Conclusions

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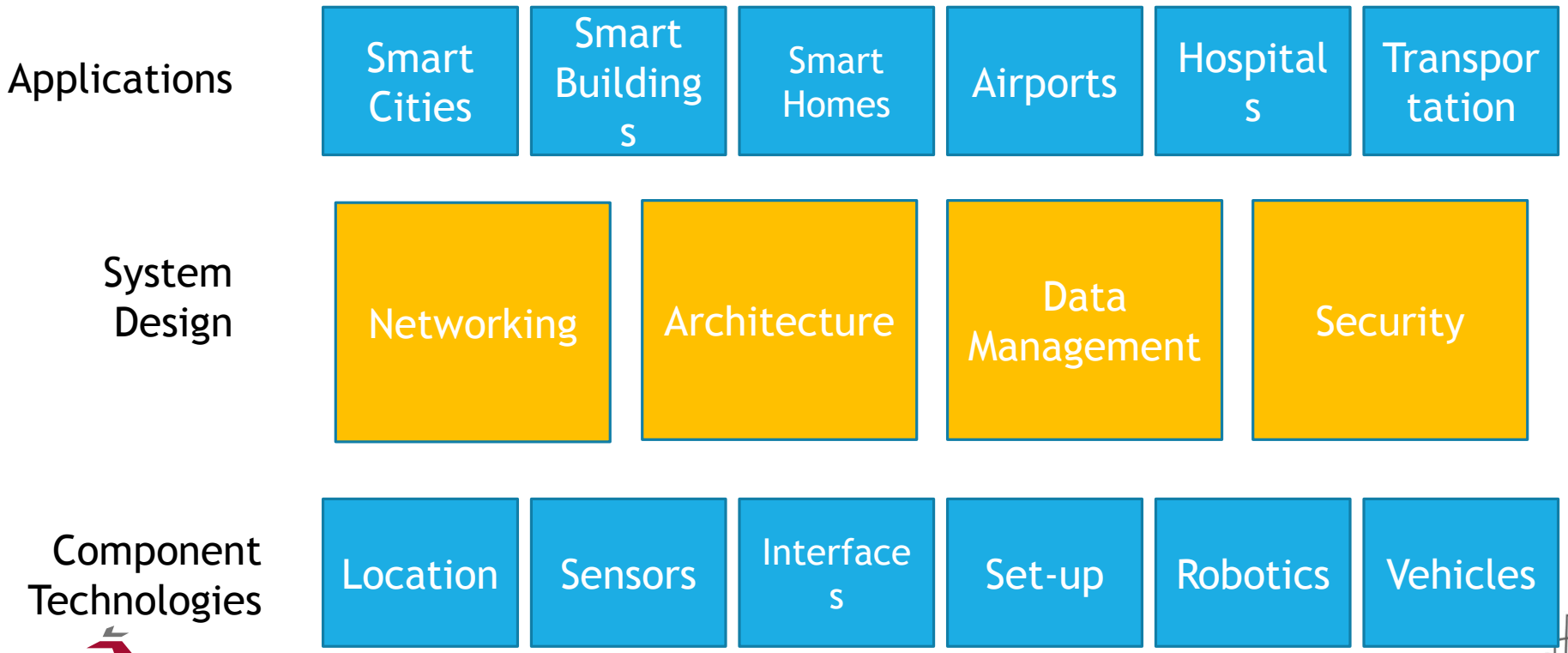
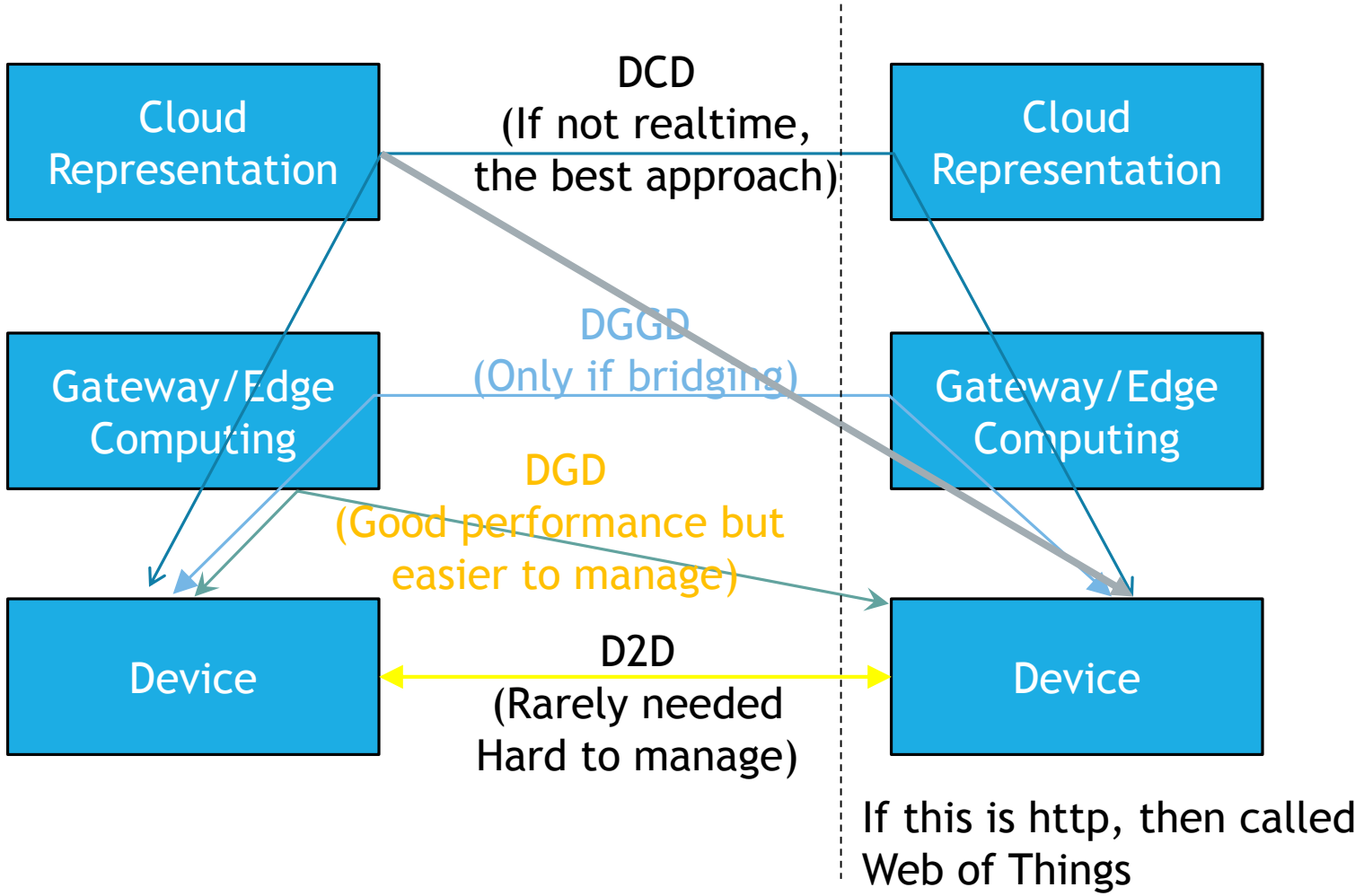
YOU HAVE JUST SEEN SEVERAL TOPICS COVERING…



COMMUNICATIONS STRATEGIES



TODAY: WALLED GARDENS

NEST, Home Kit, Smart Hub are independent ecosystems.

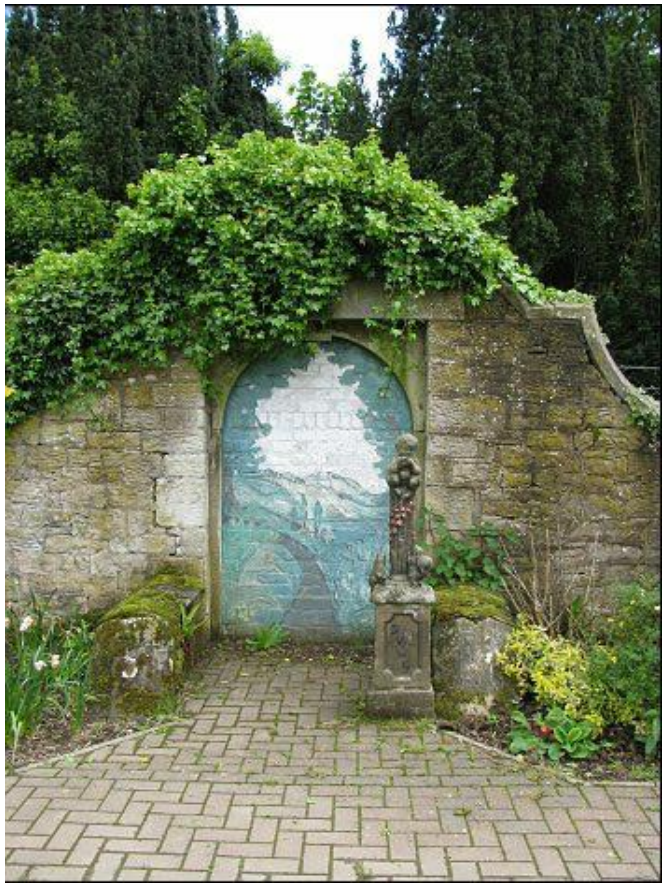
- Industrial the same.

The gardens are expanding at the expense of the device manufacturers:

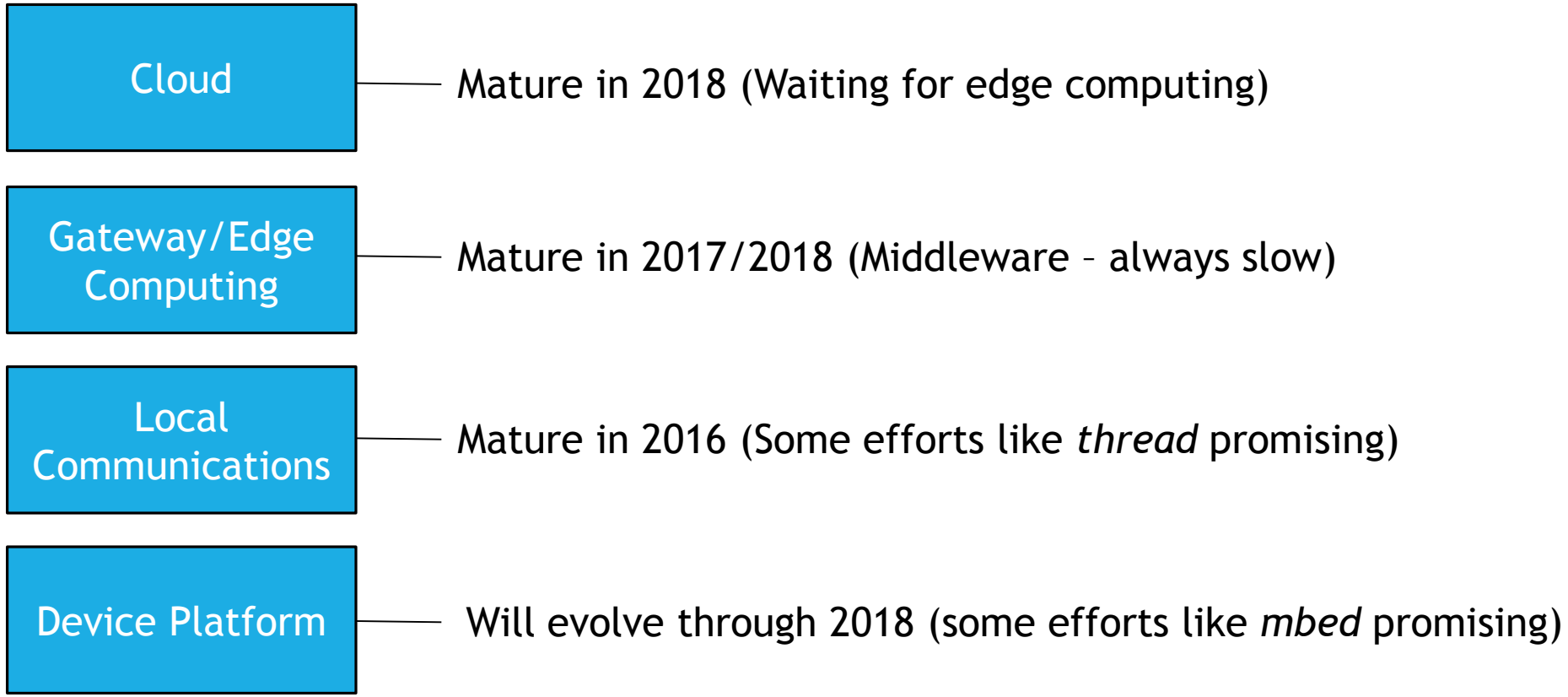
- Jawbone, for example, works with both NEST and Home Kit.

When will the gardens talk to each other?

- The issues are at all layers



SYSTEM ROADMAP: BEYOND WALLED GARDENS



SARMA'S VIEW

As I have said, I believe that web standards are the way to go: http, mashups, etc.

- Check out: Building the Web of Things
  Dominique D. Guinard and Vlad M. Trifa.
  ISBN 9781617292682
- (disclosure: Dom's former student)

Lift things to the cloud when possible.

Local controller/gateway for performance

SO, WHAT SHOULD YOU DO?

1. Do something.
   - Why? Because IoT is in your future, and IoT literacy is essential.
   - IoT is very *personal* to your company. You need to figure out how it will impact *your* business.
   - If you work with a consultant, find a *process* rather than IT consultant. IT will come later.
2. Build a real system and try to use it.
3. Learn and iterate. Put iteration cycles above “solidity”.

IF YOU ARE A BEGINNER: WHERE TO START?

START SMALL AND BE PATIENT

1. Pick a single but complete example pilot

2. Pick something with a clear value proposition
   - Does your plant struggle with the level of a tank?
   - Are there machines that are not turned off at night?
   - *Make sure you pick a failsafe application*

3. Instrument for measurement

4. Do controls – i.e., use actuators

5. Observe and measure

6. Be patient and search for insights

HOW TO IMPLEMENT

Do it “internally” – but with fresh blood. Not for an enterprise architect.

Pick a non-real-time application

Use off-the shelf technology at the edge

- For example, a Raspberry Pie

Simplify communications

- No point dealing with exotic protocols
- Do that later, but wires OK initially

Implement through the cloud

- Make it easy to configure
- Log data for later analysis
- Perhaps use mashup approach (See, for example, Building the Web of Things by Dominique D. Guinard and Vlad M. Trifa.)

IF YOU ARE A MATURING USER

What is you security policy?

- Have you assessed threats?

How easy is it to maintain your system

- Can you monitor your system easily?
- Can you maintain security when you make changes? (Does your plumber need to be an IT specialist)
- Can you update your system?

What is your architecture?

IF YOU ARE A PRODUCT COMPANY

Where in the ecosystem will you play?

What is the architecture you should use?

- Security
- Updateability
- Expandability

What is your business model?

- Purchase?
- Subscribe?
- Advertisements?

What

Just do it. Thoughtfully.

CONCLUSION

THANK YOU!

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Thank You!

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