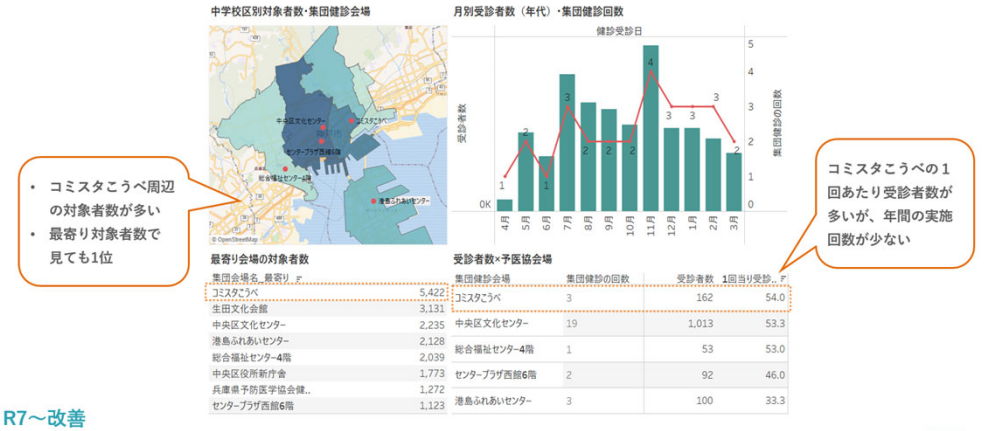
R7～改善

新湊川ふれあい会館での実施を兵庫区役所に集約し、がん検診同時実施も含め、拠点会場としての機能を向上

8

Differences in the attributes of eligible individuals and implementation status were visualized by region.

1．健診会場・日程の見直し　＜例：中央区＞



R7～改善

受診者数が多いが健診回数が少ない6～9月に、コミスタこうべで健診を追加

7

By identifying the factors contributing to regional differences and clarifying the targets of countermeasures, we can aim for more effective policy formulation.

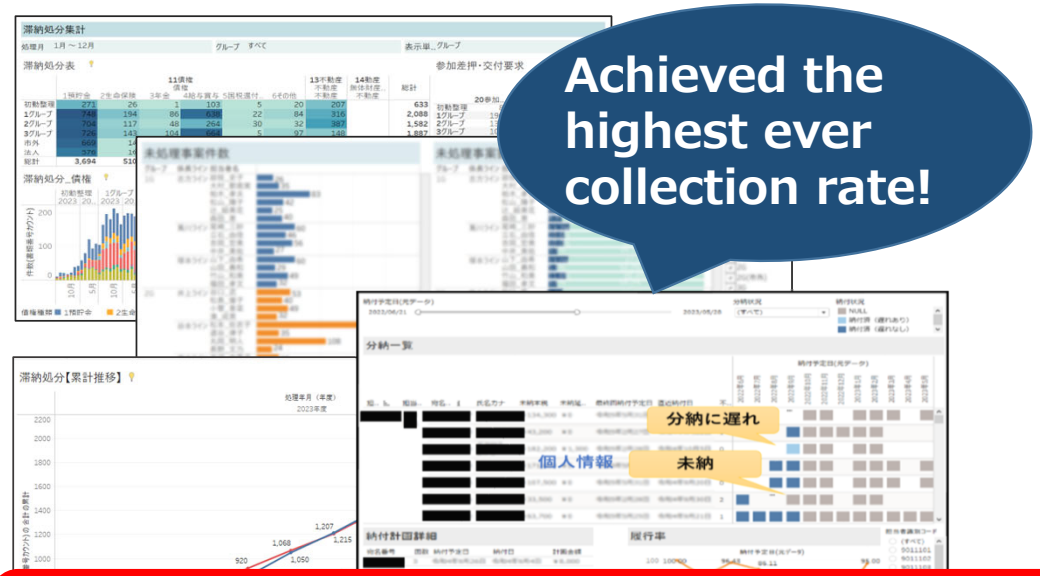
Operational Reform Through Data Utilization

神戸スマートシティ

○Several departments have already achieved significant results by implementing data-driven operational management.
○Going forward, it is necessary to expand these initiatives across the entire organization.

[Tax Department] Tax Collection Dashboard

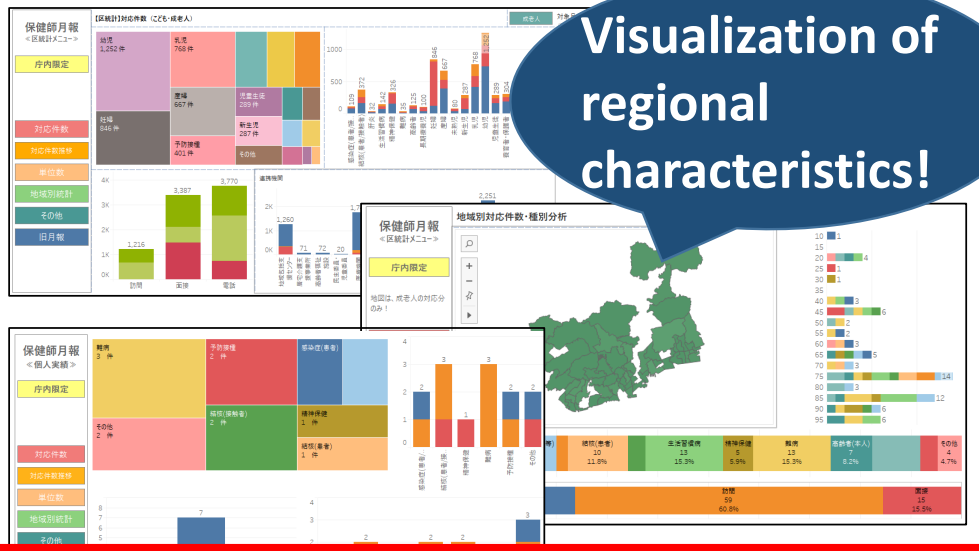
Success achieved through dashboard initiatives and
a review of delinquency management policies



Achieved the highest ever collection rate!

[Health Bureau] Public Health Nurse Monthly Report Dashboard

Visualizing and sharing daily report data from public health nurses



Visualization of regional characteristics!

In the future, through system standardization, the regular accumulation of detailed data will enable the creation of various dashboards for operational management.

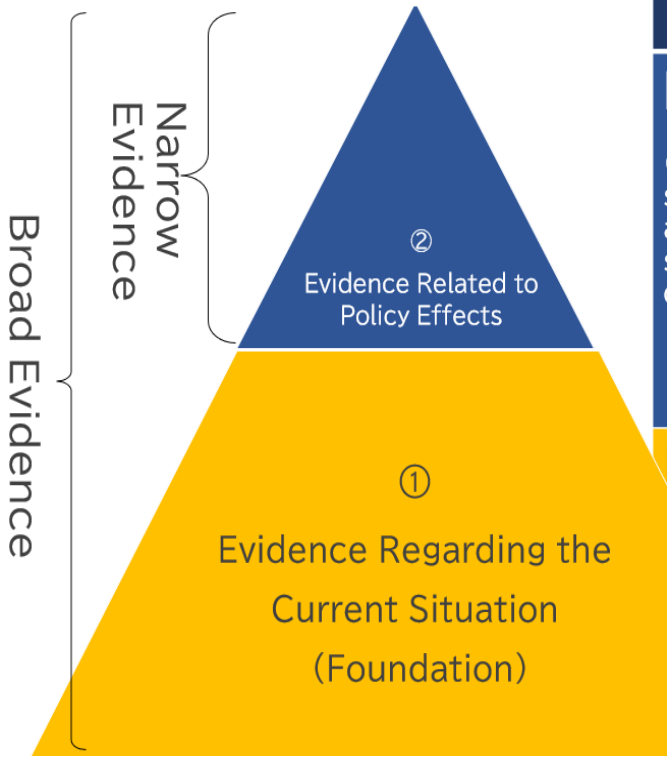
②EBPM Concerning Policy Effects

○ Utilization of Existing Evidence
○ Creation of New Evidence

Evidence Related to Policy Effects

神戸スマートシティ

○ In terms of evidence related to policy effects, we are undertaking two initiatives: "**utilization of existing evidence**" and "**creation of new evidence**."



Scope of Application	Analytical Tools	Major Analytical Methods
Narrow (Constraints such as the availability of sufficient data)	**R** Python Stata	**Causal Inference Based on Econometrics** ・RCT ・Difference-in-Differences Analysis ・Regression Discontinuity Design, etc.
Broad	**R** Python Stata Excel	**Factor Analysis, Prediction, M L** ・Regression and Correlation Analysis ・Clustering ・Decision Trees
	Tableau Power BI	Visualization Through Graphs

Utilization of Existing Evidence
→Preliminary literature reviews

Creation of New Evidence
→Analysis conducted by staff themselves

Evidence Related to Policy Effects ①: Utilization of Existing Evidence

神戸スマートシティ

○**Investigated 33 topics and 760 academic papers**, both domestic and international, using econometric causal inference methods and utilized them as evidence.

	項目	論文数
R5	①出生率に影響を与える要因	12
	②最低賃金の経済効果に対する因果効果	12
	③子どもの体力に影響を与える要因	58
	④外国人の流入による影響	19
	⑤大学生の負担軽減施策による政策効果	19
	⑥結婚の決定要因（結婚支援策の効果）	51
	⑦空家の発生要因	9
	⑧成人病の発症率の決定要因	25
	⑨開業率が高い地域の要因（スタートアップ関連）	30
	⑩女性の就業率を上げるには（女性の就業要因）	22
	⑪住宅の構造が健康に及ぼす影響	45
	⑫ソーシャルキャピタルは社会経済にどのような影響を与えるか	25
	⑬ソーシャルキャピタルがウェルビーイング（子育てなど）に及ぼす影響	26
	⑭ウェルビーイングを構成する要因（決定要因）	26
	⑮小・中学校教育に係る「学級規模」が学力に与える影響	24
	⑯フッ化物の虫歯予防に対する効果	21
	⑰投票環境が投票率に及ぼす影響	9
	⑱子供の職業選択に親が及ぼす影響	21
	⑲孤立・孤独による生活への影響	22
	⑳メンタルヘルス不調・精神疾患になる要因	19
	㉑夫婦出生力の決定要因	33
	㉒海外（先進国）における出生率向上の要因	20
	㉓不登校（小学生・中学生）の決定要因	20
	㉔健康寿命の決定要因	31
R6	①スタートアップ企業の成長の要因	21
	②コンビニエンスストアの誘致による効果	19
	③後期高齢者健診の効果	16
	④文化財・伝統行事が住民や地域に与える効果	14
	⑤オーラルフレイルの方への事後指導の効果	22
	⑥若者のUターンの要因と有効な政策	17
	⑦若年期の女性のやせと健康	18
	⑧森林・緑化が及ぼすヒートアイランド現象の緩和効果	15
	⑨市街地緑化の心理的な影響	19

Also implemented in FY 2025

⑧ Determinants of the Incidence Rate of Adult Diseases

It was found that undergoing health checkups is linked to healthy behaviors such as exercise. This insight is being utilized in the Health Bureau's consideration of health checkup promotion measures.

⑪ Impact of Housing Structure on Health

It was found that the thermal insulation performance of housing contributes to health promotion. This finding is being used by the Housing Bureau to review the Kobe Living Support Subsidy.

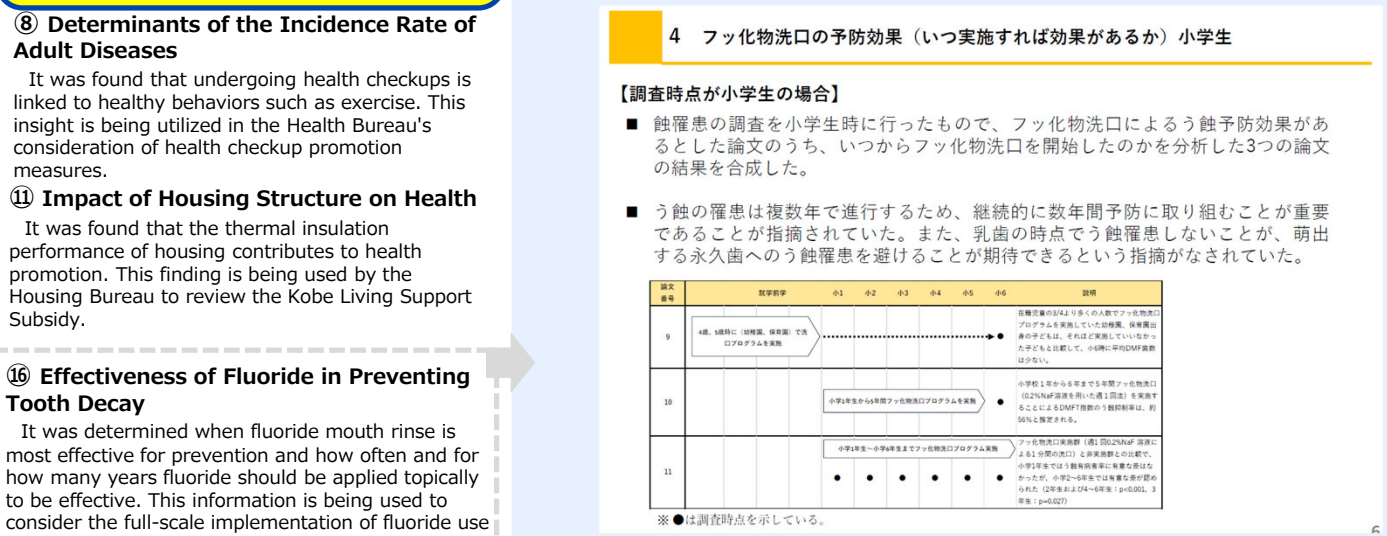
⑯ Effectiveness of Fluoride in Preventing Tooth Decay

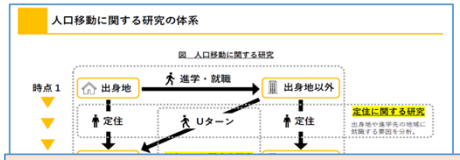
It was determined when fluoride mouth rinse is most effective for prevention and how often and for how many years fluoride should be applied topically to be effective. This information is being used to consider the full-scale implementation of fluoride use in elementary schools.

Confirmed the preventive effects of fluoride mouth rinse and topical application
➡ Utilized to consider the expansion of fluoride use to all schools

Examples

Effectiveness of Fluoride in Preventing Tooth Decay





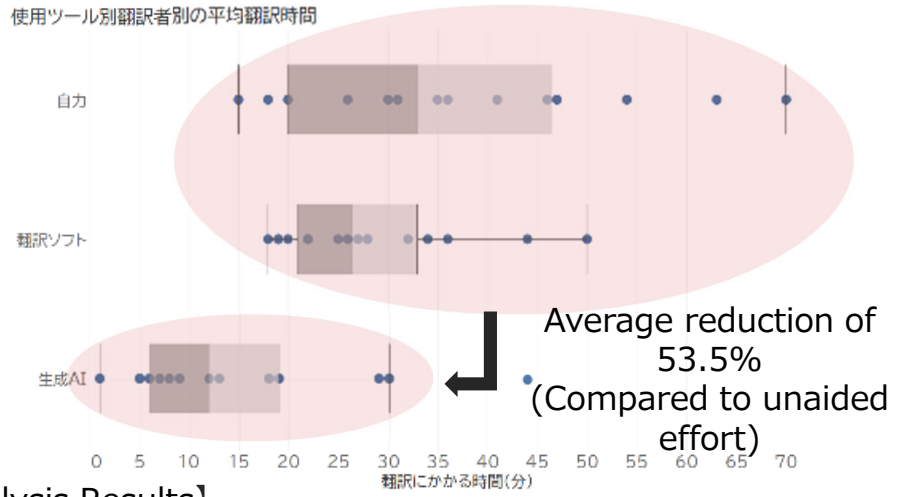
Also conducted study sessions utilizing preliminary literature reviews

Factors in Young People's Returns to Rural Areas and Effective Policies

Verification of Operational Improvement Effects of Translation Support Software and Generative AI

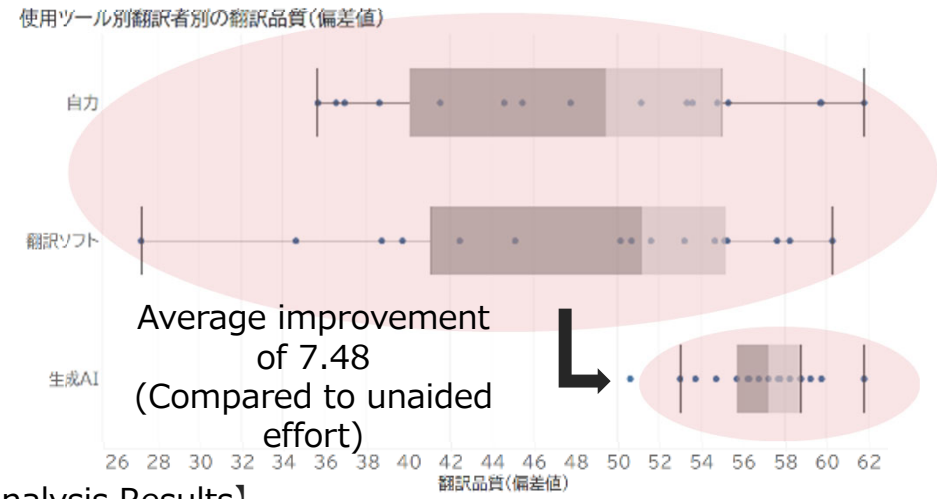
- The purchase of paid translation support software was under consideration for translating public relations materials into English.
- As a result of conducting an RCT, it was found that the already introduced generative AI was superior to the translation support software in terms of time and quality. ⇒ Decided not to proceed with the introduction of specialized translation software.

【Time Required for Translation】



【Analysis Results】
Considering the translators and the pages translated, using generative AI **reduced the time required for translation by 67.2% compared to unaided effort.** (RCT)

【Quality of Translation Results (Standard Score)】



【Analysis Results】
Considering the translators and the pages translated, using generative AI **improved the quality of translation results (standard score) by 8.72 compared to unaided effort**. (RTC)

※The generative AI used was Microsoft Copilot, which is available to all staff.
※The translation support software is typically used after training it with past translation results; however, in this experiment, no past data was used for training.

※The standard score was calculated by having translation results graded (out of 100 points) by staff responsible for translation in the International Affairs Division, without them knowing which tools or translators were used.

Postpartum Care Program Analysis (Effectiveness Evaluation)

神戸スマートシティ

It was found that using postpartum care significantly improves parenting emotions.

⇒ The analysis results were used in budget requests.

■ Overview of the Postpartum Care Program

Objective:

By promoting the reduction of parenting anxiety and the formation of parent-child attachment, the program aims to prevent postpartum depression and child abuse.

Content:

Mothers within one year postpartum can receive health management and lifestyle advice from midwives through overnight or outpatient visits.

■ Analysis Overview

Objective:

Although citizen feedback from surveys is positive, the necessary budget has increased with growth in users. The aim of the analysis is to objectively demonstrate the program's effectiveness to secure the necessary budget.

Method: Multiple Regression Analysis

Dependent Variable: Improvement in parenting emotions

Independent Variable: Use of postpartum care

Control Variables: Mother's age, emotions during pregnancy, EPDS score, presence of apathy, presence of spousal support for childcare, presence of newborn fussiness, whether twins or single child

■ Analysis Results

Mothers who utilized postpartum care showed an improvement in parenting emotions that was 0.165 points higher than for those who did not use the program.
(This was significant at the 10% level.)

	Improvement in Parenting Emotions
Use of Postpartum Care	**0.165**
Robust Standard Error	(0.0985)
90% Confidence Interval	[0.00245, 0.327]
N	923

*** p<0.001
** p<0.01
* p<0.05
. p<0.1

※Limited to mothers who experienced depressive mood
※Parenting Emotions: Parenting emotions of mothers were quantified at the 4-month and 9-month infant health checkups, assigning values as follows: "Very Enjoyable" = 4, "Enjoyable" = 3, "Neutral" = 2, "Struggling" = 1, "Greatly Struggling" = 0.
※Improvement in Parenting Emotions: Parenting Emotions at 9-Month Infant Checkup - Parenting Emotions at 4-Month Infant Checkup
※EPDS: The responses to a questionnaire were scored to calculate a result. With a maximum score of 30, a score of 9 or above indicates the possibility of postpartum depression (not a definitive diagnosis).

Postpartum Care Program Analysis (Utilization Factor Analysis)

神戸スマートシティ

Mothers with high EPDS (depression index) scores, those with unfavorable parenting emotions, and older mothers had higher utilization rates.

■ Analysis Overview

Method: Decision Tree Analysis

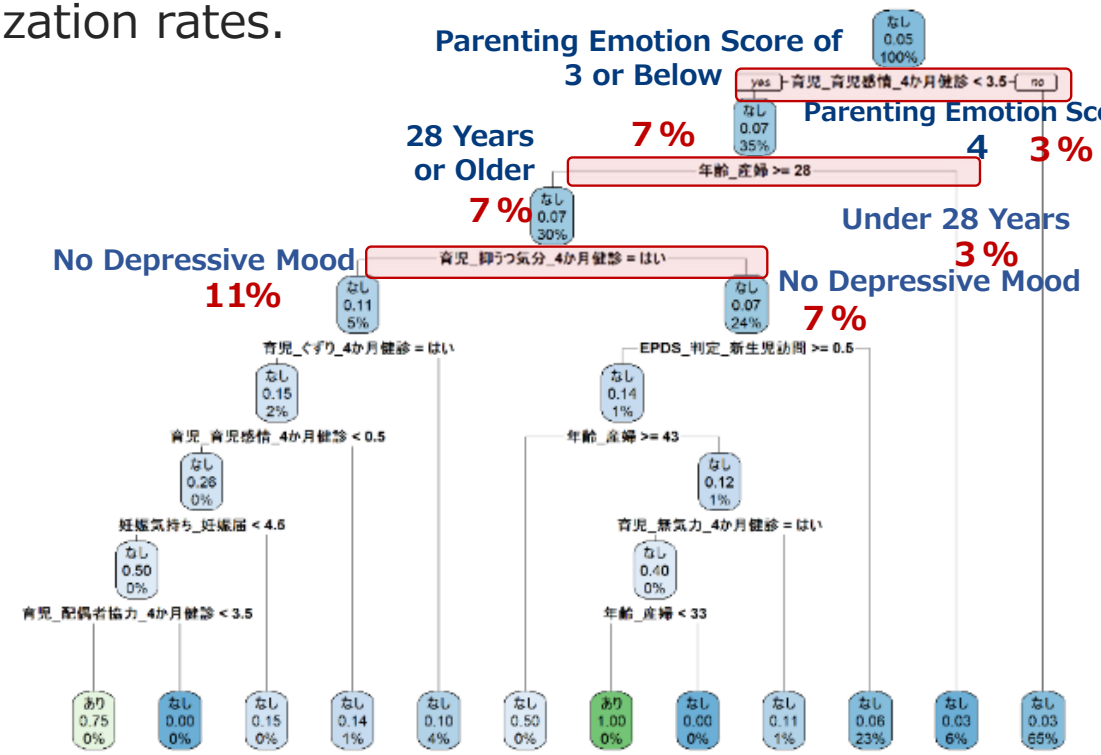
- Dependent Variable: Use of postpartum care
- Independent Variables: Mother's age
  - Emotions during pregnancy
  - EPDS
  - Presence of apathy
  - Presence of spousal support for childcare
  - Presence of newborn fussiness
  - Whether twins or single child

■ Analysis Results

① The utilization rate of postpartum care among mothers with a parenting emotion score of 3 or below was more than twice that of mothers with a parenting emotion score of 4.

② Among mothers with a parenting emotion score of 3 or below, the postpartum care utilization rate for mothers aged 28 or older was more than twice that of mothers under 28.

③ Among mothers with a parenting emotion score of 3 or below who were also aged 28 or older, the postpartum care utilization rate for those who experienced depressive mood was more than 1.5 times that of those who did not experience depressive mood.



Red: Percentage of Mothers Who Used Postpartum Care

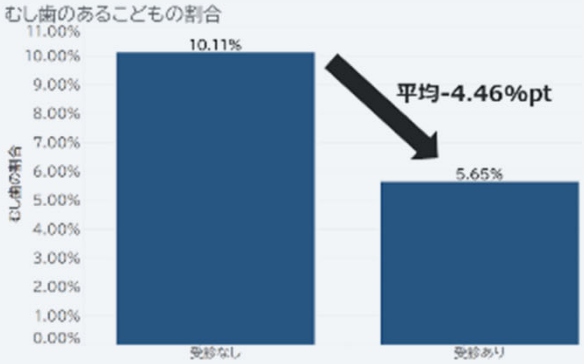
※Parenting Emotions: Parenting emotions of mothers at the 4-month and 9-month infant health checkups were quantified as follows: "Very Enjoyable" = 4, "Enjoyable" = 3, "Neutral" = 2, "Struggling" = 1, "Greatly Struggling" = 0.
※Improvement in Parenting Emotions: Parenting Emotions at 9-Month Infant Checkup - Parenting Emotions at 4-Month Infant Checkup
※EPDS: The responses to a questionnaire were scored to calculate a result. With a maximum score of 30, a score of 9 or above indicates the possibility of postpartum depression (not a definitive diagnosis).

Other Analysis Examples

Since FY 2023, we have undertaken 35 analyses, completing 21 of them.

Some projects have been revised based on the analysis results, achieving a certain measure of success.

■ Prenatal Dental Checkups and Children's Cavities (Multiple Regression Analysis)



・Pregnant women can receive free dental checkups. These checkups provide knowledge on preventing the transmission of cavity-causing bacteria and refer cavity treatment that reduces such bacteria in pregnant women, thereby lowering the risk of transmission to their children.

・Children of mothers who received checkups had a 2.54 percentage point lower probability of developing cavities. (Significant at the 10% level)

⇒**Consideration of strategies to improve checkup attendance rates**

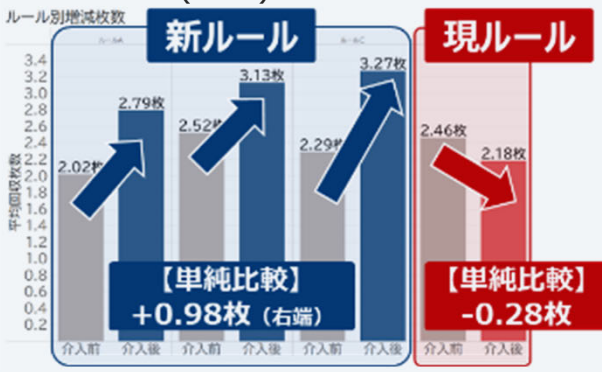
■Number of Parks Within Elementary School Districts and Exercise Time Outside of Class (Multiple Regression Analysis)

・For fifth-grade boys, students at schools with "many" parks in the district spent 99.5 more minutes exercising than those at schools with "almost none." (Significant at the 0.1% level)

・For fifth-grade girls, there was no statistically significant difference.

⇒**Providing spaces for exercise is important for boys, but for girls, different strategies need to be considered.**

■Review of Point Allocation Rules and the Number of Refill Packs Collected (RCT)

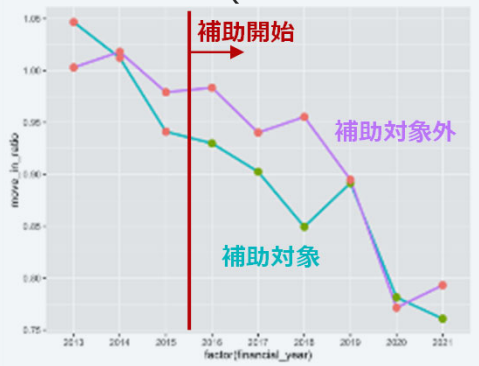


・When a refill pack is collected via the app, users receive points equivalent to 10 points = 1 yen. An investigation was conducted to determine whether changing the point allocation rules would increase the number of containers collected.

・Changing the upper limit on the number of collections eligible for points (per month, per person) resulted in an increase of 1.23 packs (per month, per person). (Significant at the 5% level)

⇒**Based on the analysis results and a comprehensive evaluation, the program was discontinued.**

■ A Subsidy System and the Number of New Resident Households (Difference-in-Differences Analysis)



・A subsidy is provided to households that meet certain criteria when they move into Kobe City, with the aim of increasing the number of new resident households.

・Even with the introduction of the subsidy system, there was no statistically significant difference between the number of new resident households eligible for the subsidy and the number of similar households that were ineligible.

⇒**Review of the system**

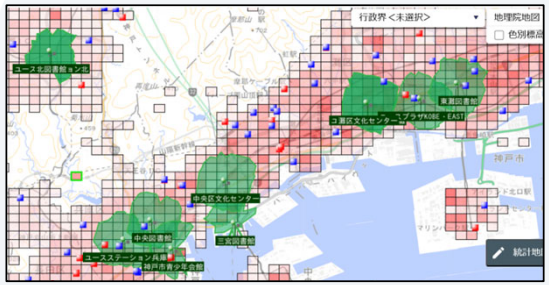
Preparation of Usable Data

Analysis Combining Official Statistics with Open Data / GPS Data

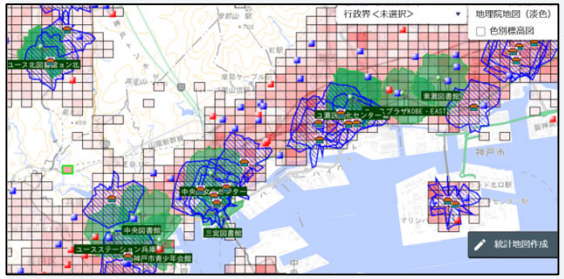
神戸スマートシティ

○ With official statistics such as the national census, we create dashboards to use for comparisons with other cities. Additionally, official statistics are utilized in data analyses like the ones listed below.

■Selection of Areas for Establishing Community Study Rooms (Child and Family Bureau)



・When setting up community study rooms, it was necessary to consider which areas to select for the establishments.
・The goal was to establish community study rooms in locations easily accessible to middle and high school students, considering existing study spaces like libraries and youth stations, as well as the locations of schools and the residential areas of middle and high school students.

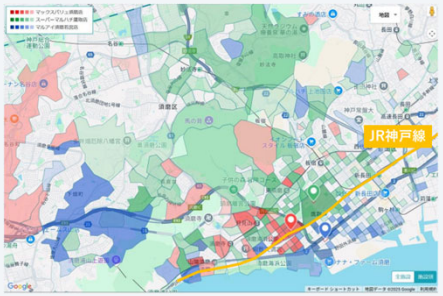


・Utilized data on existing study spaces, school locations, and the distribution of the young population (from the national census) to select sites for the establishment of community study rooms.
・By visualizing areas with existing study spaces and regions with a high concentration of middle and high school students but lacking study spaces, a comprehensive investigation was conducted to establish study rooms in the most desirable locations possible.

※ Note: Utilized the Ministry of Internal Affairs and Communications Statistics Bureau's Geographic Information System, "j-STAT MAP"

■Analysis Related to Live Events (Transportation Bureau)

・The site of a former city bus depot was leased to a food supermarket operator. As the lease agreement approached expiration, it became necessary to consider new utilization methods for the site to improve both urban development and the financial balance of the bus operations.
・Utilized KLA's human flow data analysis to understand area characteristics, as well as customer information for the existing supermarket and its relationship with competing stores.



・Using census data within KLA, we identified the population dynamics and number of business establishments within a 700-meter radius of the target area. It was revealed that the daytime population exceeds the nighttime population, and the area has a high concentration of manufacturing industries.
・An analysis of competitors and visitors' areas of residence indicated that the existing supermarket is a key facility for local residents, with high demand for a drugstore as well.
・It was decided to redevelop the site into a complex that includes not just a supermarket, but also a drugstore and dining establishments.

※ KLA (KDDI Location Analyzer): Expanded estimation of GPS data based on census data

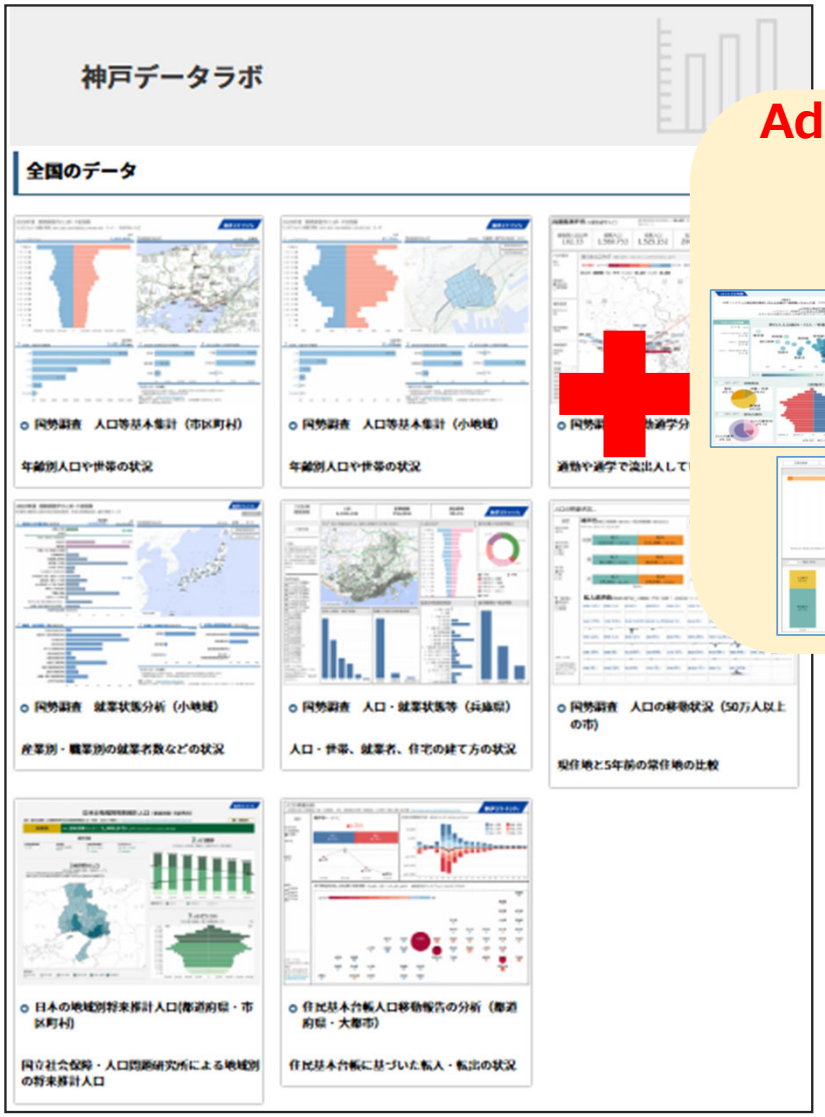
Kobe Data Lab: Nationwide Dashboard Publication

神戸スマートシティ

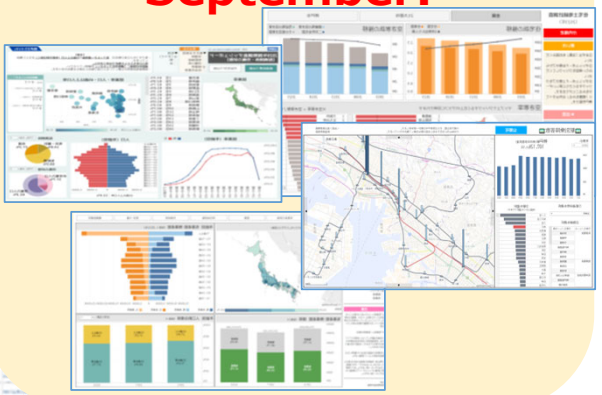
Dashboards allowing the exploration of nationwide data are now available!

Kobe City Website

Click on “Kobe Data Lab.”



Additional releases at the end of September!



Access Here!

42

Nationwide Dashboards Published in Kobe Data Lab

神戸スマートシティ

1st Batch	Basic Complete Tabulation of Population Census (Municipalities / Small Areas)	Population by age group and data on household situations
	Commuting Analysis of Population Census	Data on where people are commuting to and from for work and school
2nd Batch	Labour Force Analysis of Population Census (Small Areas)	Number of employed persons by industry and occupation
	Data on Population and Employment Status in Hyogo Prefecture from Population Census	Population of Hyogo Prefecture, as well as data on its employed persons and housing situation
	Data on Mobility of Population (Cities with Population of 500,000 or More) from Population Census	Mobility of population through comparison of data on place of residence between now and 5 years ago
3rd Batch	Population Projection of Japan by Area (Prefectures and Municipalities)	Population projections up to 2050 by area
	Report on Internal Migration in Japan (Prefectures and Major Cities)	Migration patterns by age group and destination
4th Batch	Housing and Land Survey (Prefectures and Ordinance-Designated Cites)	Number of dwellings, percentage of vacant dwellings, and distribution of monthly rent for leased housings
	Employment Status Survey (Prefectures and Ordinance-Designated Cities)	Employment rate, childcare leave utilization rate, and percentage of dual-income households
	Number of Passengers Getting On and Off by Railway Station	Number of passengers getting on and off at each station shown on a map
	Data on Marital Status from Population Census and Labour Force Survey (Prefectures and Municipalities)	Percentage of unmarried persons, employment rate, and unemployment rate

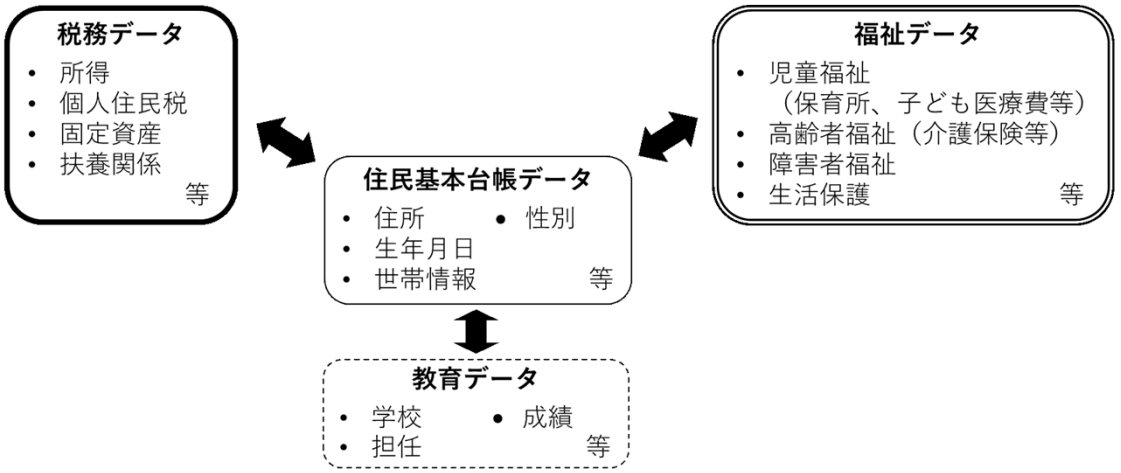
Please try it out yourself!

The Potential of EBPM Utilizing Big Data Held by Local Governments

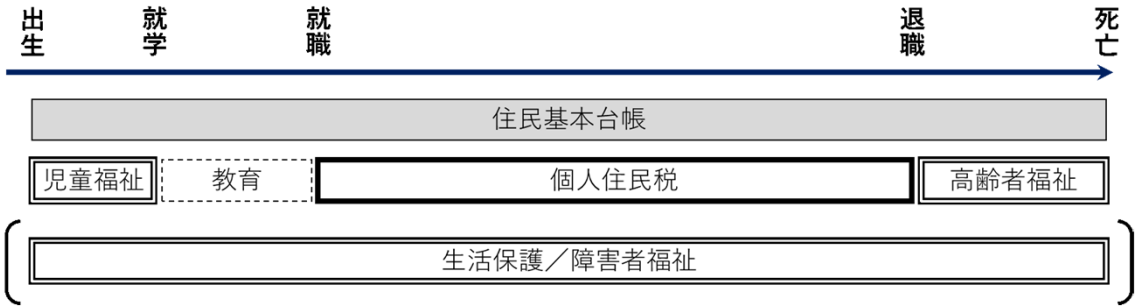
神戸スマートシティ

- Because local government services are closely tied to residents' lives and cover a wide range of areas, **municipalities hold big data** related to taxation, welfare, education, and more, centered around the resident registration system.
- In addition to core systems, there are a wide variety of other systems that hold a large amount of data.
- However, until now, this data has not been utilized beyond its use in operations.

⇒ Instead of viewing systems solely as **systems** from the perspective of an IT department, **consider them as treasure troves of data that could be utilized for EBPM** (Evidence-Based Policy Making) **in policy departments.**



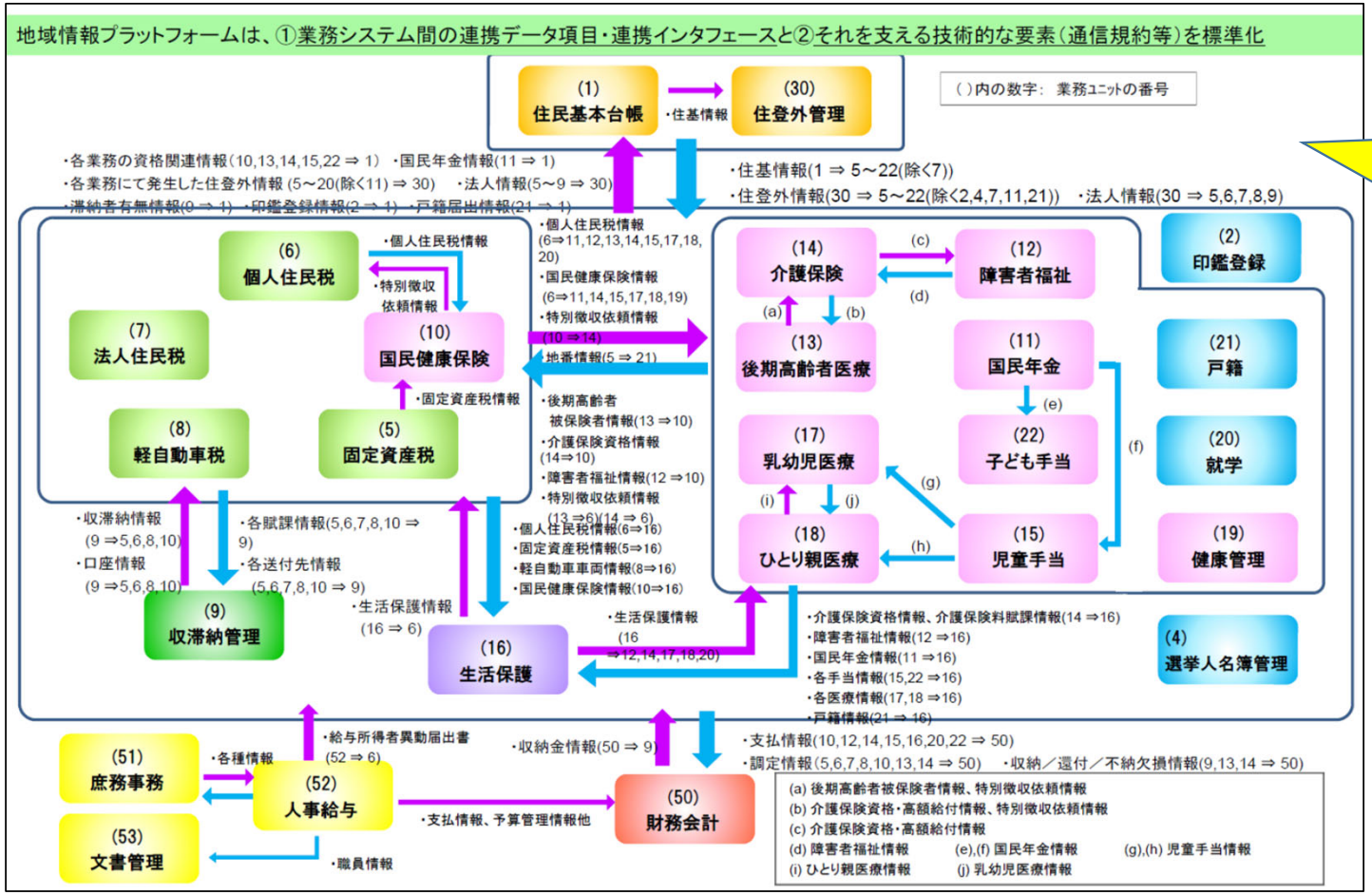
【個人のライフイベントとの対比】



Core System Data Stored within Internal Data

神戸スマートシティ

○ 84 datasets sent from core systems to an intermediary server managed by the government, along with proprietary datasets such as resident registration and tax data, are stored in the internal data integration platform.
○ Among these, the Resident Registration Data Mart, Census Data Mart, and Statistics Data Mart are shared.



A portion of this data was extracted and stored in the internal data integration platform.

Ascertainment of Each Bureau's Administrative Data and Sharing of Data Items

神戸スマートシティ

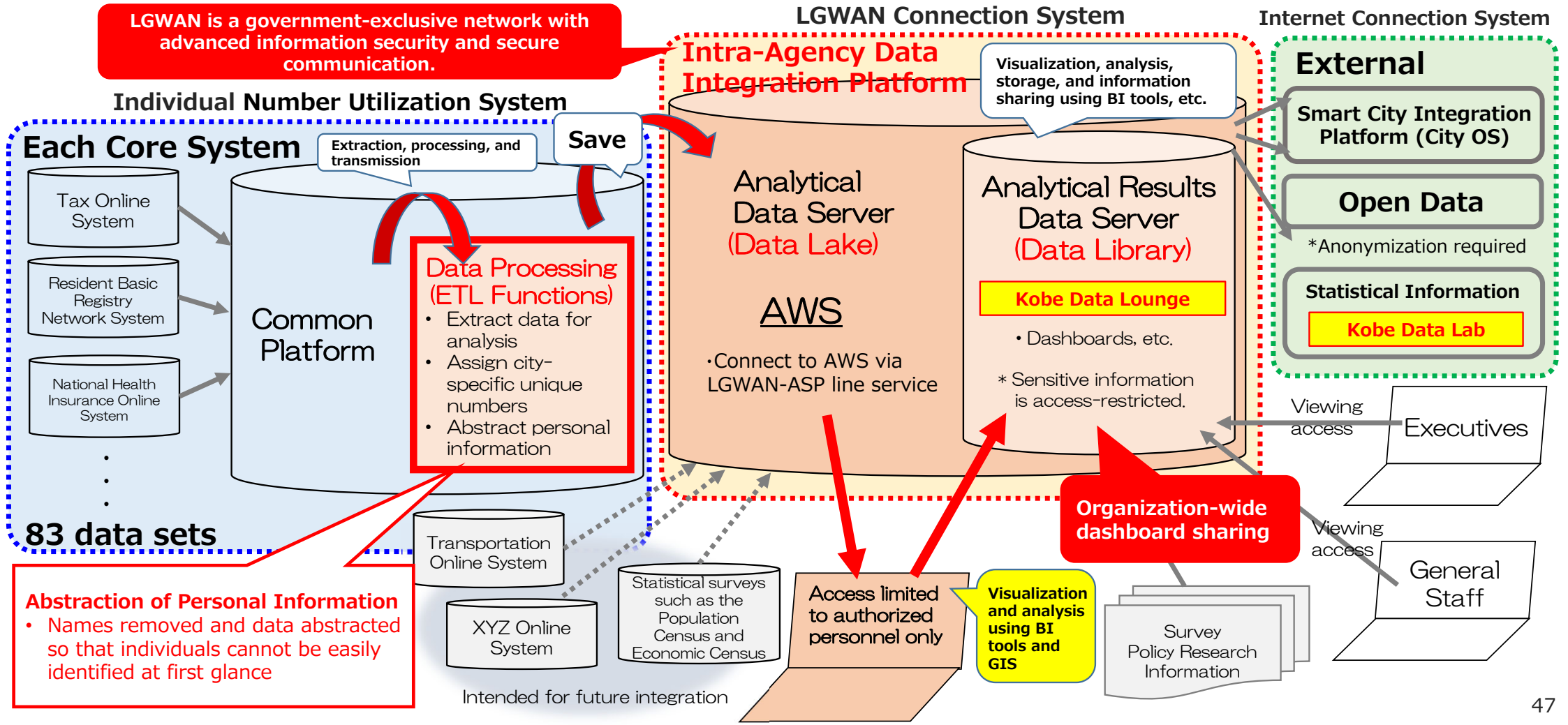
○ Organized information from approximately 700 information system ledgers to **ascertain and compile the data held by each bureau, presenting it in an easy-to-understand format for listing and sharing.**

情報システム台帳の一例		
EM－NET	災害援護資金貸付償還事務システム	耐震診断・改修等補助台帳システム
近畿情報ネット	介護認定システム	住宅貸付システム
全国瞬時警報システム（J-ALERT）	後期高齢者医療（広域連合システム）	建築情報管理システム
兵庫県フェニックス防災システム	後期高齢者医療（神戸市システム）	建築・設備積算システム
防災行政無線（同報系）システム	介護認定審査会支援	AIS（船舶自動識別装置）
文書管理・電子決裁システム	介護保険認定管理	港湾EDIシステム（みなとシステム）
戸籍総合システム	総合事業管理システム	ハーバーハイウェイ保全情報管理システム
住民基本台帳ネットワークシステム	墓園管理システム	搬入車両重量計量システム（苅藻島クリーンセンター）
パイオネットシステム	生活衛生関係業務システム	下水道事業財務会計システム
例規データベース	医務薬務台帳管理システム	水防情報システム（FISKO）
経理契約システム	ものづくり工場使用料等収納管理専用システム	公園施設管理台帳システム
地方税電子申告システム	自動検針装置（BMS）	土木積算システム
固定資産税評価図管理システム	農業共済集中化運営システム	下水道使用料調定・収納システム
家屋評価計算システム	都市計画情報案内システムゆーまっぷ	下水道予算決算システム
下水道台帳管理システム	放置自転車等管理システム	給水設計台帳管理システム
下水道施設・設備情報システム	道路冠水モニタリングカメラシステム	道路管理システム
河川モニタリングシステム	制御専用システム	管路情報管理（マッピング）システム
道路冠水モニタリングカメラシステム	営業オンラインシステム	財務会計システム（交通局）
バスICシステム	お客様サポートシステム	例規システム（交通局）
運行情報システム	財務会計システム（水道局）	駅務ICシステム

Construction of the Internal Data Integration Platform (Including a Vision for the Future)

神戸スマートシティ

○"**Accumulate**" data and process it into dashboards for "**sharing**" ⇒ **Enables even staff unfamiliar with data handling to utilize it.**



Comparison of Official Statistics and Business Data

神戸スマートシティ

- Official statistics, such as the national census, continue to maintain their quality even amid the growing use of alternative data (business data). They are useful for policy formulation, including analyzing changes over time and comparing different cities.
- On the other hand, business data has distinct strengths not found in existing official statistics such as:
  - ✓ Administrative operational data (e.g., tax data) offers accuracy, comprehensiveness, and large sample sizes.
  - ✓ Real-time data (e.g., smartphone GPS data) provides immediacy and speed.
- However, since business data is ultimately a byproduct of business,
  - ✓ It may lack items that are not necessary for business but are important for analysis (e.g., educational background).
  - ✓ It is necessary to understand its "quirks" and perform data cleaning and processing to use it effectively for analysis.
- Therefore, it is important to understand the strengths and weaknesses of both types of data and to combine them effectively.

⇒ Kobe City also utilizes both types of data.

神戸スマートシティ

Development of Personnel Skilled in Data Utilization

Except for advanced analyses, the approach is to **undertake analysis internally, with staff conducting the analysis themselves**.

If one has not personally engaged in hands-on analysis, it is difficult to interpret the results, including understanding their limitations.

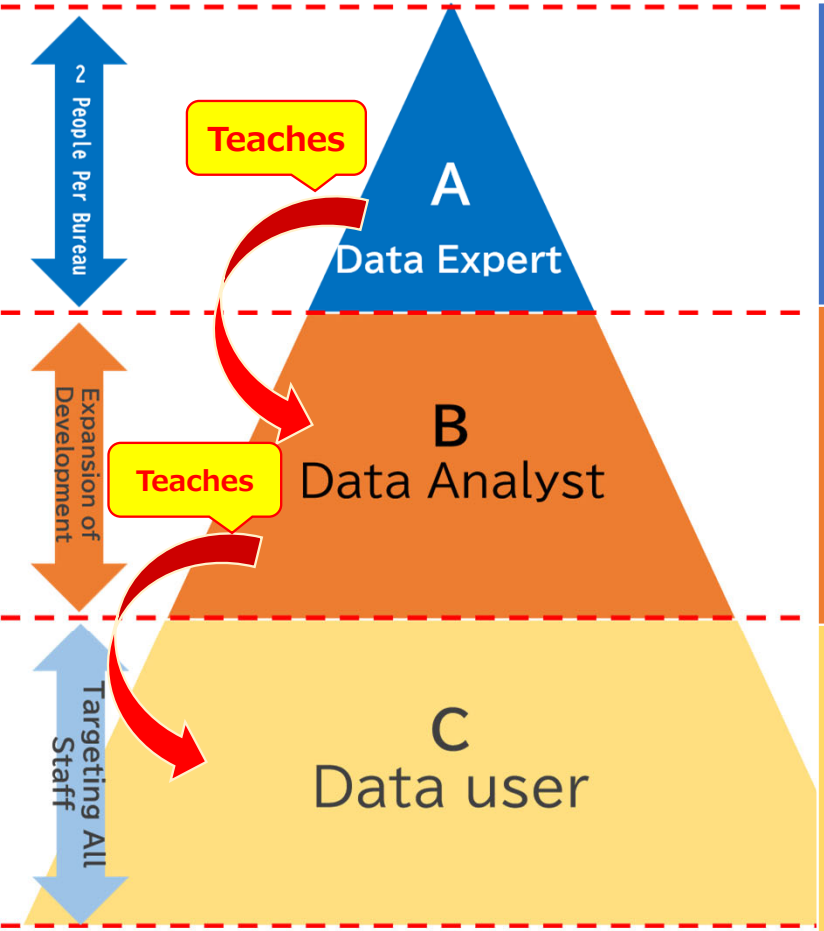
The following decisions require domain knowledge, and it is most efficient for staff with that knowledge to conduct the analysis themselves.

- ✓ The assumptions for whether statistical causal inference holds (e.g., in RDD, whether there are no changes other than the treatment before and after the intervention).
- ✓ Interpretation of analysis results (e.g., why did the number of passengers at a particular station suddenly increase this year?)
- ✓ The presence or absence of policy implications in analysis results (e.g., even if it's determined that a large playground has an effect (or no effect) on improving children's physical fitness, the results cannot be utilized if there is no room to change the playground area due to legal or budgetary constraints)

Kobe City's Strategy for Developing Personnel Skilled in Data Utilization (FY 2021–2025)

神戸スマートシティ

○Strategically implemented personnel development. Starting from scratch, around 800 individuals have been trained as A) Data Experts and B) Data Analysts.



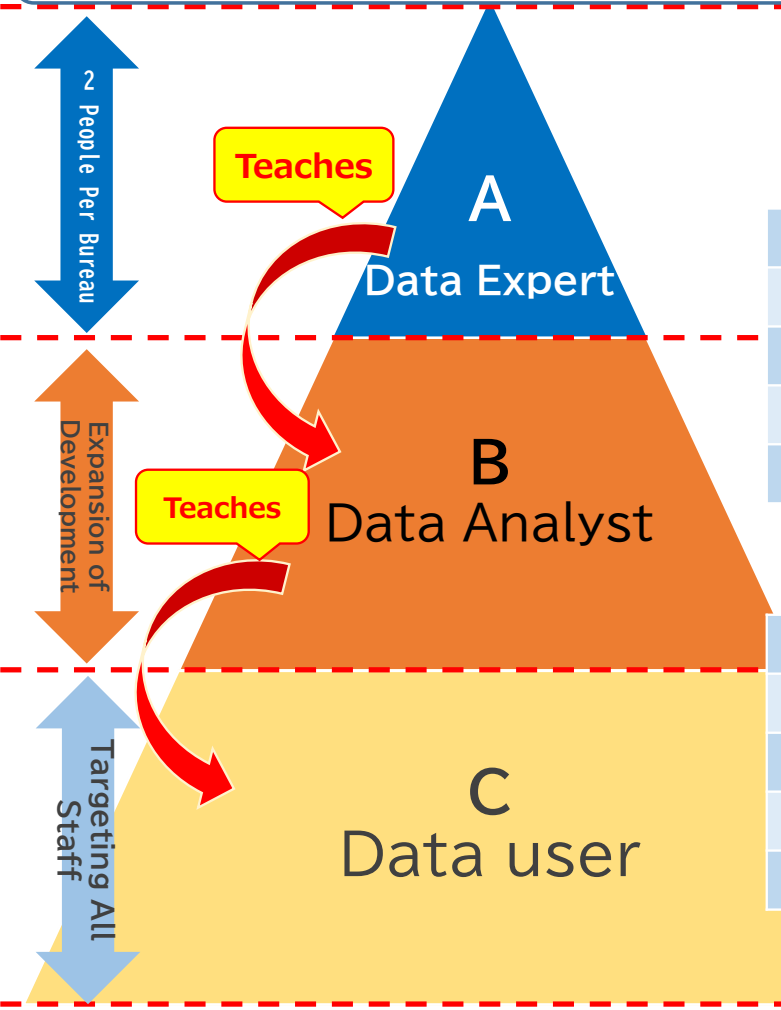
			Actual Numbers				Expected	
データ利活用能力	研修等		'21	'22	'23	'24	'25	Total
○RやPython等プログラミングで政策評価や業務改善等できる ○AIやRPA等新たな技術使った業務改善ができる ○BIツールやGIS等を活用し、行政データを使ったより高度な分析ができる	○データエキスパート研修 ○神戸大学主催RIDXの受講 ○オンライン自習	TS	+3	+5	+8	+5	+13	25
		TL						6
		RL						3
○BIツールやGIS等を使って、行政データの可視化、分析ができる ○RやPython等を使って簡単なデータ分析ができる ○計量経済学の因果推論に基づく論文を批判的に読める	○データ分析スキル習得研修（導入編・実践編） ○データアナリスト研修 ○データアカデミー（GIS、KLA等の活用） ○統計研修（中級） ○オンライン自習	T	+11	+80	+133	+197	+200	700
		R	—	+24	+31	+25	+30	113
○作成されたダッシュボードを使いこなし、データ分析や政策形成ができる ○行政データの取扱い及びセキュリティ研修を受講し、一定のITリテラシーがある ○データ利活用の必要性を理解する	○政策評価を学ぶ研修 ○先行論文調査活用研修 ○ダッシュボードを活用した政策立案研修 ○統計研修（基礎） ○階層別研修 ○セキュリティ等研修 ○オンライン自習		—	—	+150	+250	+300	700

※Video streaming for all staff

Status of Development of Personnel Skilled in Data Utilization (As of October 1, 2025)

神戸スマートシティ

○There has been active participation in training, particularly among young staff, advancing the development of personnel skilled in data utilization across various bureaus and departments.



○Data Expert: 22 staff passed

※The number of staff per bureau/department was counted based on current workplace.

○R User: 93 staff

Staff who participated in R training

危機管理局	-人	福祉局	8人	建設局	7人	水道局	2人
企画調整局	9人	健康局	4人	都市局	3人	交通局	3人
地域協働局	5人	こども家庭局	4人	建築住宅局	3人	教育委員会事務局	4人
行財政局	14人	環境局	2人	港湾局	1人	区役所	10人
文化スポーツ局	2人	経済観光局	5人	消防局	5人	その他	-人

○Data Analyst: approx. 530 staff

Staff granted dashboard creation authority via training, etc.

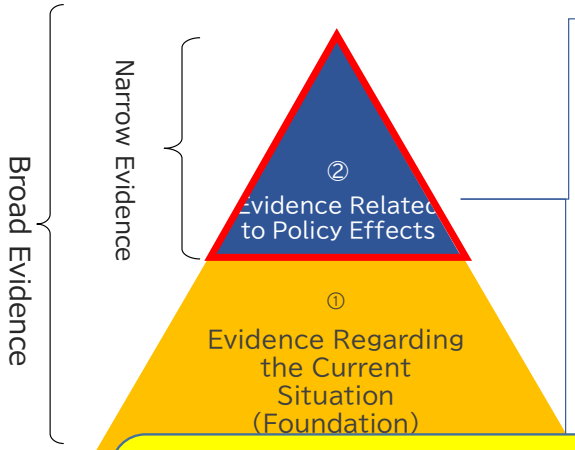
危機管理局	8人	福祉局	50人	建設局	15人	水道局	34人
企画調整局	100人	健康局	27人	都市局	28人	交通局	5人
地域協働局	16人	こども家庭局	13人	建築住宅局	11人	教育委員会事務局	8人
行財政局	75人	環境局	9人	港湾局	8人	区役所	74人
文化スポーツ局	6人	経済観光局	25人	消防局	9人	その他	7人

○Data User Training Participants: approx. 650 staff

Data Analysis Skill Acquisition Training

神戸スマートシティ

○The Data Analysis Skill Acquisition Training includes an "Introduction" and a "Practical Application" module, and so far, about 80 staff members within the organization have participated.
○In FY 2024, the "Introduction" module had 15 participants from within the organization, and the training was also opened to external personnel, with 15 participants from Hatsukaichi City and the MIC.



Introduction module

The objective is to acquire methods for determining causal effects of policy based on data. The focus is on acquiring practical data analysis skills, so conceptual explanations are minimized as much as possible.

Curriculum

List of Participants

Year	Number of participants	
	Kobe City	Hatsukaichi City
2022	23	
2023	18	
2024	15	
2025	33	

In FY 2025, due to a large number of applicants, registration was closed before the deadline.

Practical Application

After lectures aimed at improving analytical skills using R, participants conduct analyses using real data. In the analyses, participants are divided into teams to analyze data and forecast next year's birth rate and annual tax amount.

In FY 2023 and FY 2024, opinion exchanges were conducted with a University of Tokyo research team.

Curriculum

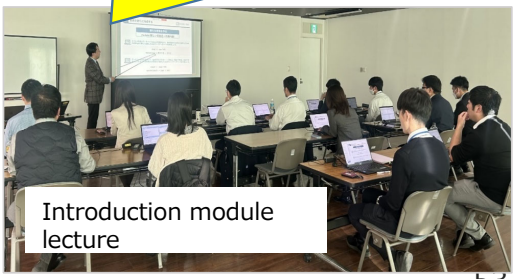
	内容
第1回	線形回帰、ロジスティック回帰による予測 -連続変数の予測と評価 -カテゴリー変数の予測と評価
第2回	決定木による予測 -連続変数の予測と評価 -カテゴリー変数の予測と評価
第3回	ランダムフォレスト、チューニングによる予測精度向上
第4回	課題に対する取り組み状況の報告 情報交換・講師からのアドバイス
第5回	課題に対する取り組みについて、分析結果と政策提案内容の発表

List of Participants

Year	Participants
2023	18
2024	10
2025	19

Of the participants in the Practical Application module, 7 have participated in an opinion exchange meeting with the University of Tokyo and presented their own analyses.

In FY 2024, the training was conducted with external instructors.



Introduction module lecture

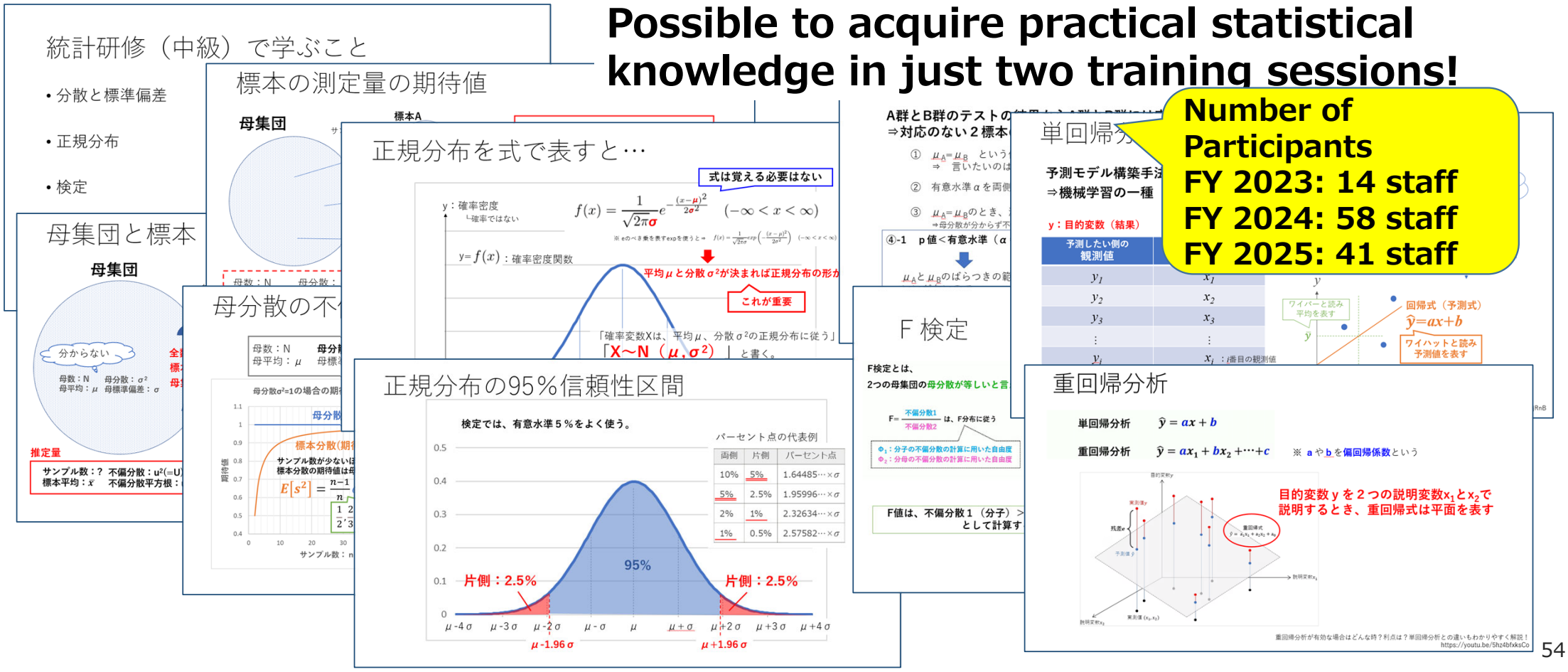
Statistical Training (Intermediate): Up to Multiple Regression Analysis

神戸スマートシティ

○ Previously, only basic statistical training (beginner level) had been offered, but in FY 2023, new intermediate-level statistical training was introduced to help participants acquire statistical knowledge.

Possible to acquire practical statistical knowledge in just two training sessions!

Number of Participants
FY 2023: 14 staff
FY 2024: 58 staff
FY 2025: 41 staff



FY2024 Development of Personnel Skilled in Data Utilization: Implementation of Training

神戸スマートシティ

◯Conducted numerous training sessions to accelerate the development of personnel skilled in data utilization. **A cumulative total of approximately 1,200 staff members participated across 20 different types of training sessions.**

内容			時期	対象者・受講者	人数	備考
Tableau	A	Tableauセイバー	前期・後期	政策課など	6人	前期：５人、後期：１人
	B	政策会議（前期）対応	5月～	各局政策担当	46人	全３回（２ｈ×３回）
		政策会議（後期）対応	11月	各局政策担当	46人	全２回（３ｈ×２回）
		DX推進リーダー育成研修	10月～	庁内公募	60人	全１回（３ｈ×１回）※育成研修の１コマ
		地域の課題調査	9月	C受講者のうち希望者 (余裕があれば庁内で追加募集)	27人	合同で実施
		各区	9月			
		庁内インターンの受入	10月	庁内希望者	2人	２日間ハンズオン研修（OJT）ほか
		各局室区別ハンズオン研修	1月～	各局から依頼	約140人	現在７局（福祉・健康・都市・水道・経済観光・教育・行財政）から依頼
	C	地域の課題調査	8月	庁内公募	約20人	
		各区	7月～	各区希望者	約210人	各区・支所で実施（計15回）
		課長等研修	1月	庁内公募　※オンライン参加含む	79人	CDO補佐官が講師、全２回（３ｈ×２回）
		階層別研修（新採、昇任時等）	4月～	該当者全員	約400人	新採（４月、10月の２回）等
R	B	データ分析（実践編）	7月～	庁内公募	10人	全５回
	B	データ分析（導入編）	11月～	庁内公募	15人	外部講師を公募、全５回、他自治体等受入
GIS	B	庁内GIS研修（分析編）	8月	庁内公募	40人	
KDDI	B	KLA勉強会（初心者向け）	6月	庁内公募	32人	
統計	B	統計研修（中級）	2月	庁内公募	58人	
論文調査	C	先行論文を活用したEBPM研修	9月～	庁内公募	オンライン	事業者で実施（委託、9テーマ）
KTL	-	自主的勉強会	随時	庁内公募	10～20人	Tableau、Rなどのテーマで実施
オンライン	-	Udemy（Tableau、R等の自習）	随時	庁内公募	オンライン	10 ～20人にライセンス貸出、人数制限あり

FY 2024 KTL (Voluntary Study Group) and Online Learning

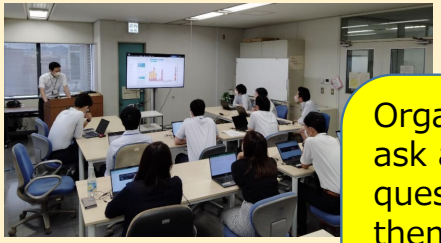
神戸スマートシティ

○Created a chat room for information exchange within the organization regarding the use of Tableau and R.
○During and after training, many members participate to exchange opinions, share information, and resolve technical questions.

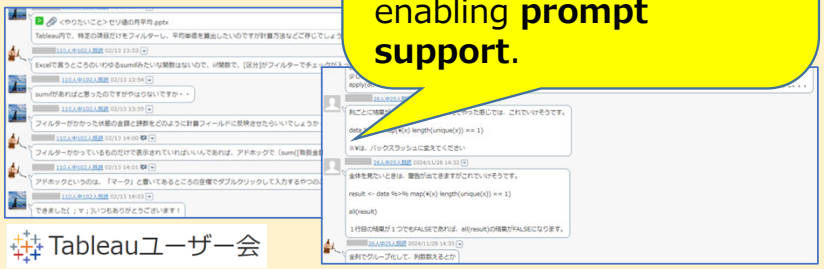
FY 2024 KTL (Voluntary Study Group)

● **Tableau Mokumoku-kai** (Held After Hands-On Training) *Hosted by the Health Bureau
1st Session: Tuesday, July 9, 2024
2nd Session: Thursday, January 30, 2025

● **R Data Analysis Case-Sharing Meeting**
1st Session: Wednesday, November 6, 2024
2nd Session: Monday, March 10, 2025

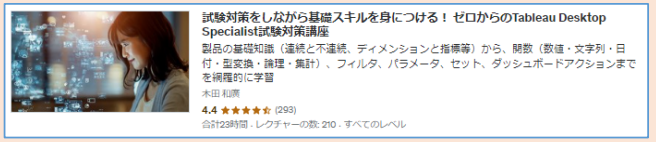


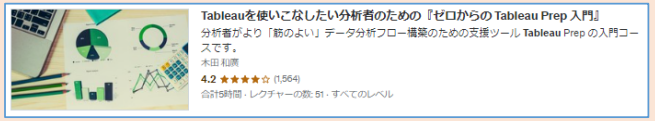
● **Chat room**

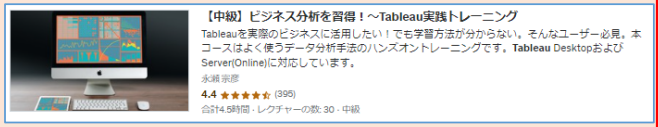


Organizational users can ask and answer questions among themselves, improving **overall skill levels** and enabling **prompt support**.

Tableau Beginner and Intermediate Courses







For those interested, we provide a temporary Udemy (online) account to facilitate further skill development.

Internal Certification Systems

神戸スマートシティ

○ Established new certification systems for staff who have acquired the skills necessary for data analysis (Tableau Leader and R Leader).

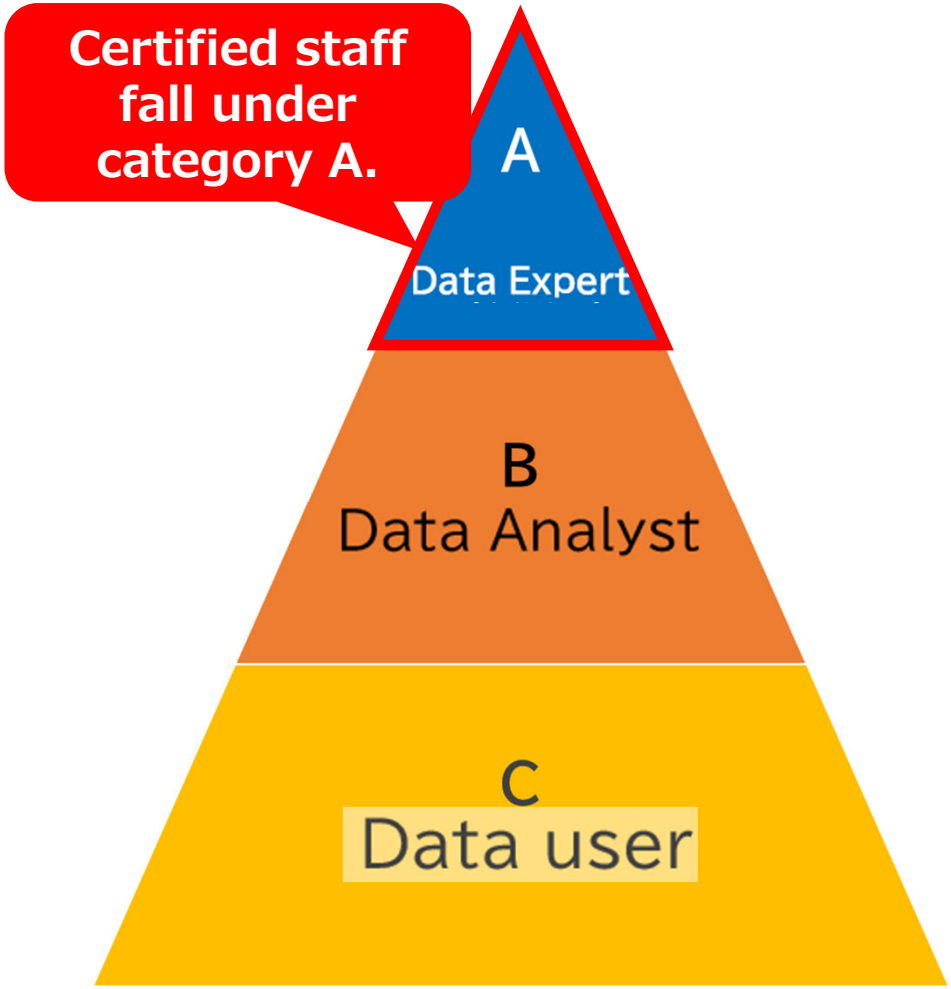


Tableau Leader

Three staff members currently seeking certification

【Overview】
This is **an internal certification** for staff who have acquired practical skills in using Tableau.

【Certification Process】
Complete all of the following tasks within **four months** from the start.
・Skill Development: Acquire essential skills for creating dashboards
・Practical Experience: Create dashboards using your department's data
・Presentation: Present the dashboard content to the department head and relevant personnel in your department.

R Leader

Approximately 10 staff members planning to seek certification

【Overview】
This is **an internal certification** for staff who have acquired practical skills in using R.

【Certification Process】
Complete all of the following tasks within **five months** from the start.
・Multiple-Choice Exam: Acquire basic statistical knowledge and coding skills.
・Practical Experience: Conduct analysis using your department's data and prepare a report.
・Presentation: Present the analysis content to the department head and relevant personnel in your department.

神戸スマートシティ

ご清聴ありがとうございました

神戸スマートシティのその他の取組は
スマートこうべで！

神戸市企画調整局調整課スマートシティ担当
TEL：078-322-6462
Email：smartcity@city.kobe.lg.jp

Contact us!