



The Deliberate Practice of **Thinking About Your Systems**



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May 2025



Andrea Magnorsky
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About Andrea

Programmer and Creator of Bytesize Architecture Sessions

- Programming professionally since 2001
- Co-founded PC & Console Games Company in Ireland
- Worked in enterprise, medium and small companies
- Contracting and Consulting since 2018
 - E-Commerce
 - Broadcasting media
 - Finance
- Moved to NZ a year ago

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You ship what is in your programmers' brains.

.....

Andrea Magnorsky - 2021



**“It’s not the domain experts knowledge
that goes into production, it’s the
assumption of the developers that goes
into production.”**

.....

Alberto Brandolini - 2019*

***or before**

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Knowledge workers are workers whose main capital is knowledge. These are workers whose job is to “*think for a living*”.

Source: [Thinking For A Living: How to Get Better Performance and Results From Knowledge Workers.](#)
Davenport, Thomas H. (2005).

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Knowledge Stock

is the **store** of knowledge
you have developed or can
access.

...each pile represents a person's knowledge

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Knowledge Flow



**... the lines represent knowledge sharing in ways
that change the system**

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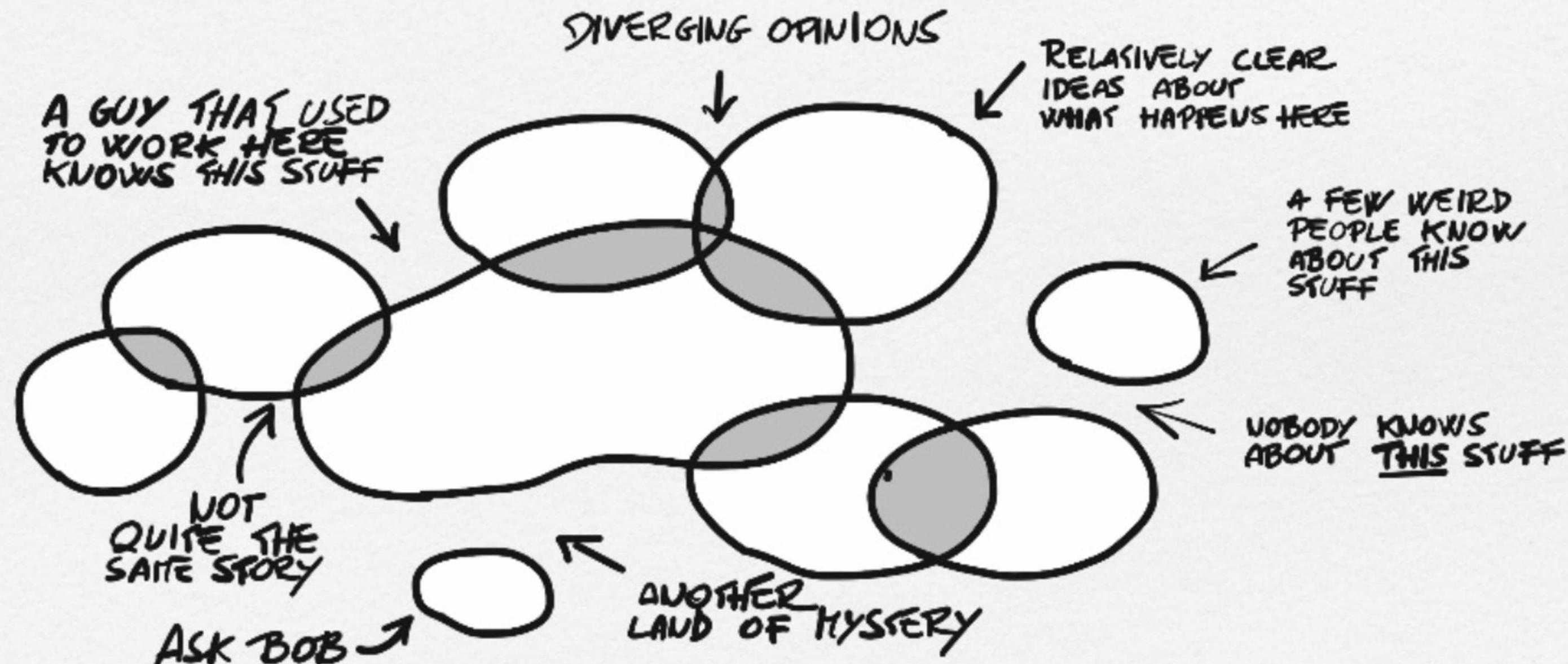
“Knowledge transfer among employees is thought to be a **crucial determinant** of an organisation’s capacity to utilise new knowledge and **innovate.**”

Liao et al., 2007

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THE KNOWLEDGE DISTRIBUTION



The way the knowledge is distributed during workshops.
Source: Presentation by A. Brandolini

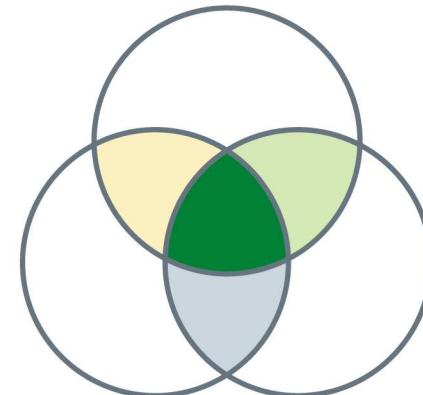
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Added difficulty

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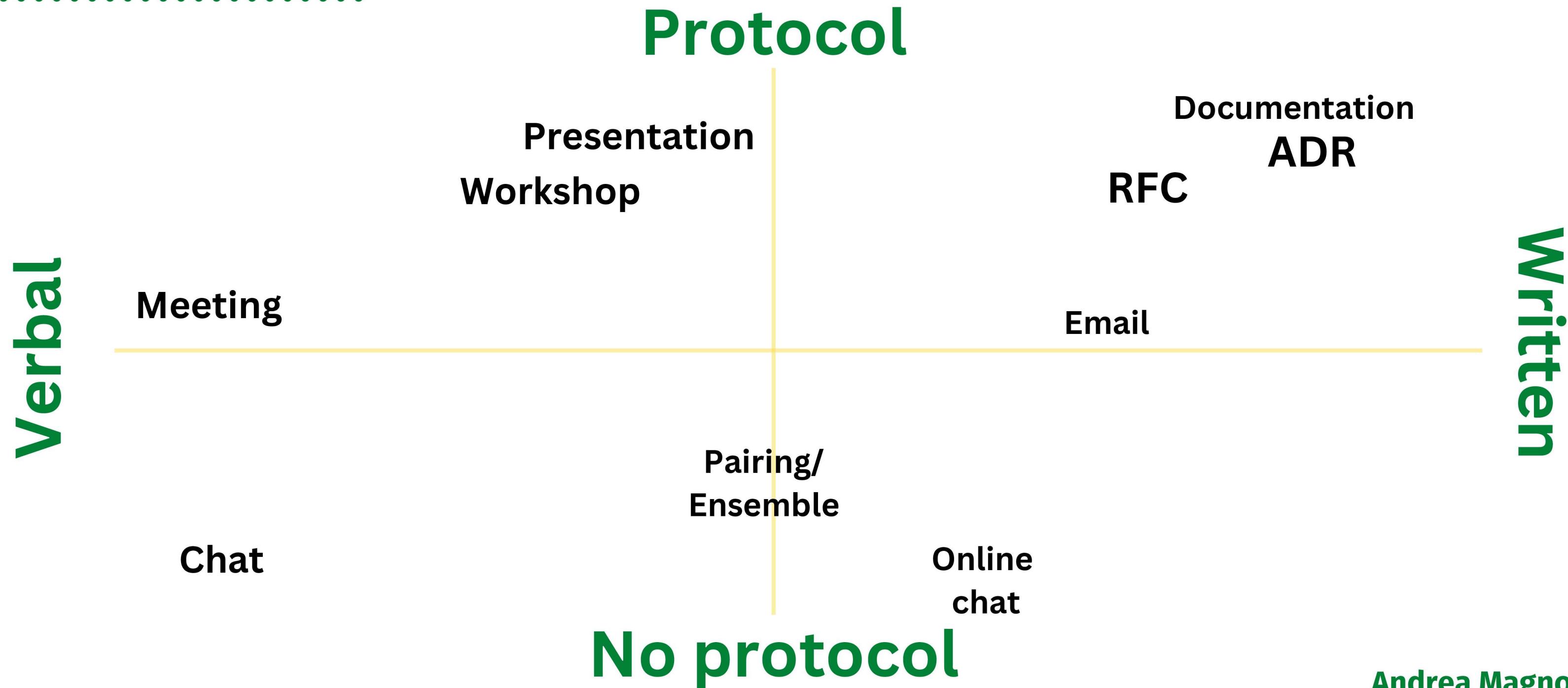
- Changing teams
- Coordination between teams
- Conflicting long term plans
- Power
- Role dependent information variance





Knowledge sharing methods

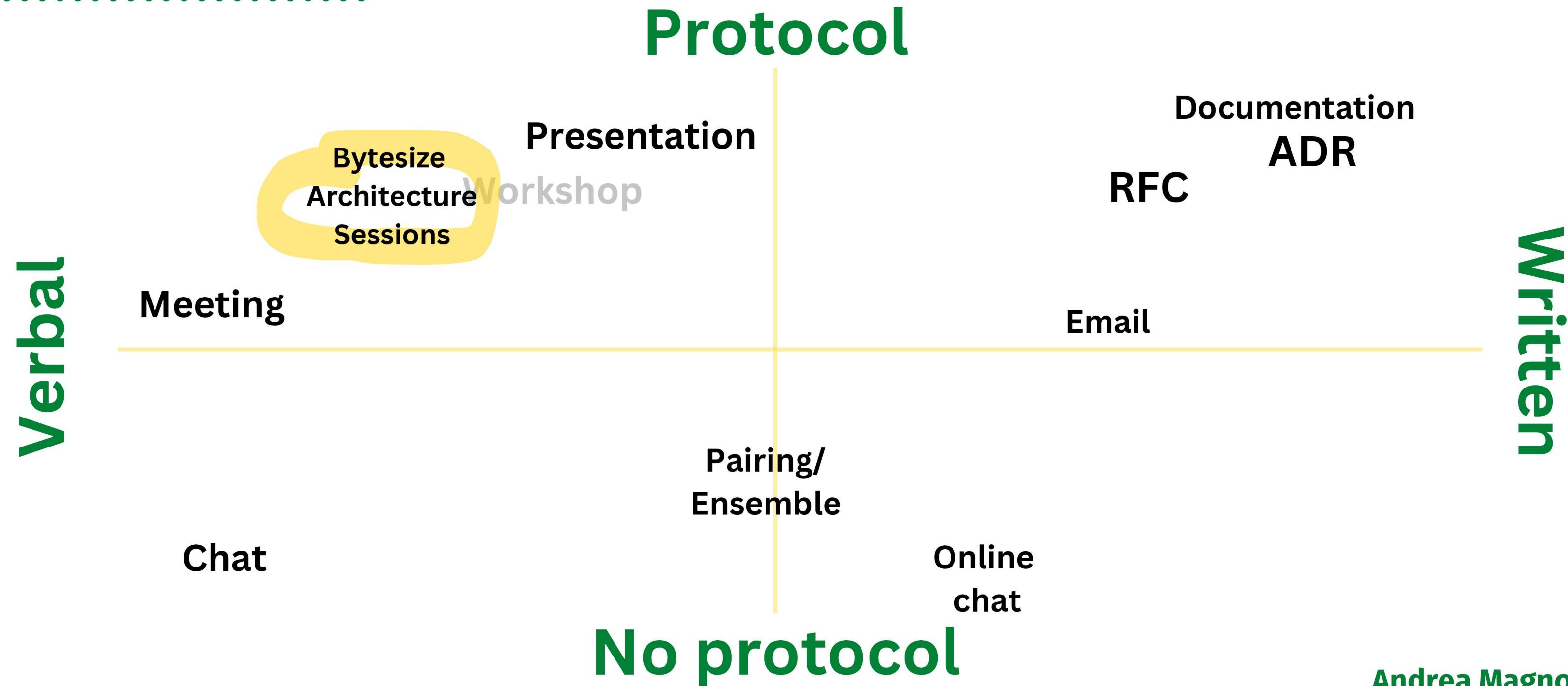
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Knowledge sharing methods

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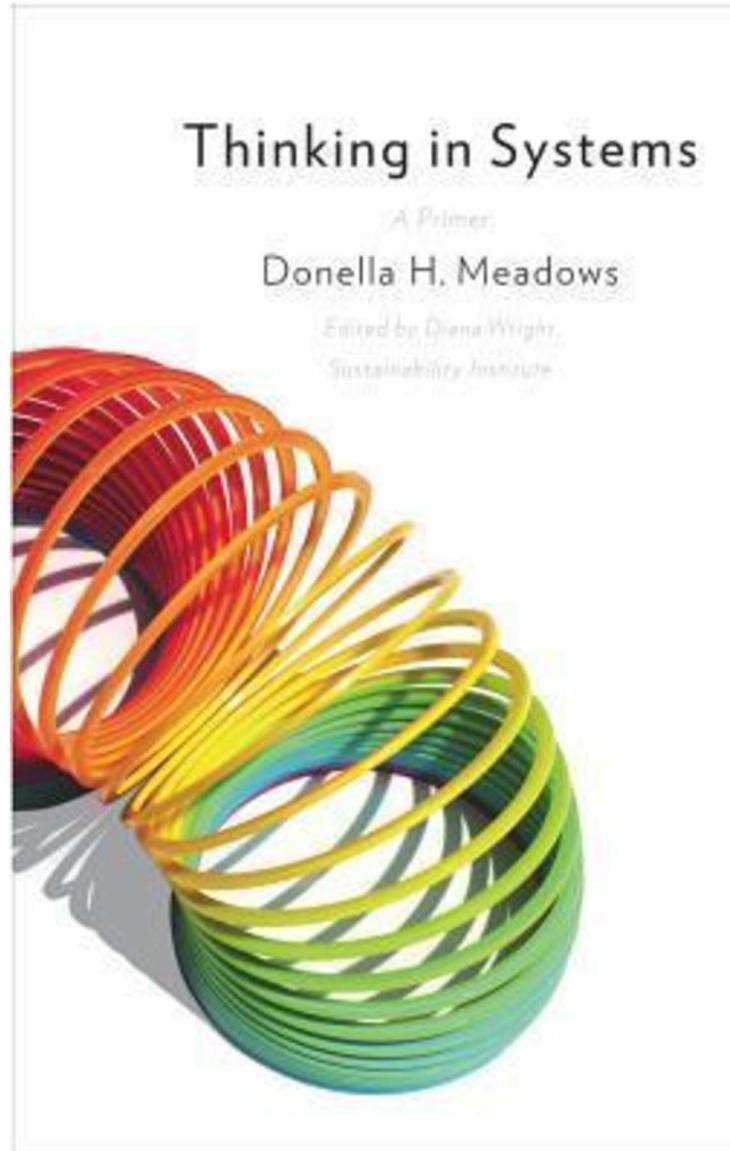




Bytesize Architecture

Sessions[T] is a workshop format

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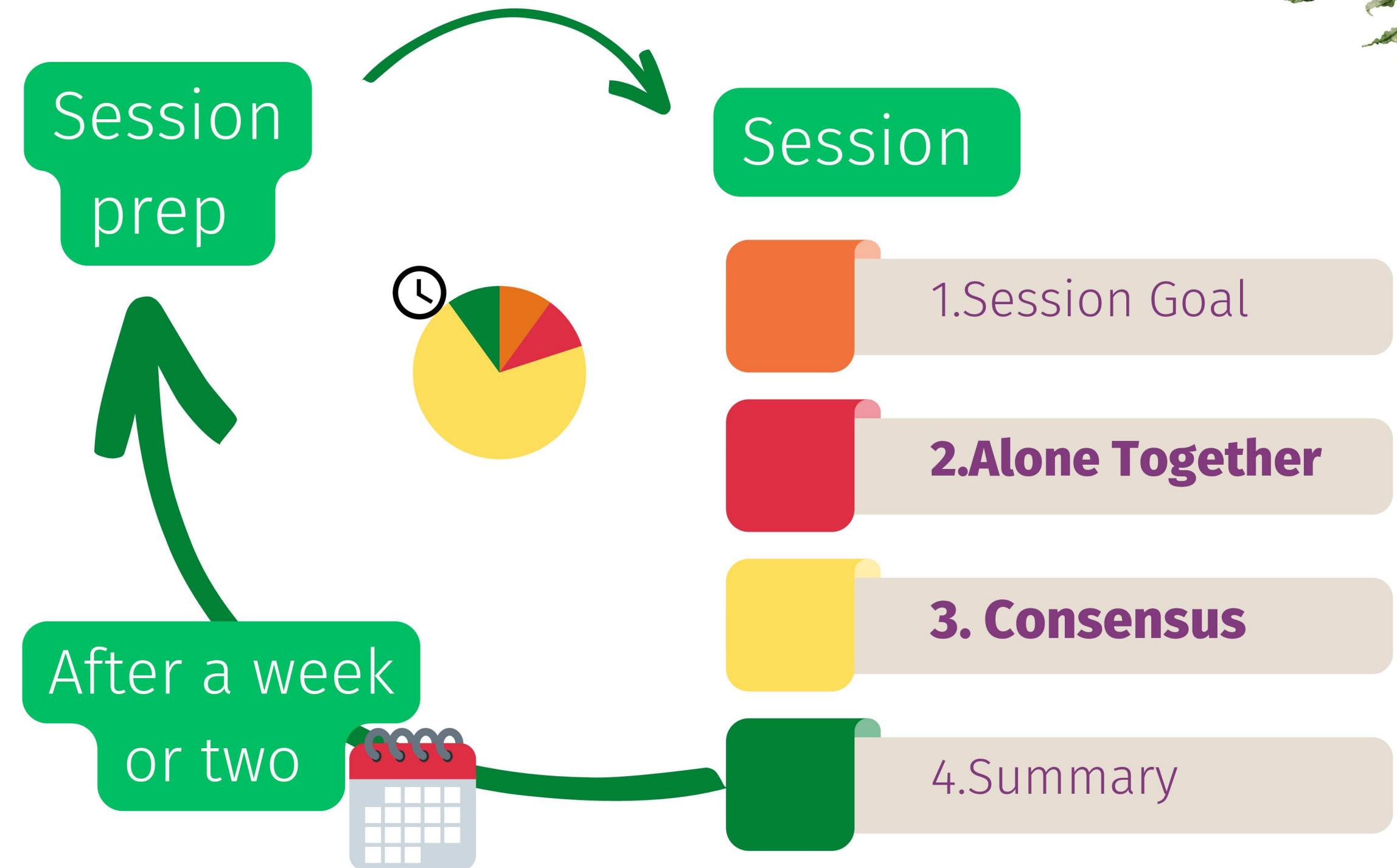
“Words and sentences must, by necessity, come only one at a time in linear, logical order. **Systems happen all at once.** They are connected not just in one direction, but in many directions simultaneously.”



Thinking in Systems: A Primer by Donella H. Meadows

Format

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In their words

.....

The main thing I took from today is
that everyone brought their own
perspective and that enabled us **all**
to learn something



Jim Taylor
Senior Product Manager
ITV



Why run Bytesize Sessions?

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1

**Towards congruent
understanding of
your System**

2

Enabling format

3

**Creates design
tools**



**Build an architecture
practice in a safe way**

.....



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18



When to use Bytesize Architecture Sessions?

Tech debt

Acknowledge problems and plan for the future

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Evolving Team

Acknowledge gaps and learn together

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Big Changes

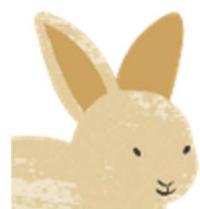
Map current and ideal. Iterate towards optimal solution



Industry example: the first Bytesize Architecture Session

Before the Session

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- Invited the team.
**Active participants
of the stand up**
- Taught the team
about C4 Model



Session starts

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Session

1.Session Goal

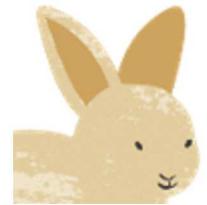
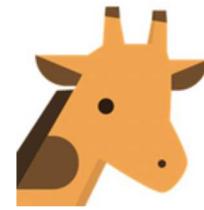
2.Alone Together

3. Consensus

4.Summary

1. Goal

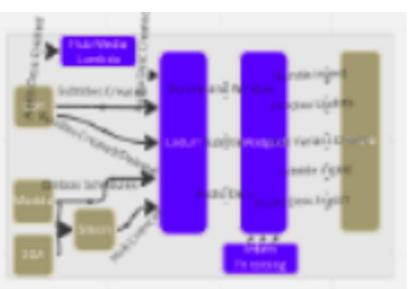
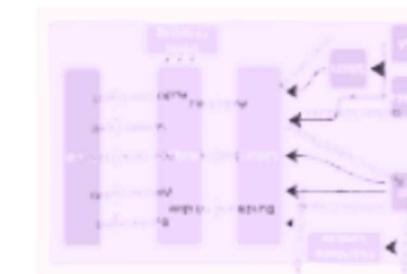
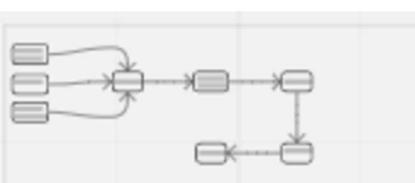
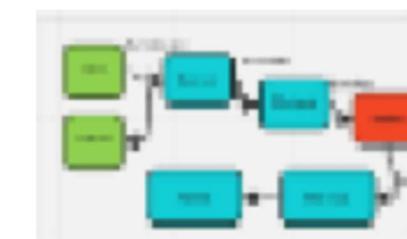
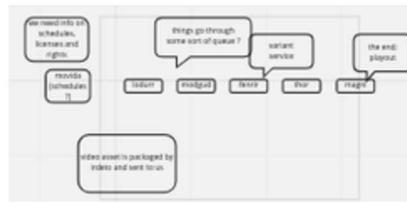
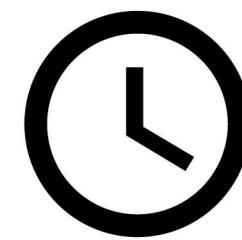
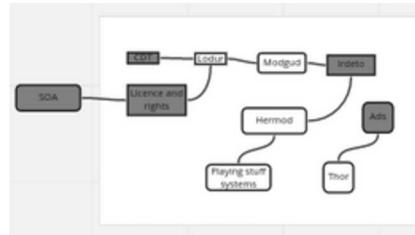
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**Set the goal:
Create a context
diagram of the
system as it is.**

2. Alone Together

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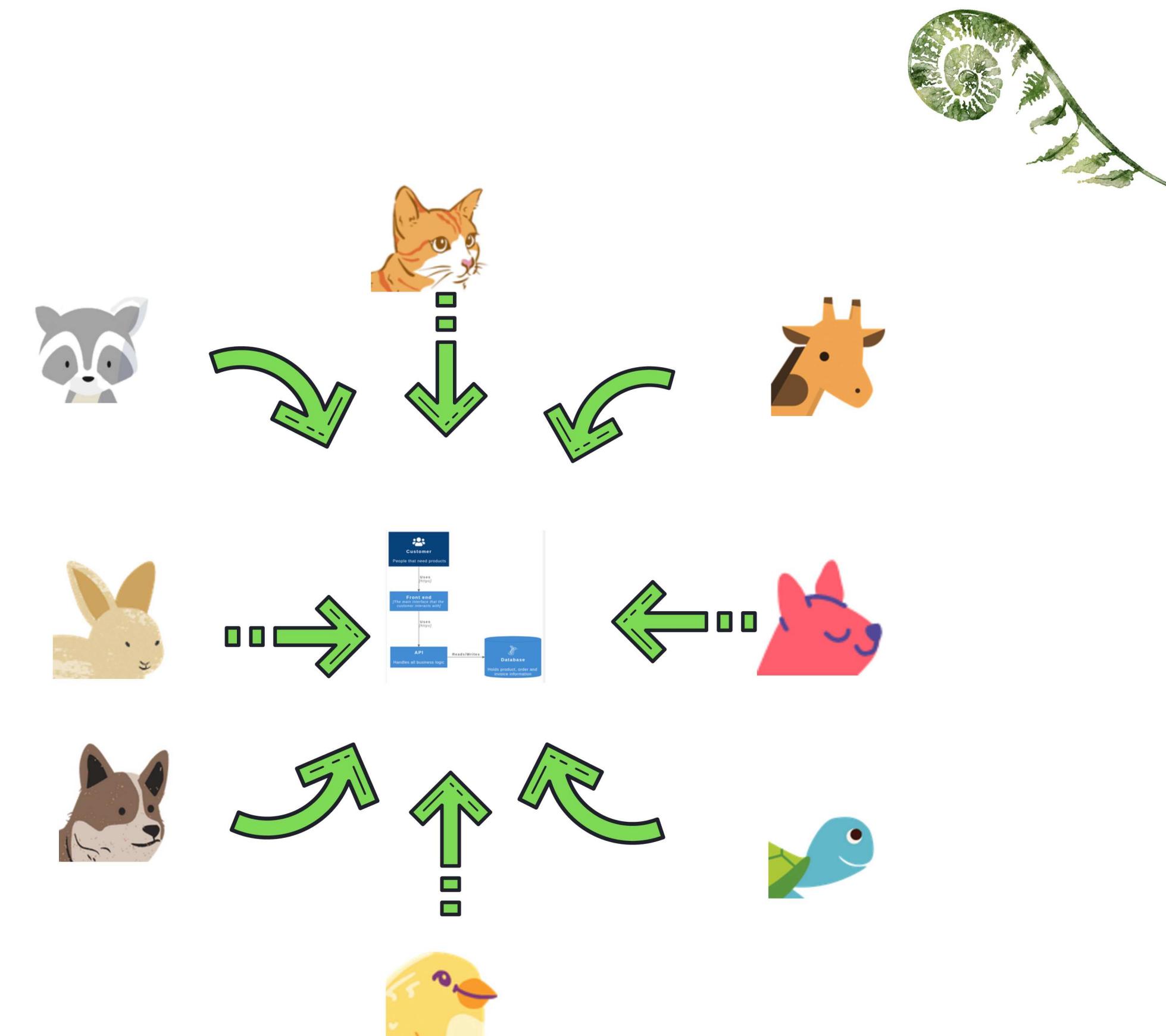


When the 3min timer elapsed each attendee explained their model.

3. Consensus

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The team drew part
of the system.
End session before
they were done.



4. Summary

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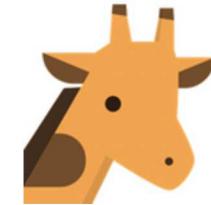
The team summarised that they:

- Learned more than expected
- Format helped them focus
- Wanted to finish the diagram soon.
- What should they model next



Iтерате!

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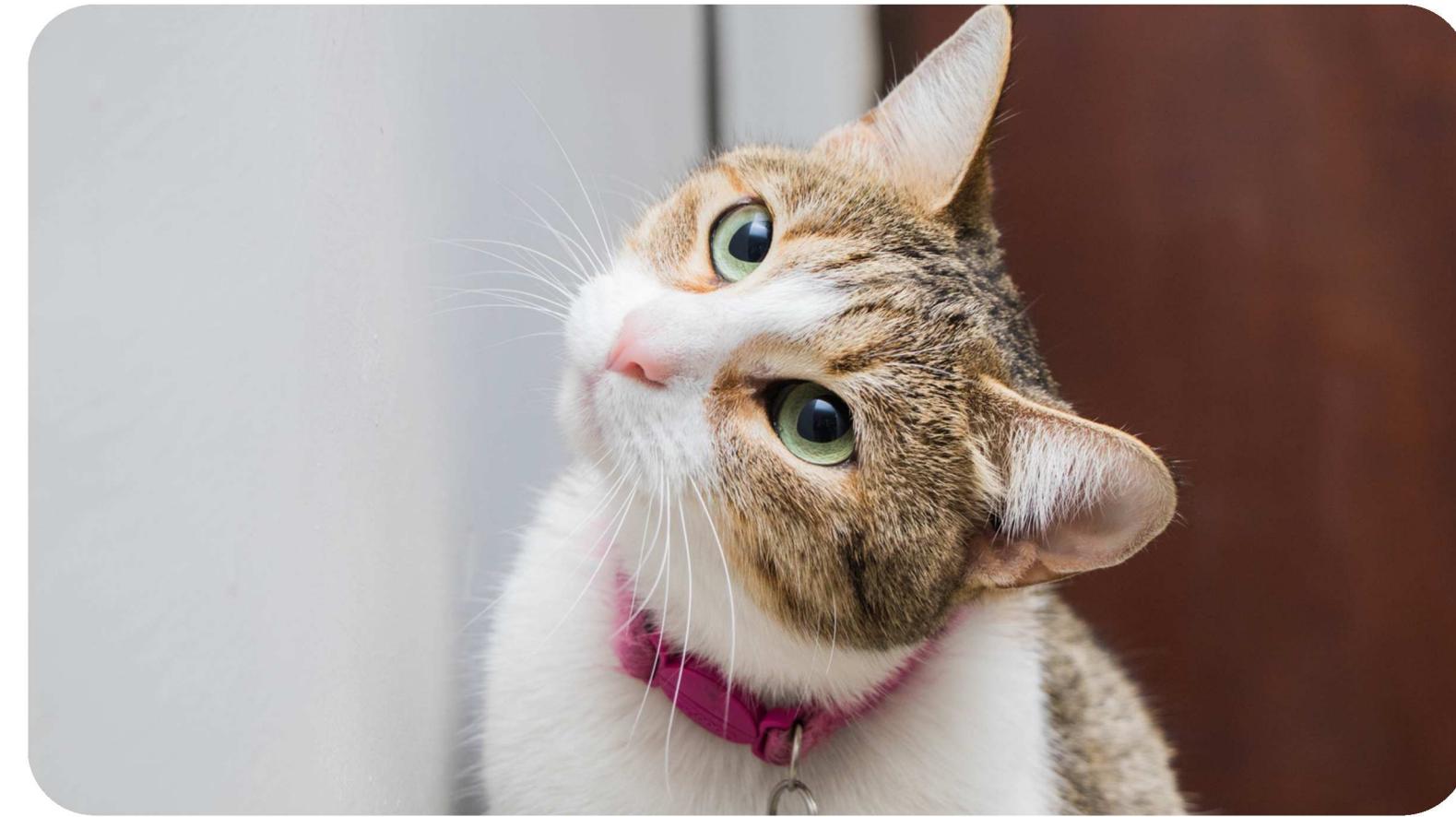
- Reviewed guests
- Discuss possible goals: Finish System Context



More info

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www.BytesizeArchitectureSessions.com



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Kea

Bytesize Architecture Sessions in books

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**Extended case study:
Inter-team collaboration**

- More in Chapter 17 ...

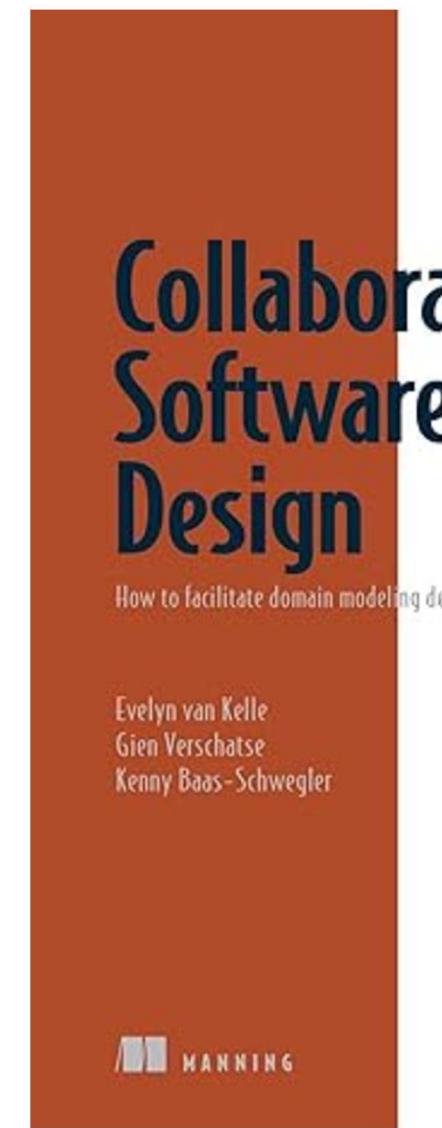


Architecture Modernization
Nick Tune

Collaborative Software Design

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A great book that helps you find what, why and how to design software together.



Collaborative Software Design
Evelyn van Kelle, Gien Verschatse,
and Kenny Baas-Schwegler

Learning Systems Thinking

.....

“Deeply insightful, reassuringly practical, delightfully real, and staggeringly well written.”

Kevlin Henney

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Diana Montalion

Learning Systems Thinking
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Bytesize Sessions at the Open Practice Library



Bytesize Architecture Sessions

Iteratively collaborate to learn about your systems

▲FOUNDATION

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COLLECTION 2

WHAT WHY HOW LOOK LINKS DISCUSS

SHARE :

What Is Bytesize Architecture Sessions?

Bytesize Architecture Sessions are a workshop format that helps teams understand the systems they work on. Each session focuses on a small slice of a system. After some sessions your team will become more homogeneous in the understanding of their systems, grow a consistent vocabulary and ultimately build tools to design the future together.

A session lasts between 45 and 90 minutes, and has four well defined parts: Session Goal, Alone Together, Consensus and Summary. You can model your systems using different tools. I suggest starting with [C4 Diagrams](#).



<https://openpracticelibrary.com/practice/bytesize-architecture-sessions/>

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Foundational pieces



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Thinking in Systems

A Primer

Donella H. Meadows

*Edited by Diana Wright,
Sustainability Institute*

“A system is an interconnected set of elements that is coherently organized in a way that achieves something”

-- Donella Meadows





**“A system is not the sum of
its parts, it's their
interactions”**

Russ Ackoff

Source: youtube.com/watch?v=OqEeIG8aPPk

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Knowledge Sharing is Systems Building



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Thank You!

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