

Incremental and Iterative Software Architecture

PV260 Software Quality



Ondřej “Ondra” Krajíček
ondrej.krajicek@ysoft.com
@OndrejKrajicek



How to **make sure we don't screw up** in the long run?

PV260 Software Quality



Ondřej "Ondra" Krajíček
ondrej.krajicek@ysoft.com
@OndrejKrajicek



HOW WE BUILD BASIC BUILDING BLOCKS

HOW TO CONNECT COMPONENTS

HOW TO STRUCTURE

CHOOSING THE RIGHT TECH.

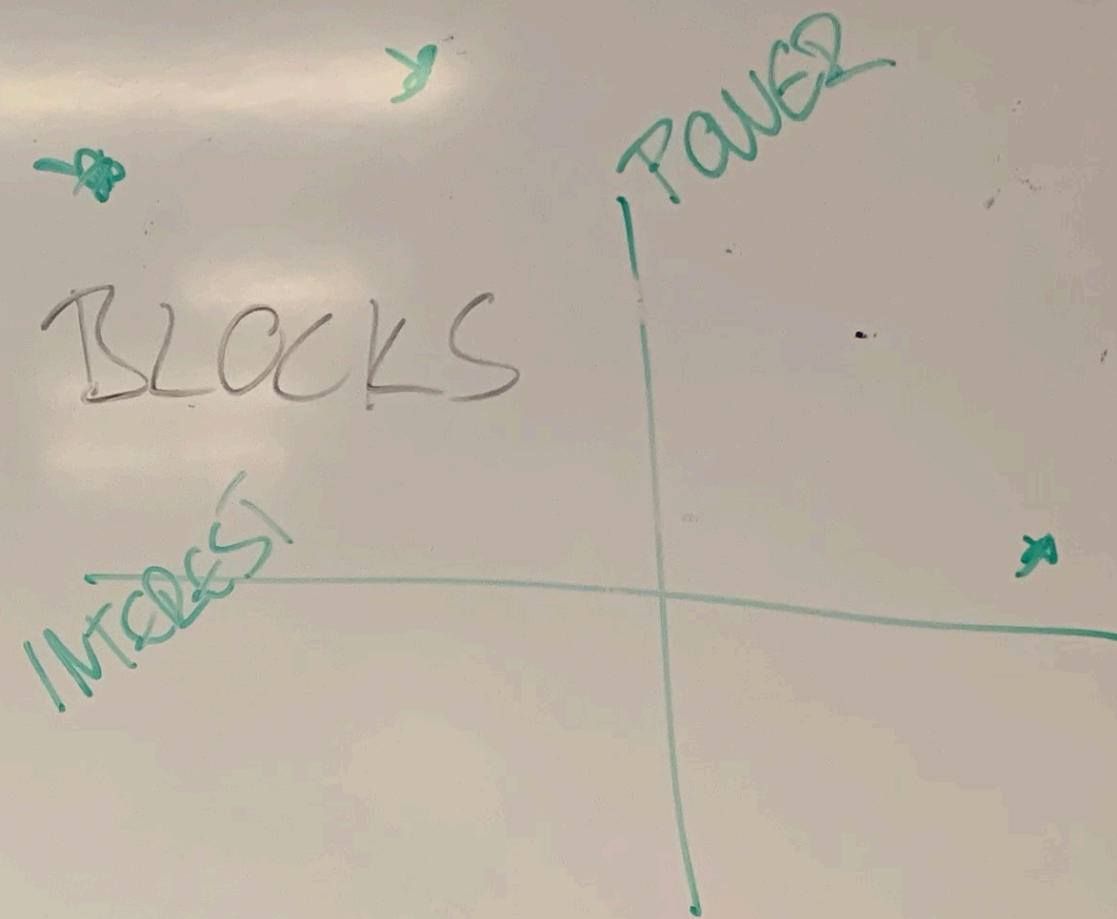
HOW TO MAKE SYSTEM EXTENSIBLE & SCALABLE

DOCUMENTATION

PROCESS "BEFORE" DEVELOPMENT

SA = DESIGN & ANALYSIS

ANTICIPATION



HOW TO PLAN?

SUSTAINABILITY
(COST)

• FUTURE EXTENSIBILITY

Incremental, Iterative, Lean, PDCA

A slight but **incredibly important** detour

Architecture is a servant of high priority stakeholder values.

Architecture is a servant of high priority stakeholder values.

Is as simple as possible, but not simpler.

Architecture is a servant of high priority stakeholder values.

Is as simple as possible, but not simpler.

Is designed to be replaceable.

Software Architecture is a Strategy.

Software Architecture is a Strategy.

Software Architecture is Communication.

Software Architecture is a Strategy.

Software Architecture is Communication.

Software Architect is a Teacher.

Who does architecture?

Who does architecture?

Everyone.

Incremental, Iterative or Both?

Why Incremental?

Why Iterative?

Lean explains why Agile techniques **sometimes** work.

Lean Principles applied to Software Architecture

- Eliminate Waste
- Build Quality In
- Create Knowledge
- Defer Commitment
- Deliver Fast
- Respect People
- Optimize the Whole

Lean Architecture?

How Iterative?

How Incremental?

Let the **KATA** begin!

<https://archkatas.herokuapp.com/rules.html>

