INTERNATIONAL BUILDING PERFORMANCE & DATA INITIATIVE

BRUGG-WINDISCH, 3RD MARCH 2020

WHY
COMMON DATA MODEL
CDM X REAL ESTATE
IBOS
INITIATIVE

IBPDI

THE CHALLENGE.
THE REAL ESTATE MARKET IS HIGHLY FRAGMENTED.

Institutional investors

corporates

public

private

IBPDI

THE CHALLENGE.
MANY PLAYERS ARE INVOLVED IN THE PROPERTY VALUE CHAIN.
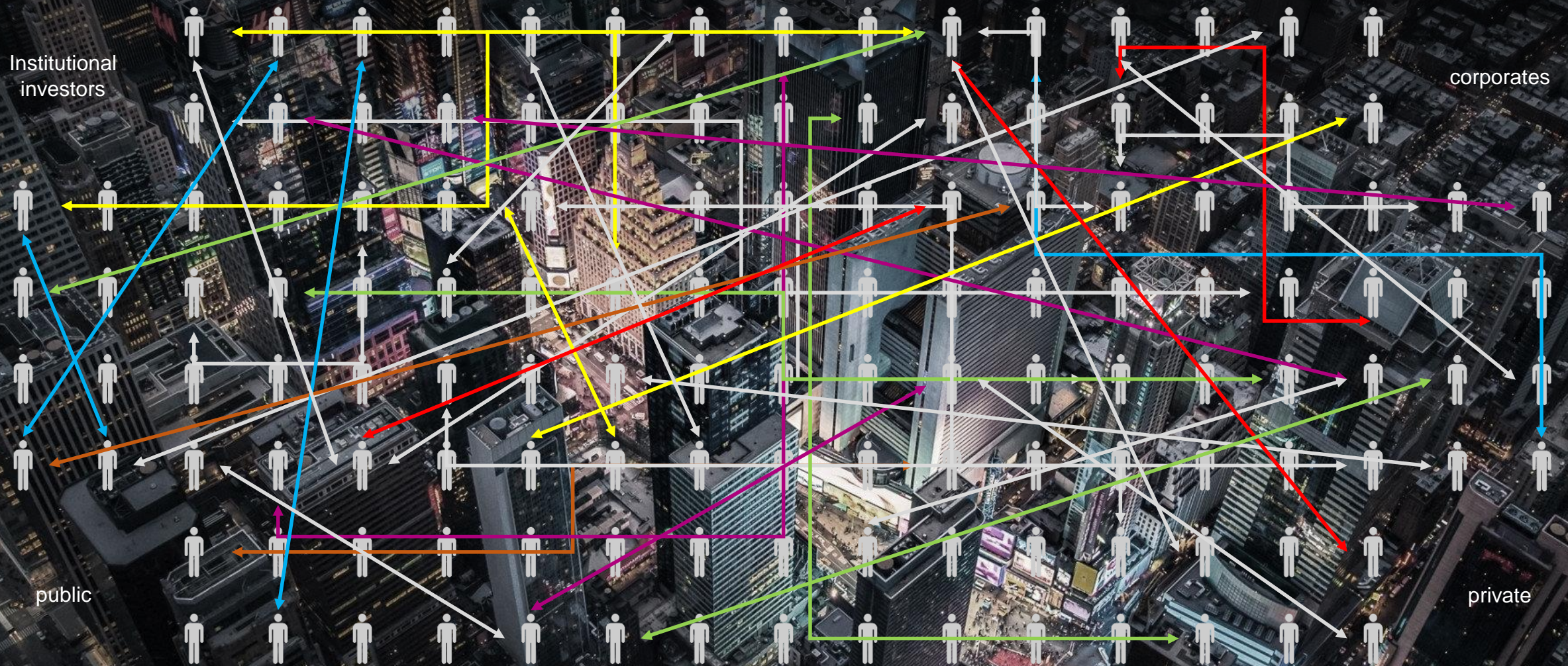
Institutional investors

corporates

public

private

IBPDI

THE CONSEQUENCE.
INTRANSPARENCY AND INEFFICIENCY.

Institutional investors

corporates

public

private

IBPDI

THE TEAM.
A STRONG FOUNDATION IS SET.

IBPDI

THE TEAM.
THE INITIATIVE IS READY TO GROW.

IBPDI

...AND PLAY!

IBPDI

WHY
COMMON DATA MODEL
CDM X REAL ESTATE
IBOS
INITIATIVE

IBPDI

OPEN DATA INITIATIVE.
INITIAL POINT OF THE COMMON DATA MODEL.

 Microsoft

Interoperability for powerful insights

Unify all business data

Combining SAP, Dynamics, Adobe

IGNITE / NOV 2018 ANNOUNCEMENT

- Initial thoughts are to deliver the ability to **integrate** CRM, **ERP**, Commerce, **Sales**, Product and others into one interoperable, single data view
- Achieving interoperability the ODI is using a **common data model** (CDM) and a common **data lake** (ADL)

IMPROVED DATA-DRIVEN AI

- The **Data Lake** is providing the format to use various intelligent apps to gather Insights
- Based on the common language the **CDM** is providing self-describing data (structurally, semantically) which increases the data understandability for applications

IBPDI

COMMON DATA MODEL.
DISCOVER THE VALUE IN YOUR DATA.

Microsoft

	Marketing Intelligence	Sales Intelligence	Operational Intelligence*
Create New Experiences	Drive powerful customer profiles through increased data breadth and standardization	Bring structured and unstructured data together to build richer buyer profiles	Aggregate multi-source data to uncover true impact of the post-sales customer experience
Drive Insights and Action	Uncover new ways to optimize content delivery and campaign performance	Amplify signals from all data sources to increase accuracy of cross-sell, up-sell, and net new sales	Make data-driven product and services decisions that improve operational effectiveness
Increase Efficiency	Deliver next-best offers based on enriched knowledge of recent customer action	Expand capacity to deliver a more positive and personalized sales experience to customers	Increase customer satisfaction by improving accuracy of automated guidance

IBPDI

WHY
COMMON DATA MODEL
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 IBPDI

UNLOCKING THE POTENTIAL OF DATA.
BY BREAKING THE DATA SILOS.

BUILDING
MINDS

SILOED DATA

A COMPLEX SYSTEM LANDSCAPE

FLUCTUATING STAKEHOLDER LANDSCAPE

LIMITED ACCESS FOR STAKEHOLDERS

LACK OF DEMOCRATIZATION

ERP   CAFM   BMS   BIM   ETC.
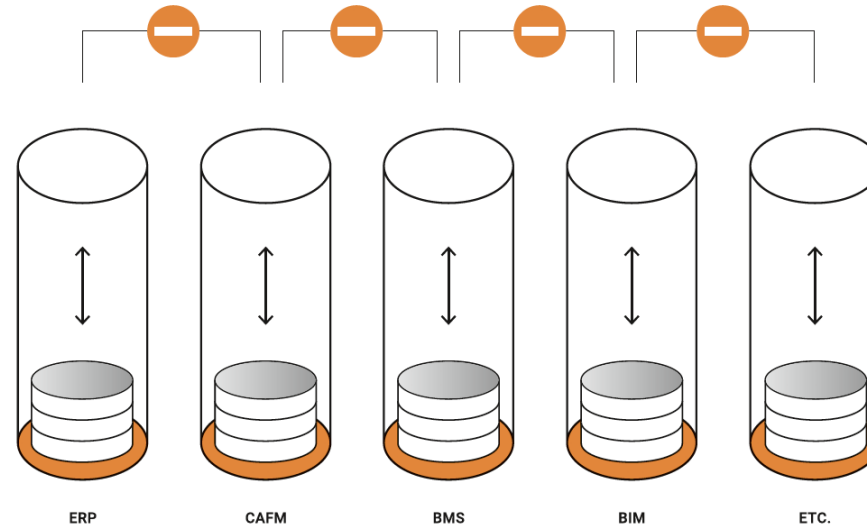
- Limited access
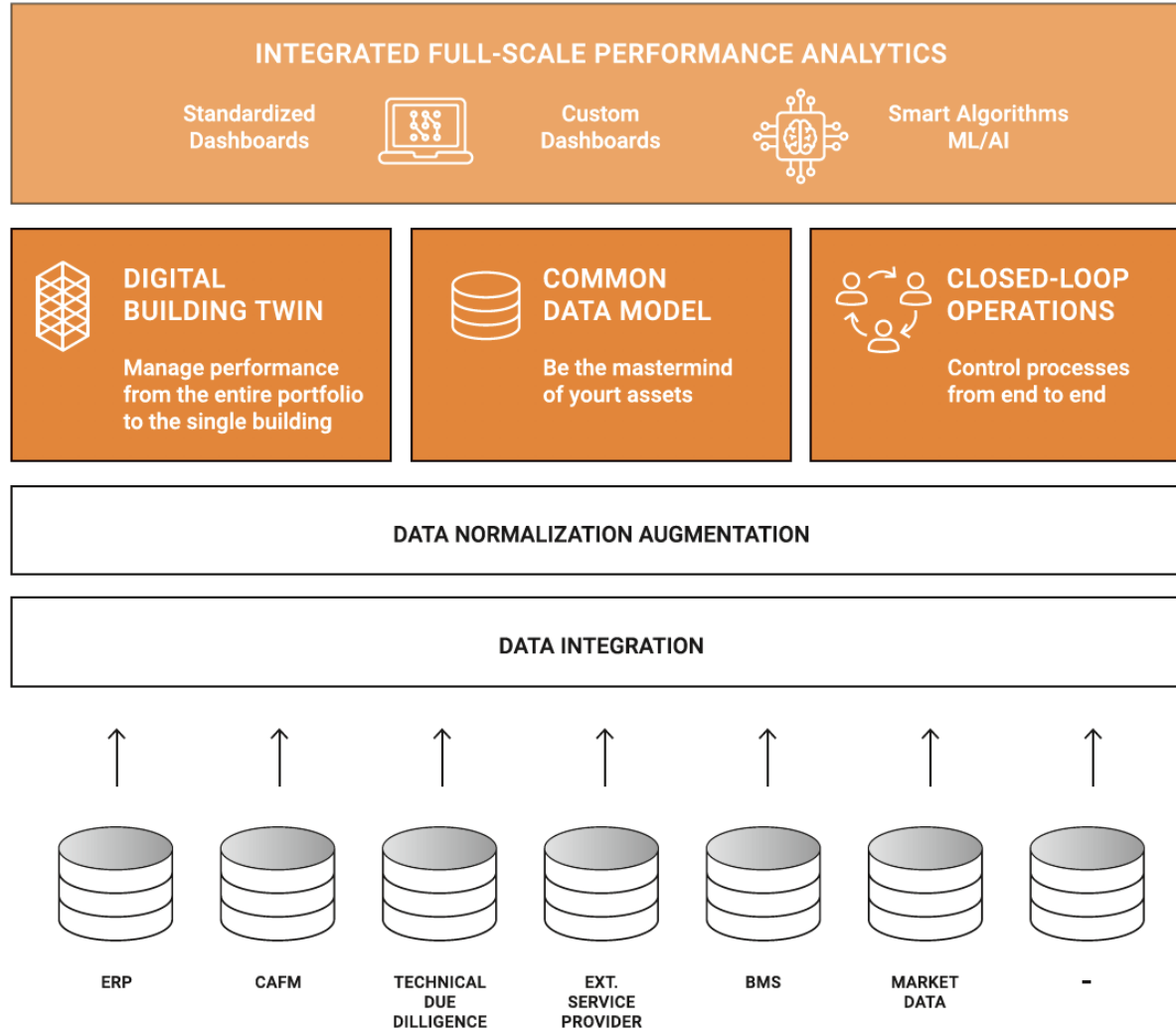- Low comparability
- Quality issues

- Increased failure rates
- Data governance issues

- Data loss
- Lack of actuality

- Fact- and data-based decision making merely impossible

- Preventing the usage of ML and AI and therefore advanced analytics

IBPDI

LIFTING THE DATA TREASURE.
WITH AN INTEGRATED PLATFORM.

INTEGRATED FULL-SCALE PERFORMANCE ANALYTICS

Standardized Dashboards

Custom Dashboards

Smart Algorithms ML/AI

DIGITAL BUILDING TWIN

Manage performance from the entire portfolio to the single building

COMMON DATA MODEL

Be the mastermind of yourt assets

CLOSED-LOOP OPERATIONS

Control processes from end to end

DATA NORMALIZATION AUGMENTATION

DATA INTEGRATION

ERP   CAFM   TECHNICAL DUE DILLIGENCE   EXT. SERVICE PROVIDER   BMS   MARKET DATA   –

- Leveraging the power of Microsoft technology
- A one-stop real estate asset optimization platform
- A unique combination of an integrated cloud platform, a digital building twin and data-driven insights

- Effectively combining sustainability, people satisfaction and profitability goals
- Providing information from a holistic, birds-eye view of the portfolio to grassroots, granular building focus
- Offering unprecedented insights, transparency and just-in-time information
- Providing the right information to all stakeholders across the entire ecosystem

COMMON DATA MODEL FOR REAL ESTATE.
STRUCTURE.

COMMON DATA MODEL
FOR REAL ESTATE

«BUILDING & PORTFOLIO LIFE CYCLE»

CONSTRUCTION MANAGEMENT
Project Data | Defects | Warranties

TRANSACTION MANAGEMENT
Transaction | Offer | Contract

PORTFOLIO/ ASSET MANAGEMENT
Portfolio Strategy | Portfolio Structure

PROPERTY MANAGEMENT
Tenant Mgmt | Rental Data

FACILITY MANAGEMENT
Operations | Maintenance | Ancillary Costs

INVESTMENT MANAGEMENT
Fond Structure | Financing

USER & CUSTOMER EXPERIENCE
User Satisfaction | Occupancy | Equipment

«MARKET»

MARKET DATA
Rental Index | Demografic

DIGITAL BUILDING TWIN

ENERGY & RESSOURCES
Energy Consumption | CO_2Emission

«ENVIRONMENT»

Financial Transaction | Budget | Accounts | Income | Cost

FINANCIALS

Project | Milestones Activity | Risk

PROJECT MANAGEMENT

Business Partner | Company Structure | Authorization

ORGANISATIONAL MANAGEMENT
«FOUNDATION»

Documents | Document Classification

DOCUMENTATION

Orders | Contracts & Agreements | Procurement

ORDER MANAGEMENT

COMMON DATA MODEL FOR REAL ESTATE.
IBOS AND CDM - DRIVING BUILDING PERFORMANCE.

BUILDING MINDS

COMMON DATA MODEL
FOR REAL ESTATE
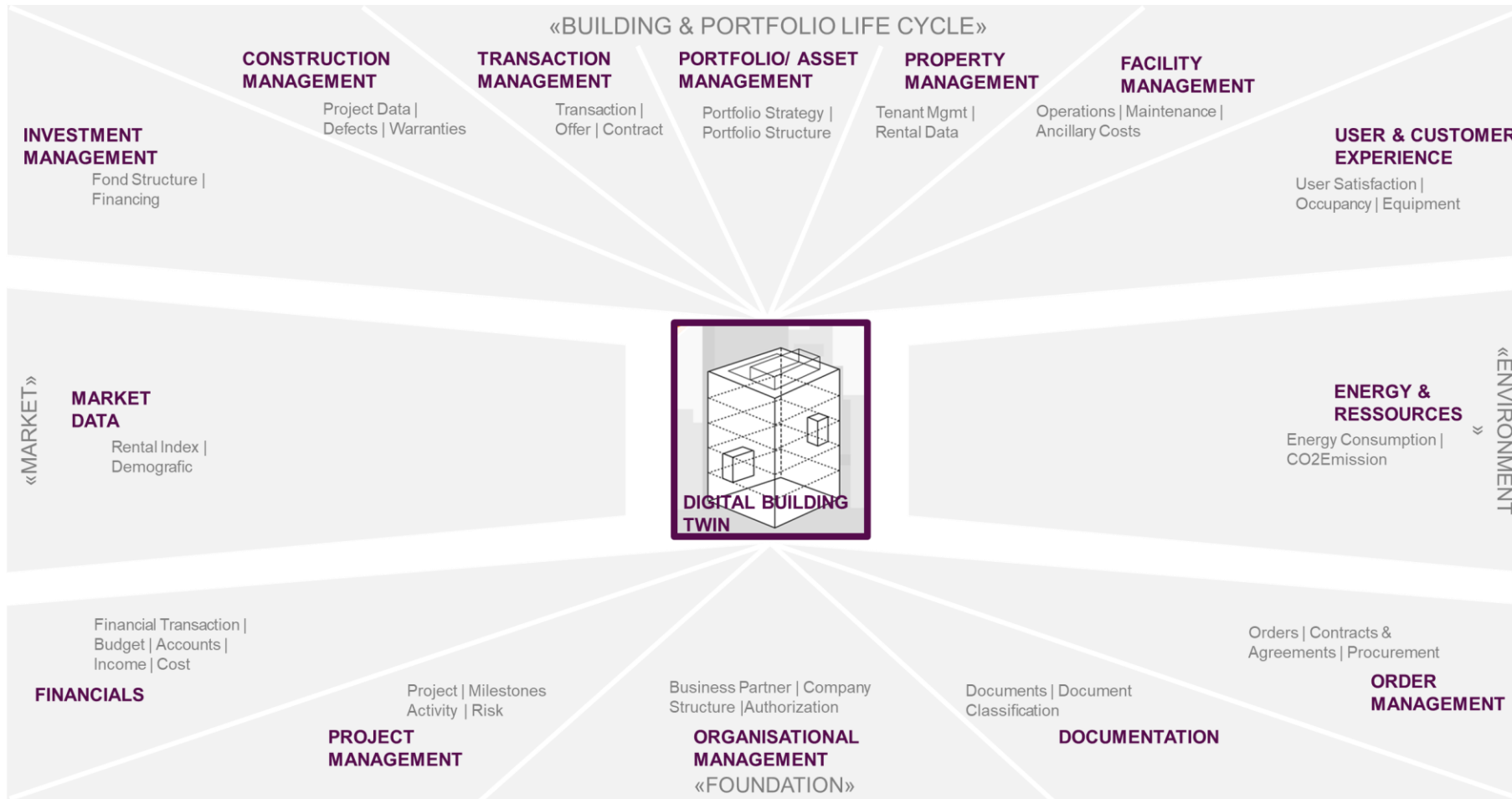
KPIs DESCRIBING BUILDING
PERFORMANCE (RESULT IBOS)

«BUILDING & PORTFOLIO LIFE CYCLE»

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Project Data | Defects | Warranties

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USER & CUSTOMER EXPERIENCE
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COMPLIANT

FUNCTIONAL

«MARKET»

MARKET DATA
Rental Index | Demografic

DIGITAL BUILDING TWIN

ENERGY & RESSOURCES
Energy Consumption | CO_2 Emission

«ENVIRONMENT»

ECONOMIC

PRODUCTIVE

Financial Transaction | Budget | Accounts | Income | Cost

FINANCIALS

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PROJECT MANAGEMENT

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ORDER MANAGEMENT

STIMULATING

IBPDI

Seamless collaboration

between all stakeholders improving process efficiency and effectiveness

Intelligent portfolio insights

based on Machine Learning and Artificial Intelligence

A single source of truth

being the backbone for data governance, data quality and compliance

New applications

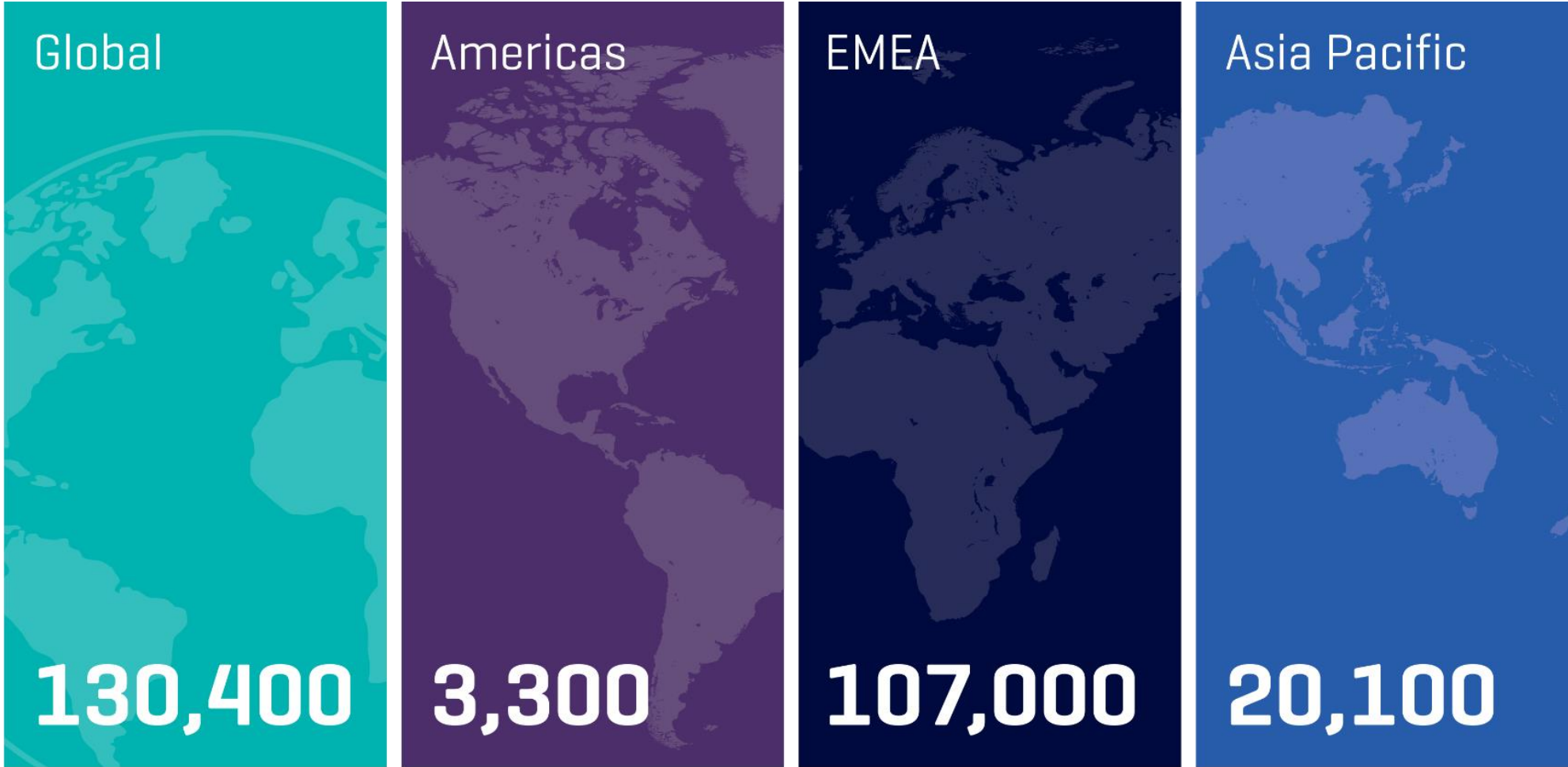enabling advanced services and a best-in-class customer experience

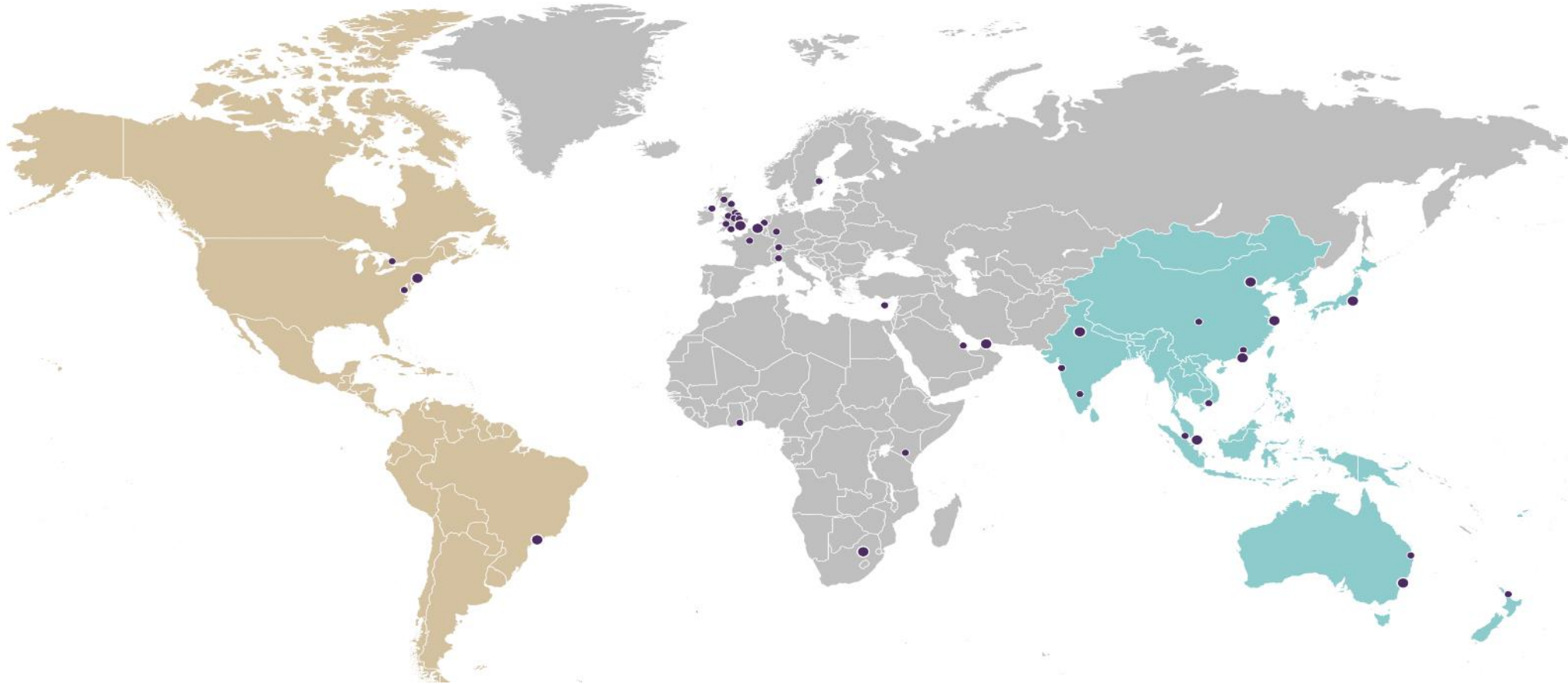**Unified data**

as innovation and business model accelerator

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WHY
COMMON DATA MODEL
CDM X REAL ESTATE
IBOS
INITIATIVE
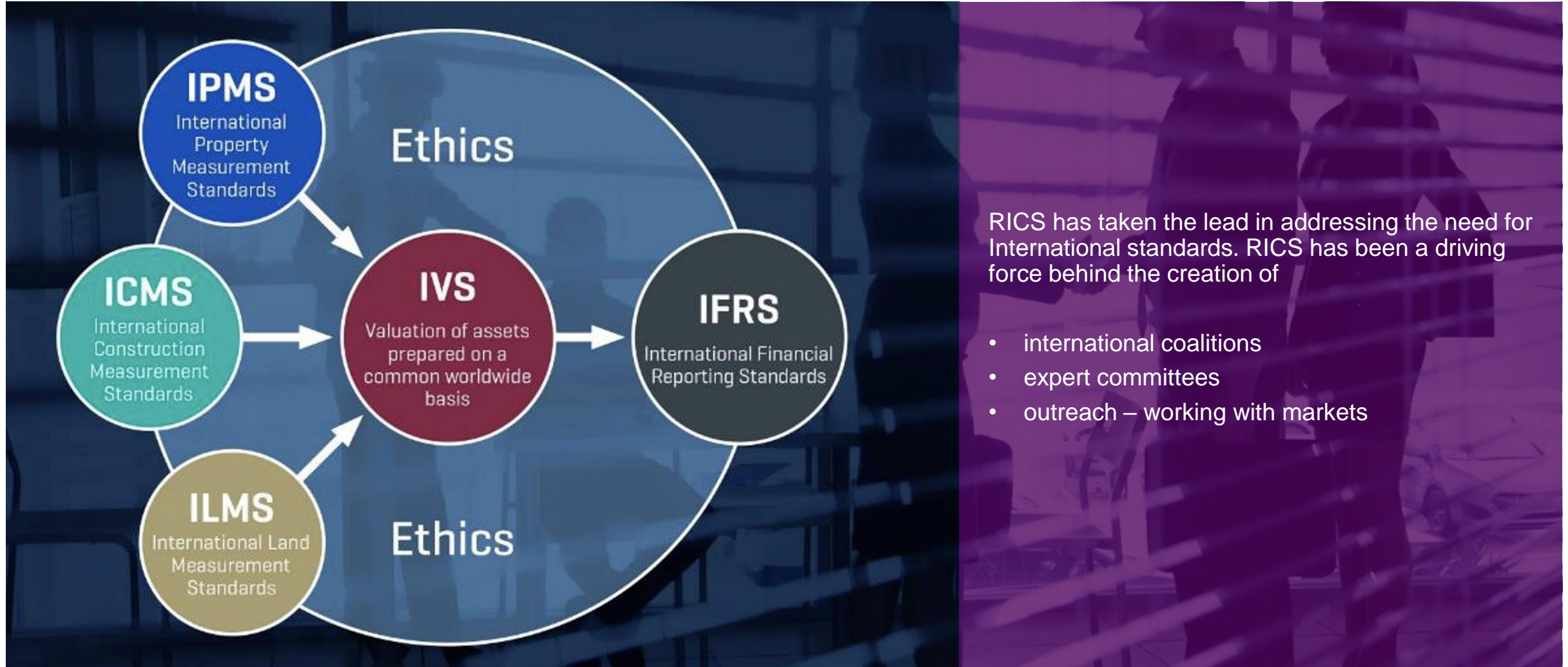
RICS.
QUALIFIED AND TRAINEE PROFESSIONALS.

Global	Americas	EMEA	Asia Pacific
130,400	3,300	107,000	20,100

Figures at October 2018

RICS.
OVER 40 GLOBAL OFFICE LOCATIONS.

RICS.
TAKING THE LEAD IN SETTING INTERNATIONAL STANDARDS.

RICS has taken the lead in addressing the need for International standards. RICS has been a driving force behind the creation of

- international coalitions
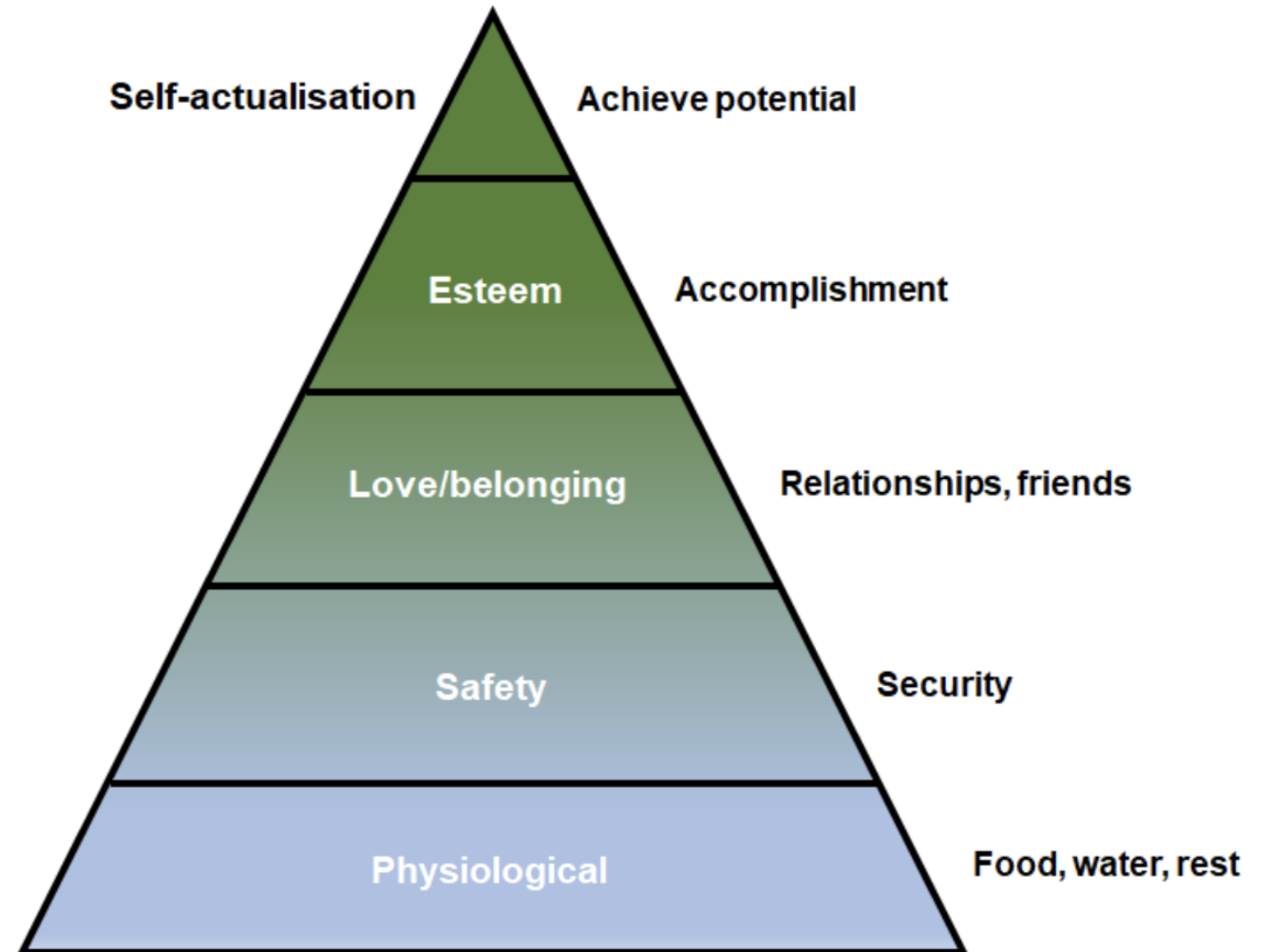- expert committees
- outreach – working with markets

RICS.
MASLOW: RE-INTERPRETED FOR BUILDINGS.

- A new data standard for building operation, performance and optimization
- Metrics and KPIs supported by the common data model
- Scoring of building performance in relation to user requirements
- Relative rather than absolute
- Focused mainly on occupants' requirements
- Decide first about the requirements and then evaluate

Self-actualisation — Achieve potential
Esteem — Accomplishment
Love/belonging — Relationships, friends
Safety — Security
Physiological — Food, water, rest

COMPLIANT

Utilities

Air quality & temp

Lighting

Sustainable

Safety & security

COMPLIANT

FUNCTIONAL

Utilities

Access & circulation

Air quality & temp

Configuration

Lighting

Risk & resilience

Sustainable

Janitorial

Safety & security

Management

COMPLIANT	FUNCTIONAL	ECONOMIC
Utilities	Access & circulation	Total cost/unit area
Air quality & temp	Configuration	Total cost/person
Lighting	Risk & resilience	Density
Sustainable	Janitorial	Efficiency
Safety & security	Management	Flexibility

COMPLIANT	FUNCTIONAL	ECONOMIC	PRODUCTIVE
Utilities	Access & circulation	Total cost/unit area	Settings
Air quality & temp	Configuration	Total cost/person	Nutrition & hydration
Lighting	Risk & resilience	Density	Systems & connectivity
Sustainable	Janitorial	Efficiency	Wellbeing
Safety & security	Management	Flexibility	Natural light & noise

COMPLIANT	FUNCTIONAL	ECONOMIC	PRODUCTIVE	STIMULATING
Utilities	Access & circulation	Total cost/unit area	Settings	Link to public realm
Air quality & temp	Configuration	Total cost/person	Nutrition & hydration	Amenities & services
Lighting	Risk & resilience	Density	Systems & connectivity	Biophilia & materials
Sustainable	Janitorial	Efficiency	Wellbeing	Curation
Safety & security	Management	Flexibility	Natural light & noise	Experience

WHY
COMMON DATA MODEL
CDM X REAL ESTATE
IBOS
INITIATIVE

IBPDI

INTERNATIONAL BUILDING PERFORMANCE AND DATA INITIATIVE.
BASIC STRUCTURE.

Who we are

INTERNATIONAL BUILDING
PERFORMANCE & DATA
INITIATIVE

IBPDI

BUILDING OPERATIONS KPIs
& STANDARDS

RICS®

COMMON DATA MODEL
FOR REAL ESTATE
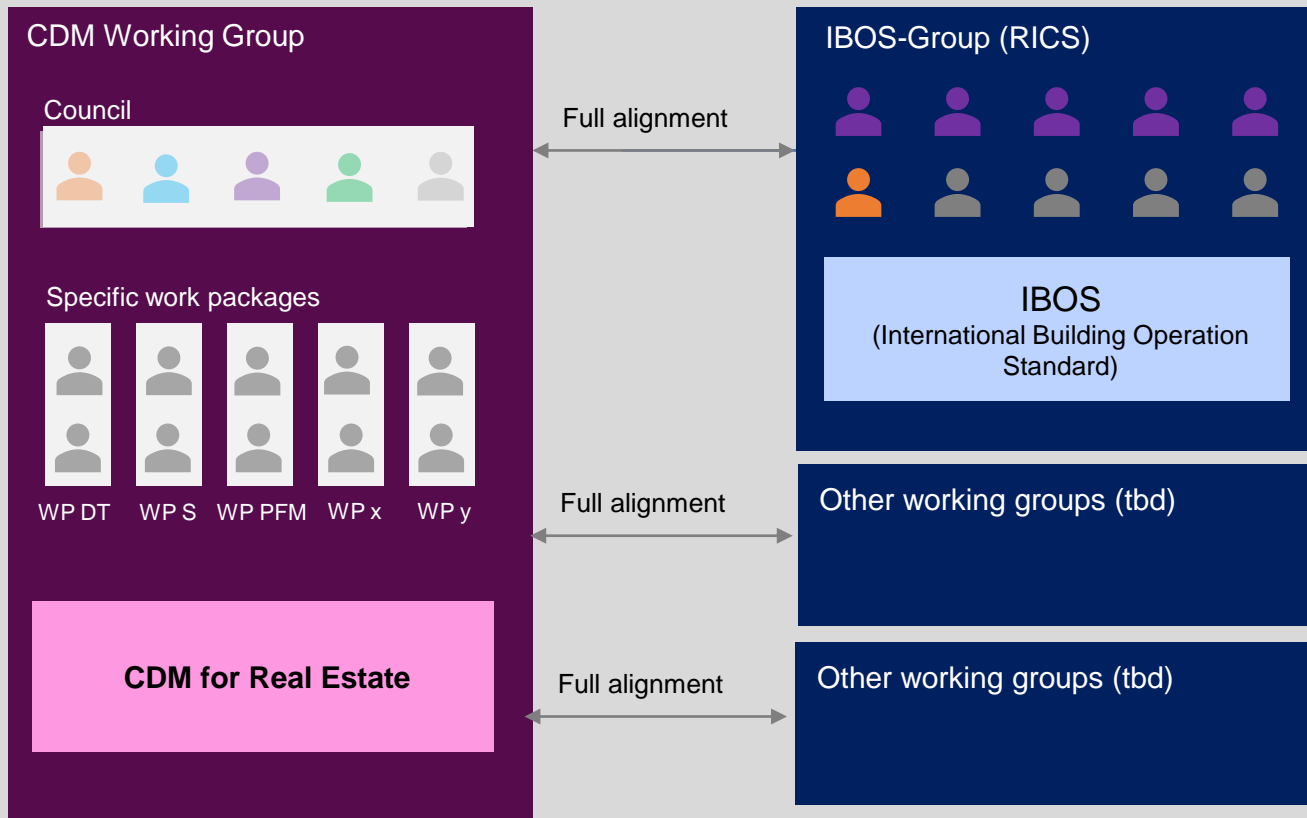
BUILDING MINDS   Microsoft

What we'll deliver

INTERNATIONAL BUILDING
PERFORMANCE & DATA
STANDARD

(Consisting of "IBOS"
and the Common Data Model for Real Estate)

IBPDI

INTERNATIONAL BUILDING PERFORMANCE AND DATA INITIATIVE.
BASIC STRUCTURE.

WORKING GROUPS (ACTIVE CONTENT GENERATORS)

CDM Working Group

Council

Specific work packages

WP DT   WP S   WP PFM   WP x   WP y

CDM for Real Estate

Full alignment

IBOS-Group (RICS)

IBOS
(International Building Operation Standard)

Full alignment

Other working groups (tbd)

Full alignment

Other working groups (tbd)

MARKET TOUCH POINTS (VALIDATION & EXTENSION)

Co-Innovation Customers
Integration and feedback through specific customer projects (proof of concept with real data)

Event
Event with relevant market players for validation and extension

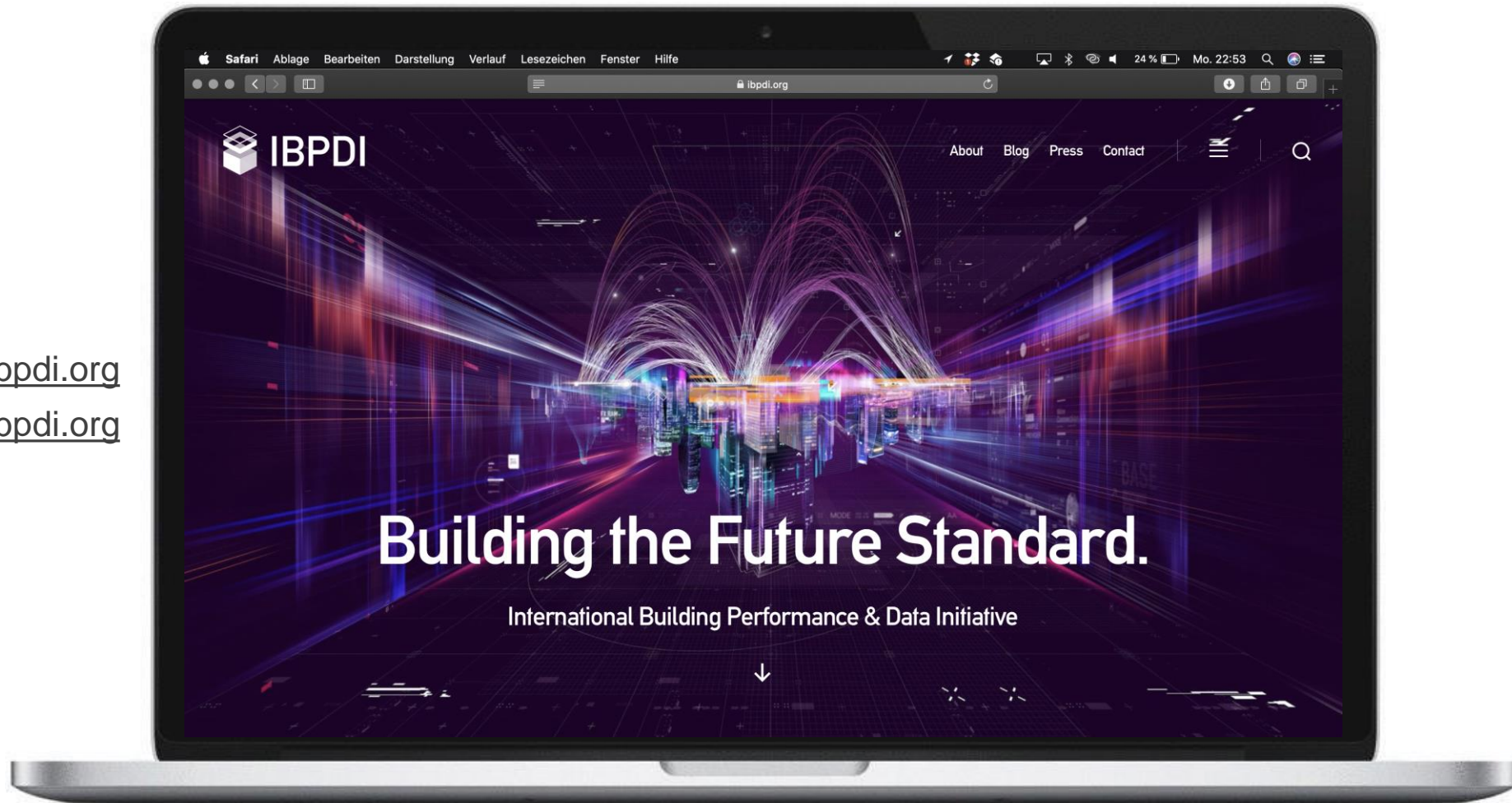**Others**
Direct market feedback through further events, appearances, presentations, etc

BuildingMinds   Microsoft   RICS   pom+   others

IBPDI

THERE IS NO SUBSTITUTES' BENCH...

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INTERNATIONAL BUILDING PERFORMANCE AND DATA INITIATIVE.
JOIN US IN BUILDING THE FUTURE STANDARD.

www.ibpdi.org

contact@ibpdi.org