Architectural Simplicity through Events

Russ Miles

Simplicity *itself*

or

“Approaches to *Dieting* for *Elephants* in *Software*”

“Architectural?”

Decisions

Scope

Awareness

Build the Right Thing, Right

A Story...

“The Elephant in the Standup”

Axioms

Your software's first role is to be useful

The best software is that which is not needed at all

Human comprehension is King

Mechanical Sympathy is Queen

Software is a process of

R & D

Software Development
is an extremely
challenging
Intellectual Pursuit

Simplicity?!

Building Adaptable Software

Why don't we build Simple Solutions?

Simplicity in Architecture?

"The Allegory of the Relationship-Shy Component"

A true story

Freedom to express myself

To not be
too tied down

Freedom to Move

Commitment

moveable,
removable,
substitutable,
combinable,
extendable”....

...clear,
comprehensible,
understandable.

Principles

O.R.E.

Organise =>

Reduce =>

Encapsulate

Step 1: Organise

Where should I be?

Hexagonal Architecture?

Back to
2005...

MILD SEVEN
elf
MAGNETI MARELLI
MILD SEVEN

The Problems of ‘Layering’

The Problems of ‘Coupling’

Entanglement

Your Application is an Island

Ports

Adapters

Evolution

2012...

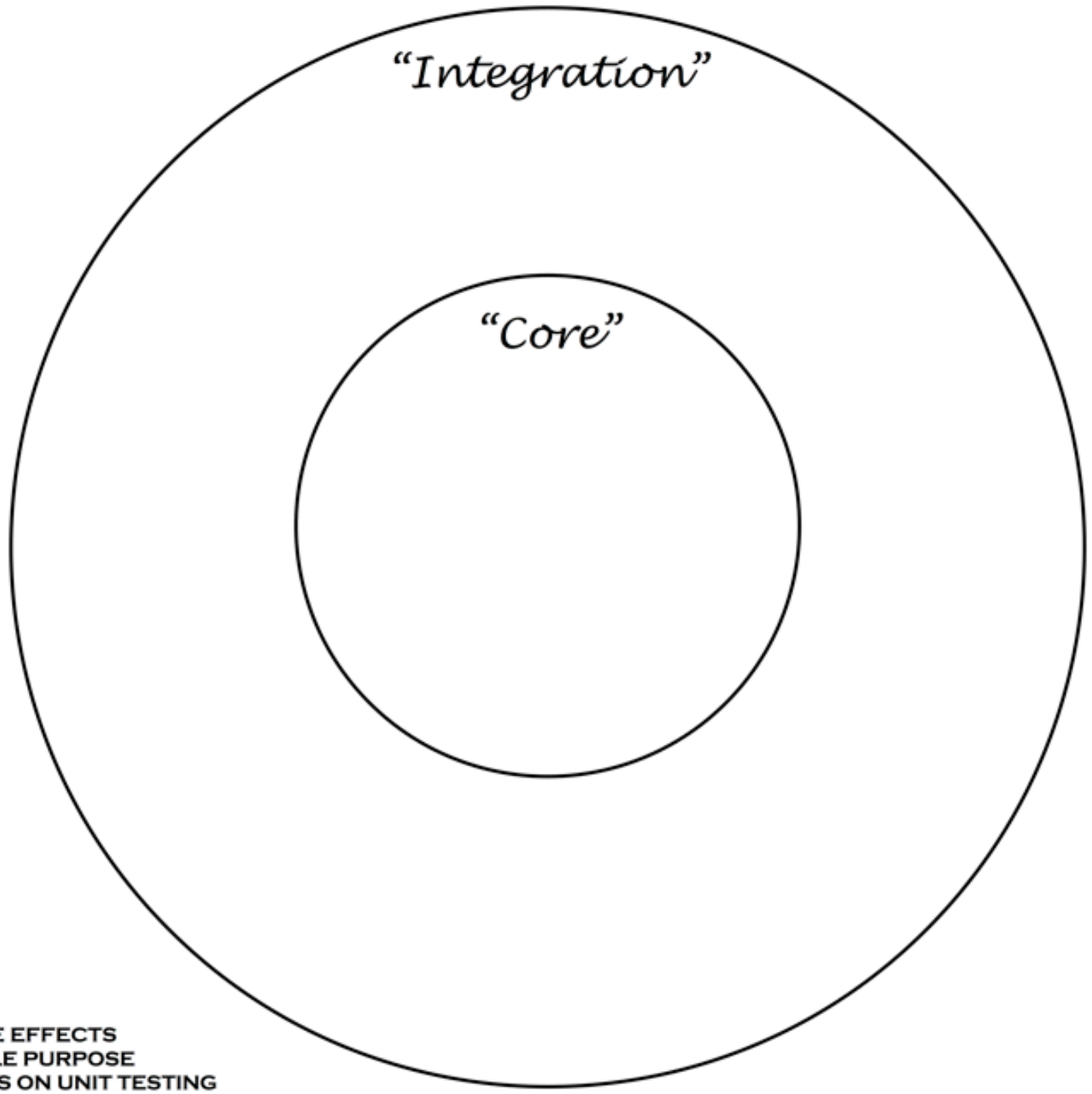
Life Preserver

Perspective?

Tool?

Approach?

YES



CORE = 0 SIDE EFFECTS
SINGLE PURPOSE
FOCUS ON UNIT TESTING

INTEGRATION = SIDE EFFECTS WELCOME

Simplicity *Itself*

Organise and Visualise

Implementation of Hexagonal

Am I ‘Core’?

Am I ‘Integration’?
and if so, which one?

Who are my peer group?

Step 1: Organise ☑

Step 2: Reduce

Reduce Entanglement

Reduce Concerns

(Almost) Be a Function

Extract Side-Effects

Reduce Coupling

Language?

Method Name?

Parameters?

Events

Immutable Events

Temporal?

Type?

Immutable Events

Immutable Data

"Be liberal in what you accept, and conservative in what you send."

Intra-Domain Duplication

Inter-Domain Duplication

moveable,
removable,
substitutable,
combinable,
extendable”....

...clear,
comprehensible,
understandable.

Easier to ‘strangle’?

moveable,

removable,

substitutable,

combinable,

extendable”....

Summary

Simplicity helps us beat the Elephant(s) in the Standup

O.R.E.

Organise =>

Reduce =>

Encapsulate

Life Preserver to Organise

moveable,
removable,
substitutable,
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...clear,
comprehensible,
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Events De-Couple

Adaptable Software Wins

Thank-you

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Simplicity *itself*