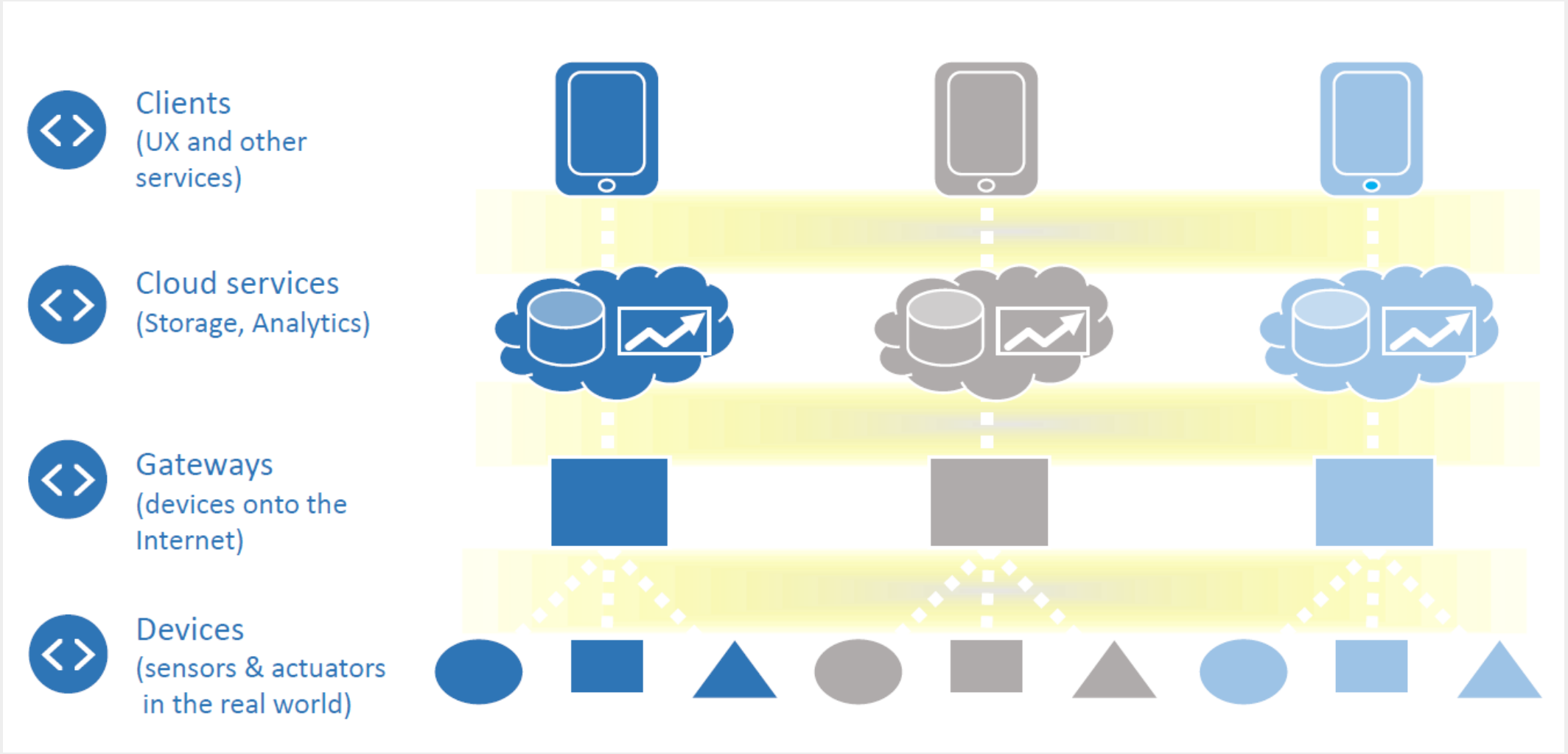
THE HYPERCAT STANDARD

THE PURPOSE OF HYPERCAT

HYPERCAT for ALL

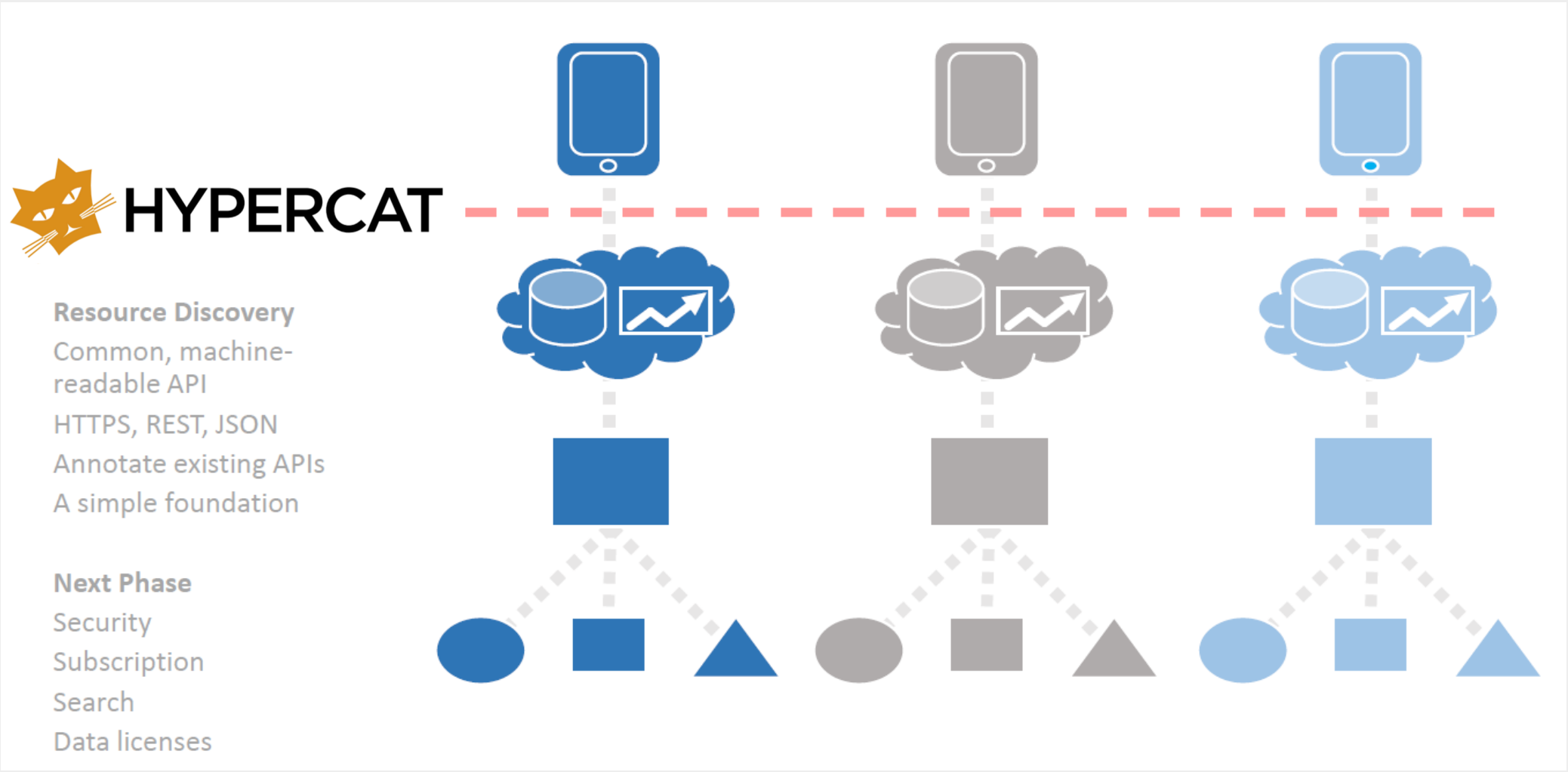
IOT (SMART SYSTEMS) STACK

HYPERCAT for ALL



HYPERCAT STANDARD

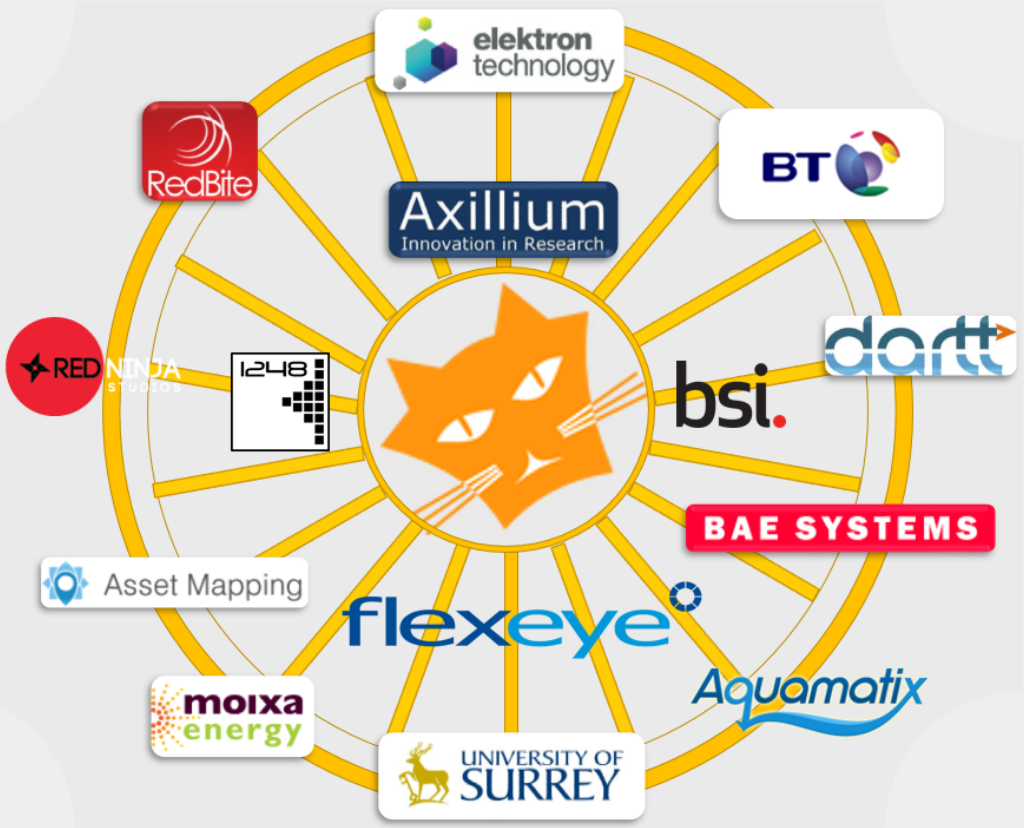
HYPERCAT for ALL

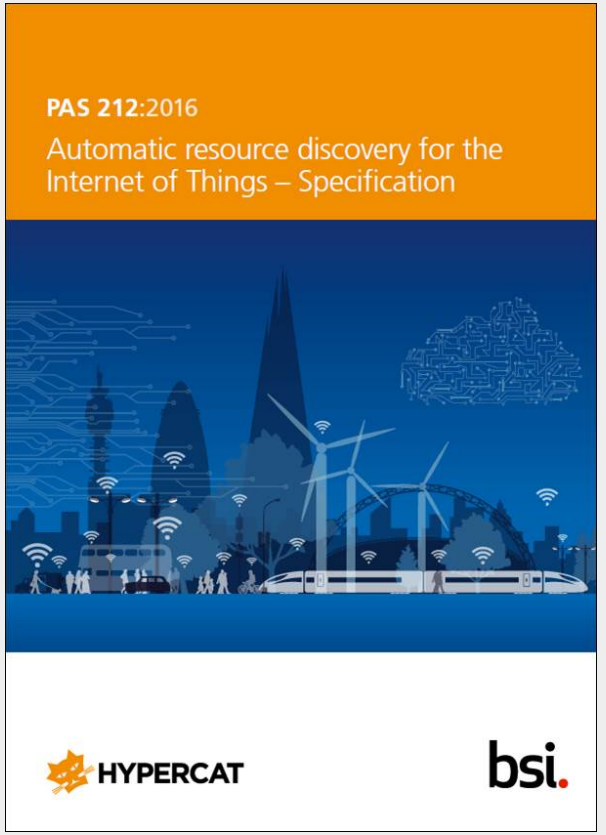


HYPERCAT CONSORTIA AND PAS 212

HYPERCAT for ALL

PAS 212 Automatic resource discovery for the Internet of Things – Specification





http://shop.bsigroup.com/pas212download

THE USE CASES

HYPERCAT for ALL

flexeye HYPERSPACE RED NINJA STUDIOS

HYPERCAT

INDUSTRY

elektron technology

SMART FOOD SAFETY

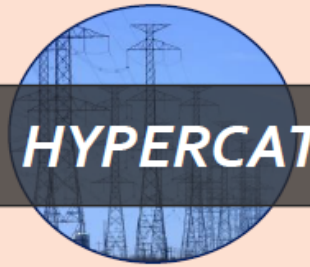
TRANSPORTATION

BT

BAE SYSTEMS

SMART LOGISTICS & FLEET

UTILITIES



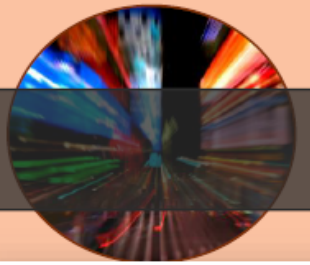
BT

moixa TECHNOLOGY

Aquamatix

SMART LIGHTING, ENERGY & WATER

SMART CITIES



Asset Mapping

BT

UNIVERSITY OF SURREY

SMART BUILDINGS, PARKING & MOBILITY

SMART INFASTRUCTURE

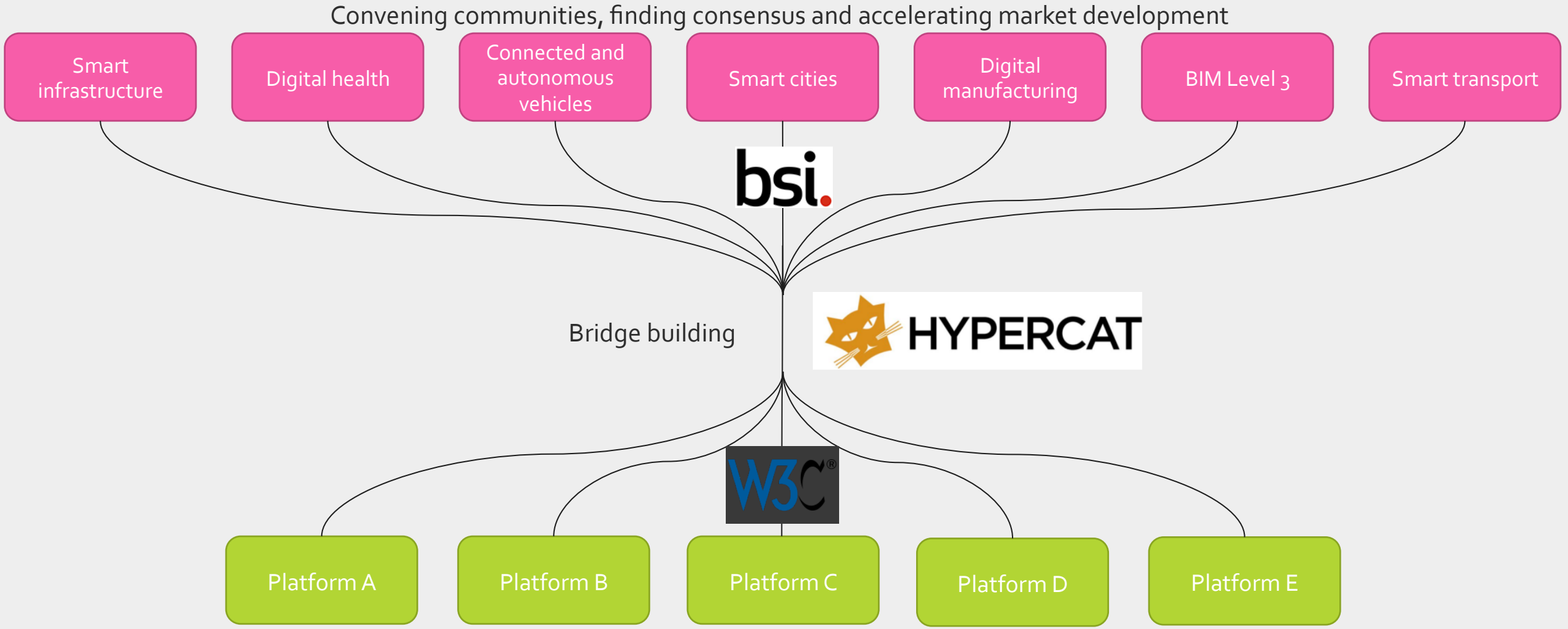
flexeye

RedBite SOLUTIONS

SMART FACILITIES & HIGHWAYS

THE PROPOSED HYPERCAT COLLABORATION

HYPERCAT for ALL



HYPERCAT COLLABORATION AIMS

HYPERCAT for ALL

- Stimulate the development and the continuous improvement of specific standards and specifications overseen by each body;
- Provide a coordinating function to exchange insights, identify overlaps, and prioritise further work needed to advance sector-specific applications;
- Provide a convening function of the different sectors (smart infrastructure, etc) working in IoT;
- Develop strategy, technical and policy white papers, reports, guidelines, and other outputs to help drive the global adoption of IoT services;
- Provide strategic input into and develop a joint position vis-à-vis other standards development organisations as appropriate;
- Improve each other's work efforts;
- Accelerate the development of open markets of IoT services based upon open standards;
- to counter the fragmentation due to incompatible platforms, standards and protocols.

HYPERCAT COLLABORATION – ACTIVITIES 1/2

- Convening and consolidating the UK IoT community, taking advantage of the UK government mandate to use the Hypercat specification in the IoT City Demonstrator and NHS test beds (BSI lead).
- Convening and consolidating the international IoT community with events and workshops covering 'business' and 'technical' area (BSI/W3C lead).
- Engaging and influencing government and other funders and investors to require the implementation of the Hypercat specification in different sector applications (BSI/W3C lead).
- Driving international implementation and adoption of PAS 212 and associated standards (BSI/W3C lead).
- Developing and maintaining an appropriate IoT standards strategy and roadmap, including: creating and updating fast-track standards and guidance documents providing a route into and influencing the international standardisation system (BSI/W3C lead).
- Delivering a marketing and communications strategy, including organising the Hypercat summit and networking events, speaking at major conferences, managing the HA website, etc. (BSI lead).
- Developing research projects, case studies and premium content to enhance commercial advantage for HA members (BSI lead but with close W3C involvement).
- Providing assessment services on an automated basis using the Hypercat logo (BSI lead).

HYPERCAT COLLABORATION – ACTIVITIES 2/2

- Gathering and analysing use cases across different application domains (W3C lead).
- Identifying and exploring broad challenges relating to privacy, security, interoperability and open markets, etc. (BSI/W3C lead).
- Coordinating with W3C groups to facilitate effective transfer of requirements (W3C lead).
- Coordinating with other industry groups and standards development organizations on technical matters (BSI/W3C lead).

WHERE TO GET STARTED

HYPERCAT for ALL

- Very simple spec (6 pages)
  - http://www.openiot.org/apis
- Build on the open standards you already use
  - HTTPS, RESTful, JSON
- Growing set of Catalogues to test against
- Growing set of Tools for Client & Services
  - Online, and as Code Libraries
  - See http://wiki.1248.io

HYPERCAT IS NOT A PANACEA

HYPERCAT for ALL

- Applications and Services still have to agree on high level semantics
  - i.e. if a service provides temperatures in °C then the application needs to understand °C
- What HyperCat does is enable an application to find those things that it does understand, in any service
  - e.g. “show me all the resources which deliver temp readings in °C”

WAY FORWARD

Hypercat alliance to maintain and further the standard, first overseas chapter in Australia, others are being discussed.