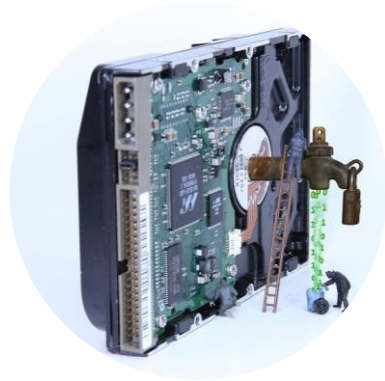# BCS PROMS-G Spring School March 2023

Week 2   16 March 2023

RPM and Project Case Studies

Dr Petrena Prince

Sustainability Program Manager

IBM Global Real Estate

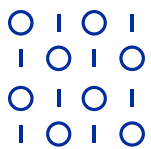We need to start thinking differently about technology

Sustainability in Global Real Estate is a must for people, planet and profit

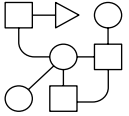Managing the cost of real estate is often the 2nd highest cost in an organization

40% of emissions are created by facilities, impacting **sustainability,** an increasingly regulated space.

"Smart" buildings and assets create over 40 ZB of data annually, but less than 30% is used

Examples of GRE use cases....

1. Understanding space utilization data to track usage and reimagine sustainable workplaces
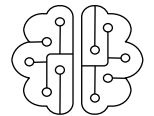
2. Manage assets and maintain efficiency for sustainability benefits

3. Reduce operating costs within datacenters and reduce GHG from across IT infrastructure
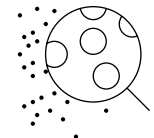
4. Align sustainability goals to business objectives while complying with increasing regulatory demands

Common Business Challenges

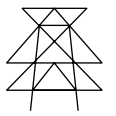|		
Environmental projects are often neglected in the capital planning process	Utility breakdown not known for some buildings	Data managed by a variety of systems & people
No centralized reporting	Many standards are required: LEED, HPSB, BREEAM, EO 13514, etc.	Difficult to track impact of environmental efforts

As a Project Manager what do you need to think about in this case?

Technologies and innovations that drive positive impact for society at large

Data centers designed and operated with an emphasis on sustainability

Efficient use of available and future technology

Responsible Data Center

Responsible Impact

Responsible Infrastructure

Be a Responsible Computing Provider

Responsible Systems

Responsible Code

Responsible Data Usage

Inclusive systems that address bias and discrimination driving equality for all

Conscious code choices that optimize environmental, social and economic impact over time

Data that is securely used in ways that drive transparency, fairness and respect for the users

As a Project Manager what do you need to think about in this case?

What data will you need

- EMS
- Data Collection for ESG reporting
- Predictive Asset Management
- IPWC
- Data Validation
- 3rd party data assurance

- Leases, including green lease clauses
- Purchasing of Renewal Energy
- Energy meters
- IoT devices for temperature monitoring
- Water meters

- Migration to the Cloud
- Optimizing workloads
- Upgrade paths
- Recycling of machines

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- How do we automate
- Data needed for feedback loops
- Data needed for ensuring ethics are considered

- What data do the developers need for improvements and energy savings

- Master data management
- Access rights and security
- Remove silos
- Remove dark data
- Use external APIs such as Weather data and EIS

As a Project Manager what do you need to think about in this case?

Who do you need to involve?

- Data Center Owner
- Local community
- Researchers

- CEA
- CSR
- Comms
- D&I

- Green IT team
- Developers
- Architects
- Researchers
- Local community

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- Developers
- Architects
- Researchers
- End users

- Chief Technology Officer
- Chief Information Officer
- Governance Board
- Ethic Board

- Architects
- Data Scientists
- Chief Data Officer
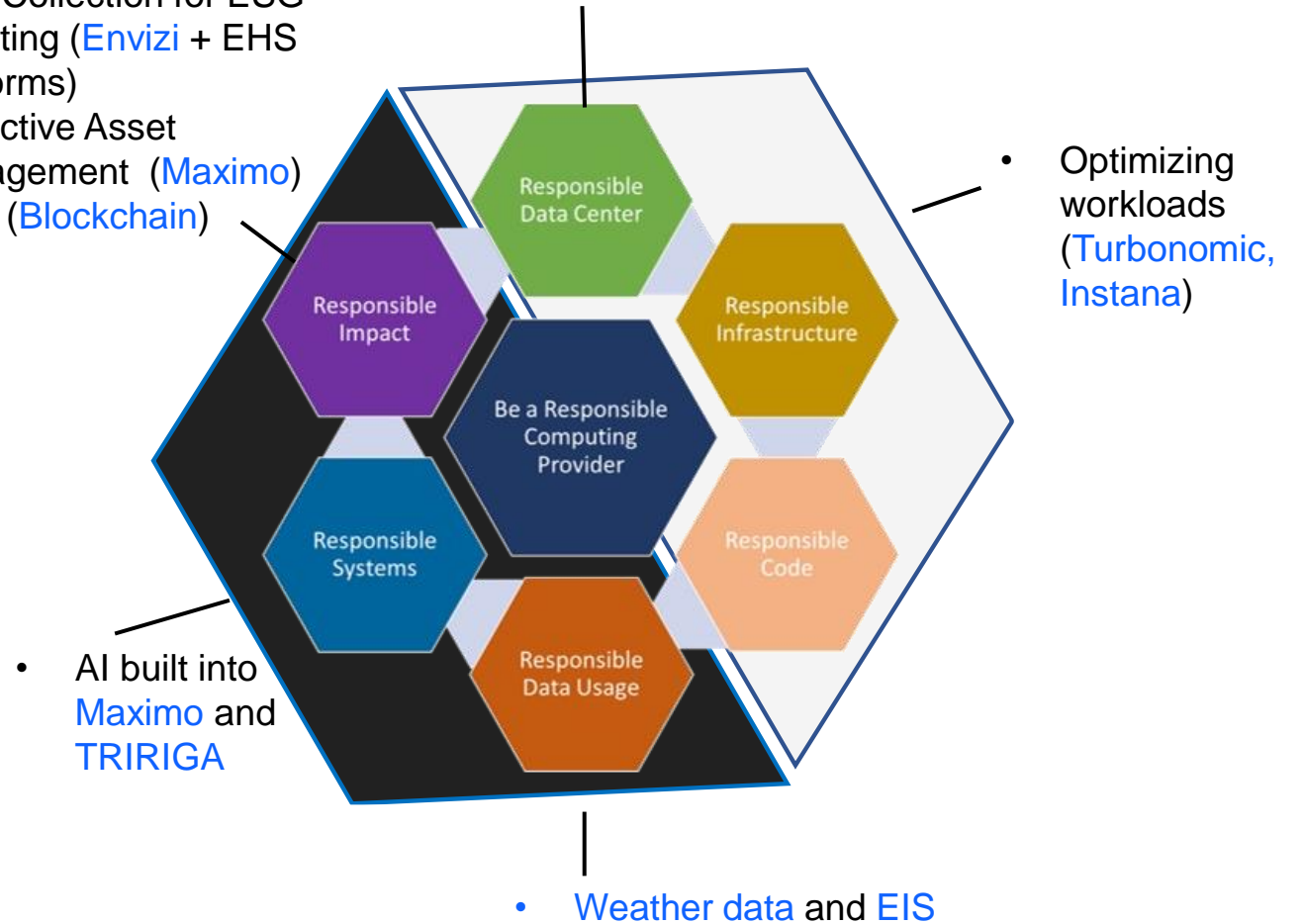- Chief Information Officer

As a Project Manager what do you need to think about in this case?

What are the best tools?

- Leases, including green lease clauses (TRIRIGA)
- Purchasing of Renewal Energy
- Energy bills (Envizi)
- Improve cooling (BMS)
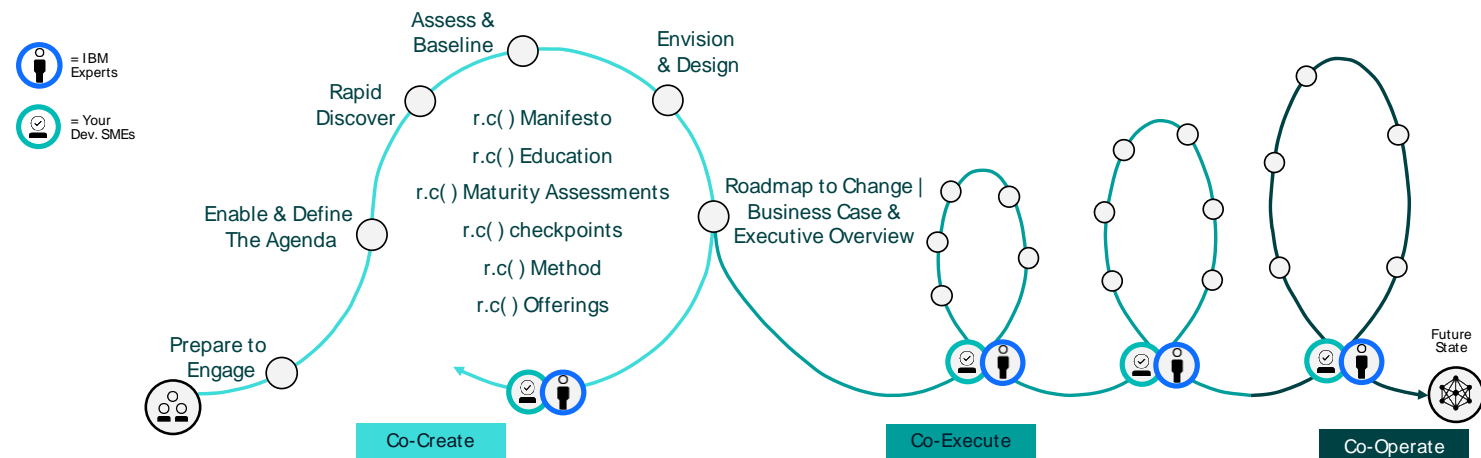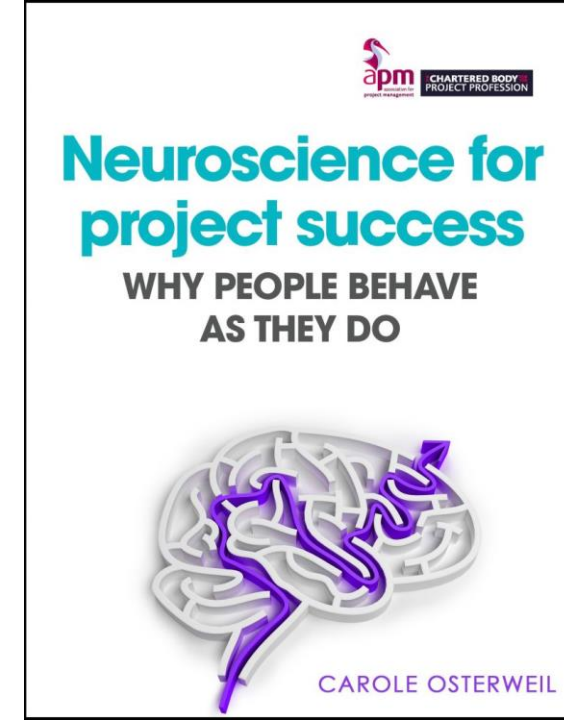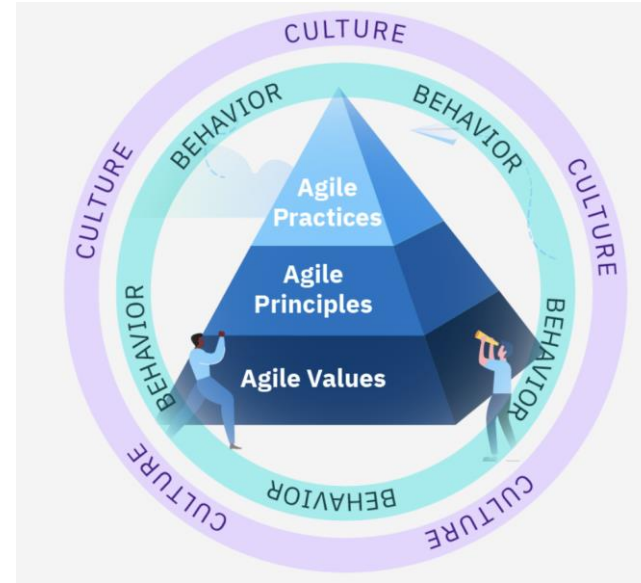- Water reduction (Envizi)
- IoT devices for temperature monitoring (MAXIMO)

- Data Collection for ESG reporting (Envizi + EHS platforms)
- Predictive Asset Management (Maximo)
- Trust (Blockchain)

- Optimizing workloads (Turbonomic, Instana)

- AI built into Maximo and TRIRIGA

- Weather data and EIS

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Responsible Data Usage

As a Project Manager what do you need to think about in this case?

How to have high performing teams

Lessons Learnt

1.   You can start on any of the domains in this framework to help you towards your goals. All actions are good for the planet, but know what data you need for your goals. You cannot measure what you cannot see

2.   Focus on the data, ensuring you have master data management and data stewardship to ensure all terms mean the same across your tools and remove unnecessary data to allow better reporting and the ability to analyse your data and take appropriate actions

3.   Focus on clear roles, and responsibilities from data gatherers, data entry, and data verifiers, as data accuracy and data verification are key

4.   Use technology and automate where possible but check the automation to bring Trust and allow feedback loops and psychological safety