Knowledge21
The Agile Transformation Company

Lean Products

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Lean Product

- What is it?
- Principles
- Useful Patterns

What is a Lean Product?

Lean Product

*"A product with **no more and no less features** than the necessary to achieve **customer and user satisfaction** through **solving a problem or need**."*

Lean Product

“Its process of production and delivery is such to avoid waste and ***maximize the return on the investments****.”*

Lean Product

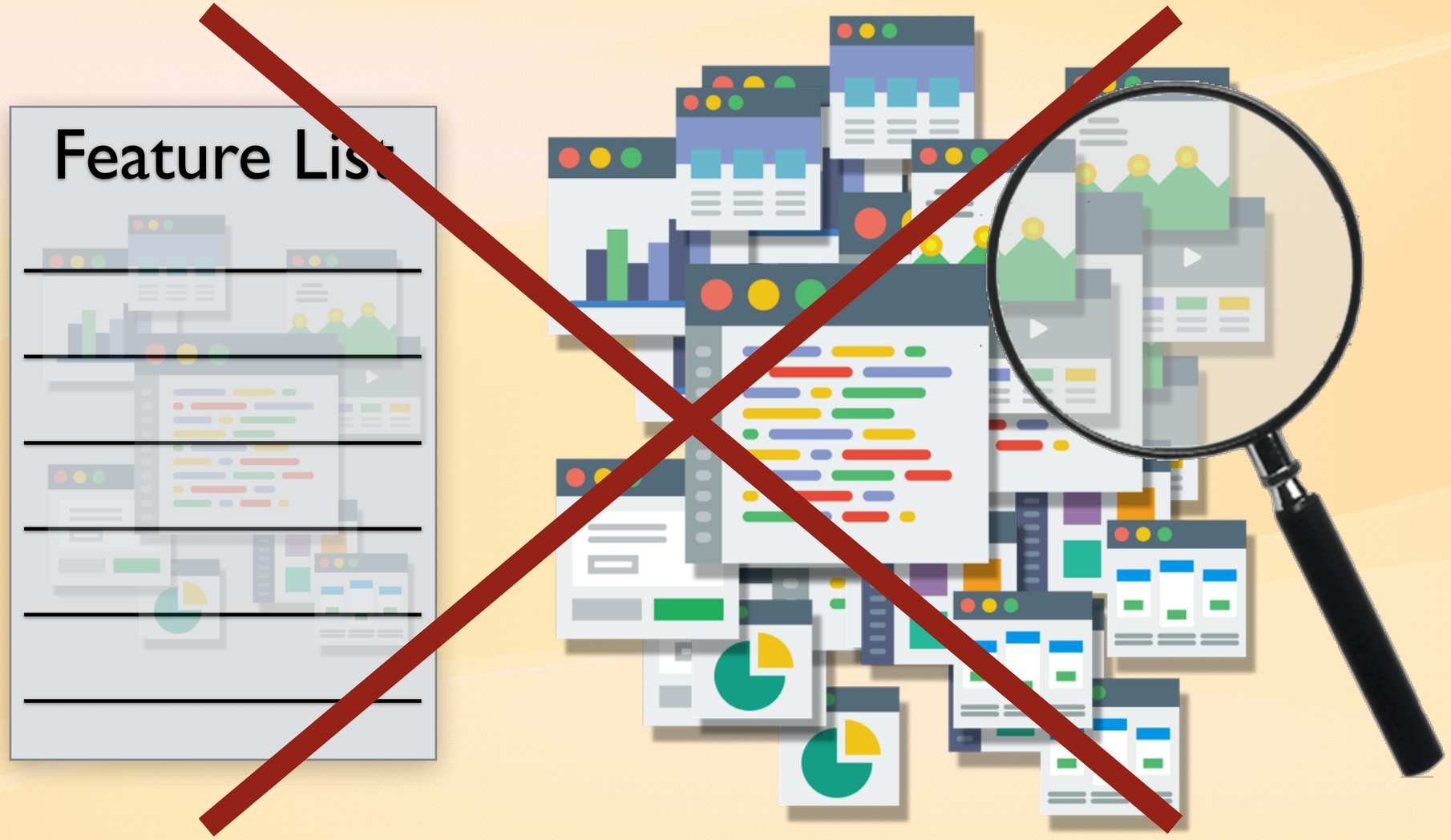
Concepts built over **Agile** and
Lean Startup principles and practices.

But taken to the **extreme**.

Focus on problems

*“A product with **no more and no less features** than the necessary to achieve **customer and user satisfaction** through **solving a problem or need**.”*

Features are not problems!



Features are solutions!

Focus on features generates waste!

=

Focus on problems!

Working Incremental Value

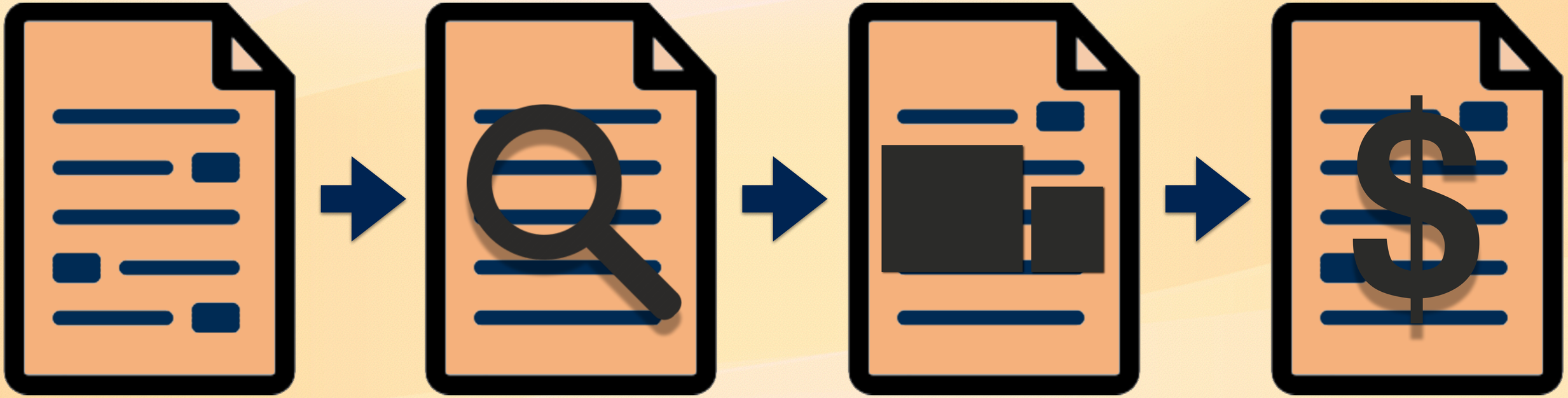
“Its process of production and delivery is such to avoid waste and ***maximize the return on the investments****.”*

Baby steps of value

“Simplest possible feature that solves the problem”

Aim for the core of the core of the core…

Developing in Large Steps



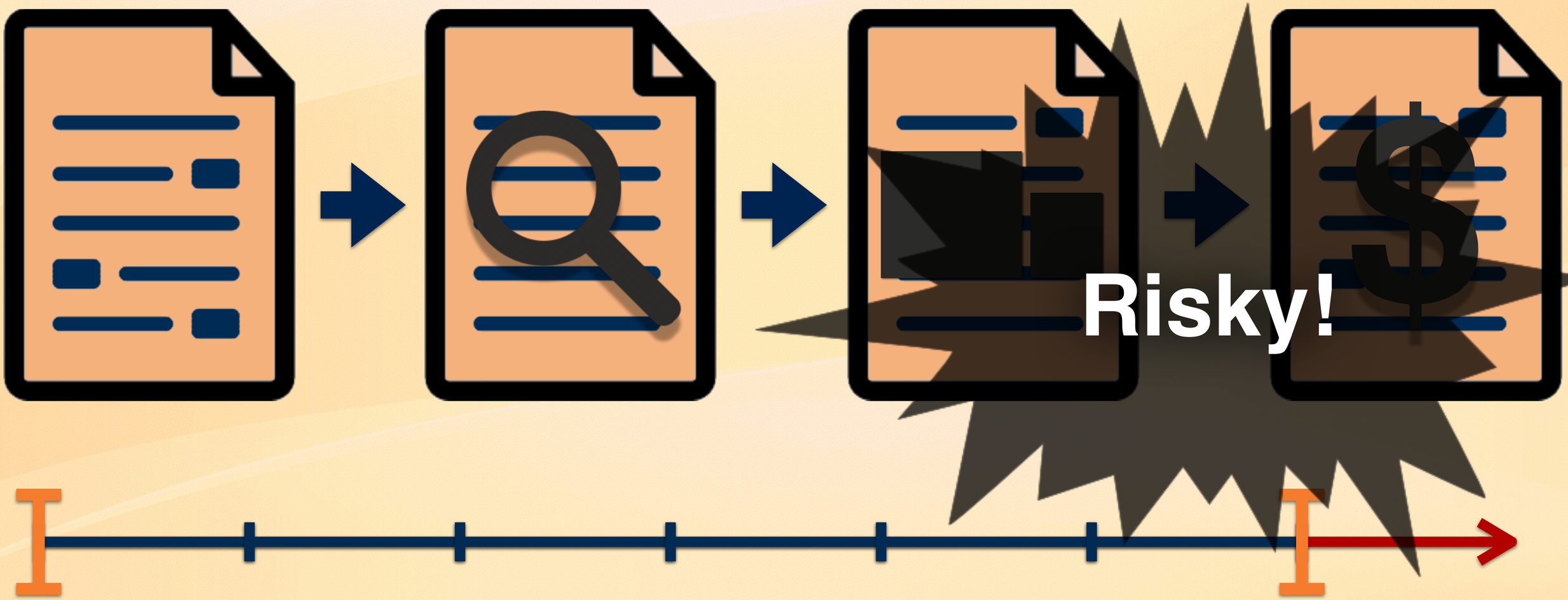
Register

Search for Product

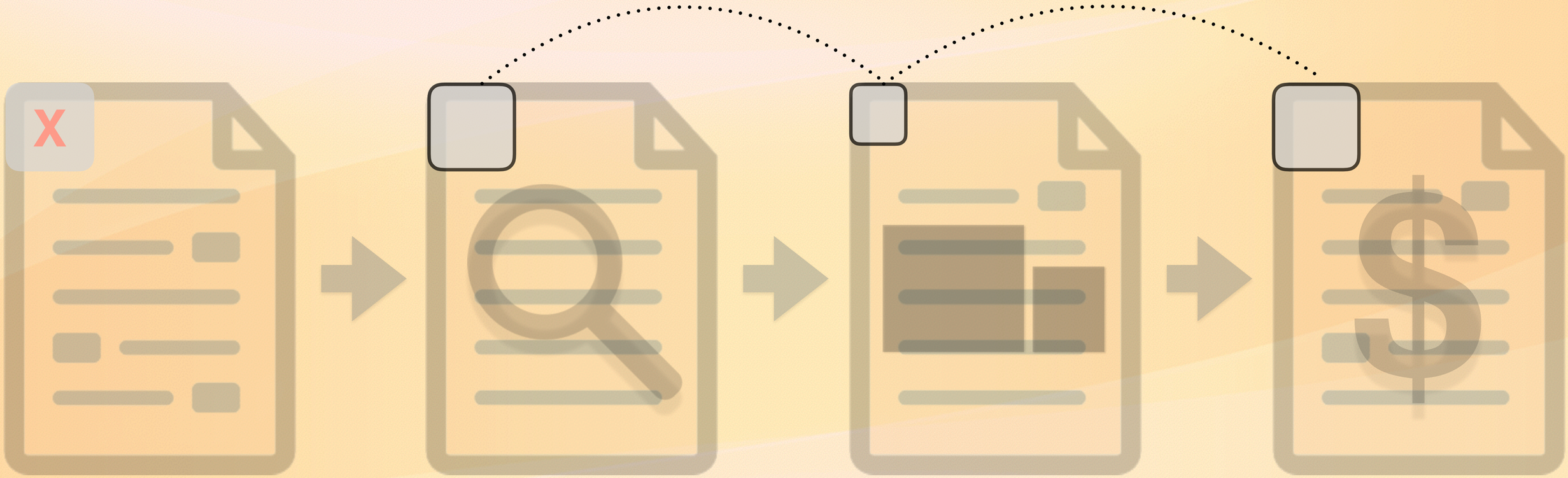
Choose Delivery

Pay

Developing in Large Steps

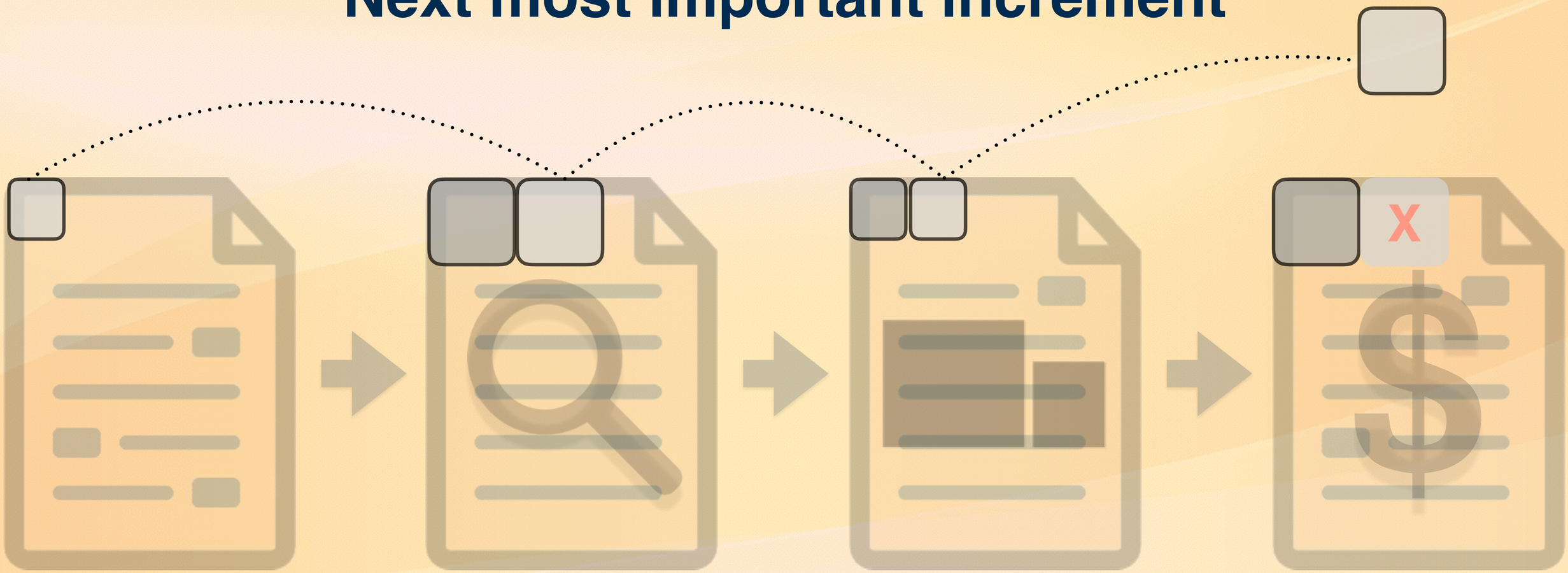


Always develop top priority working value

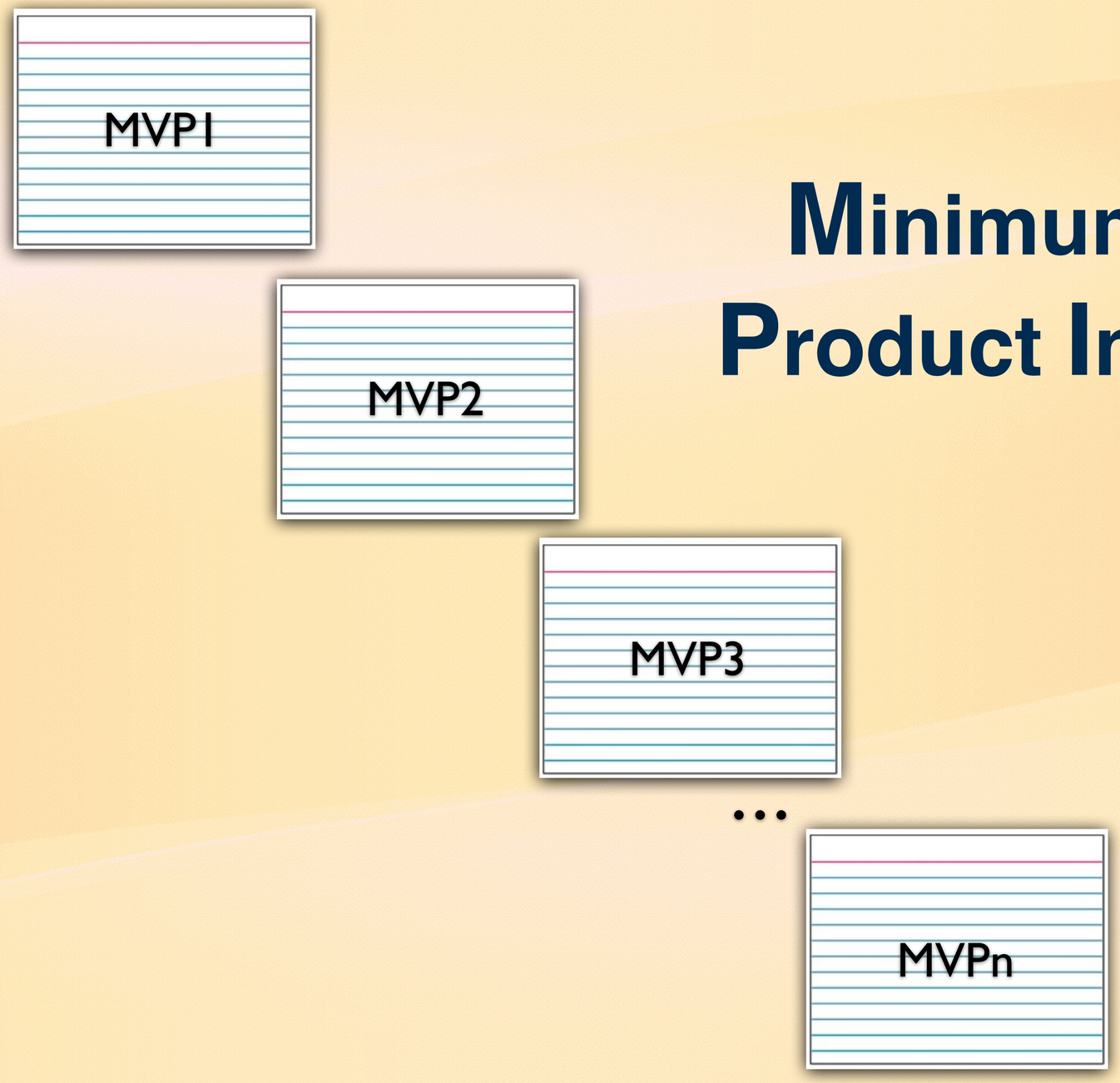


Releasable - MVP1

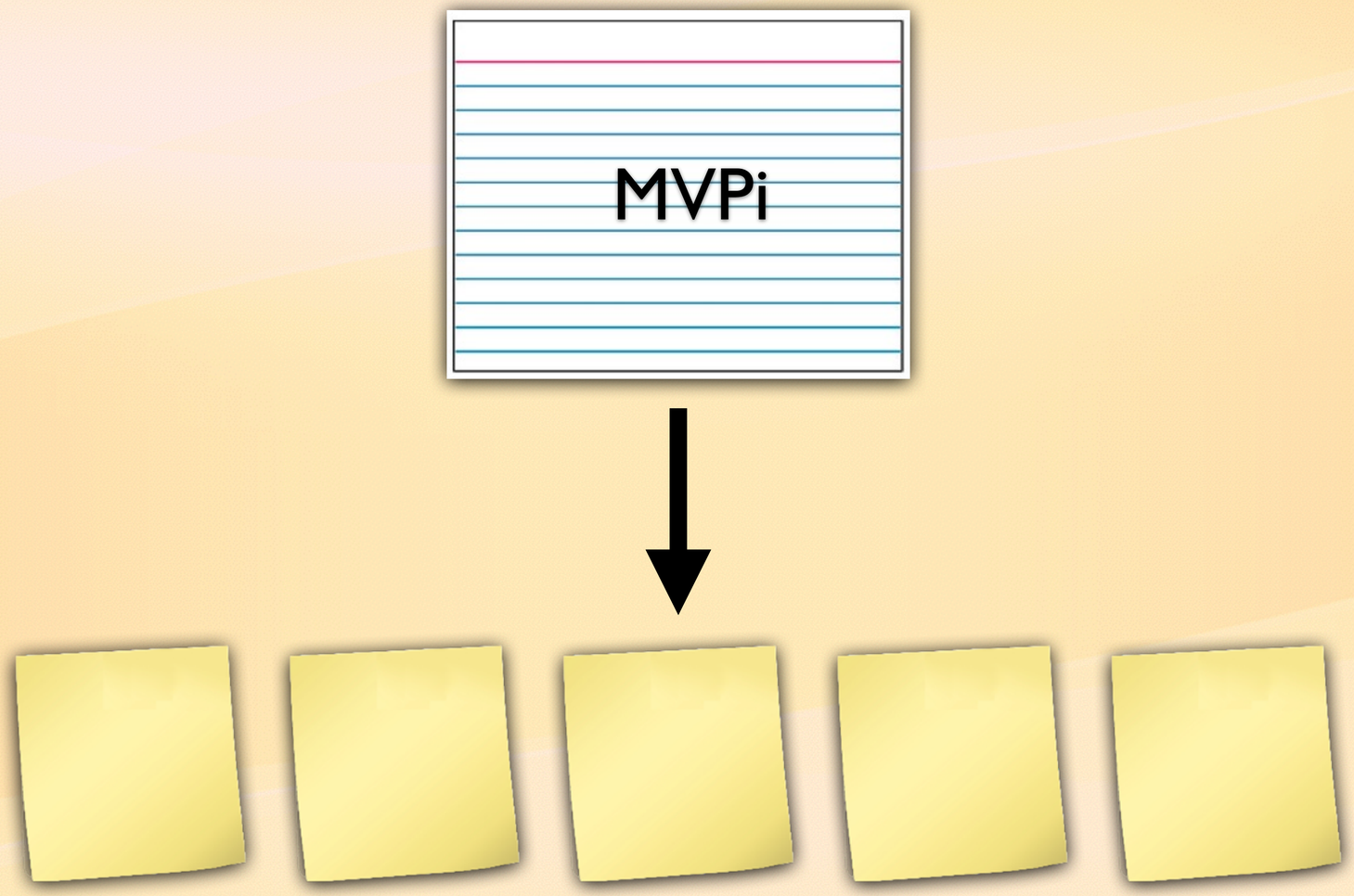
Next most important increment



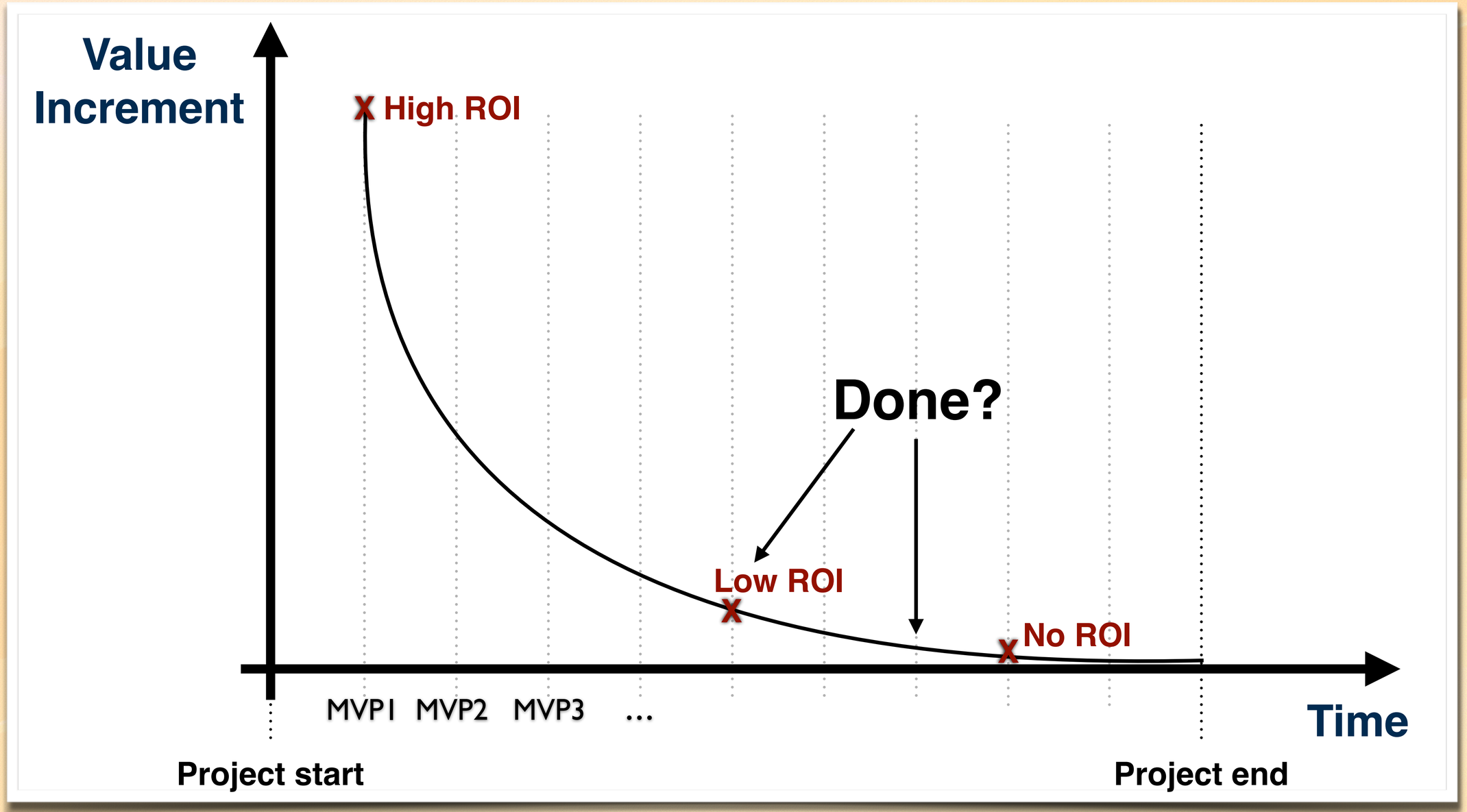
Releasable - MVP2



Minimum Viable Product Increments


MVPi

Return on the Investment



The Customer's Role

*"A product with **no more and no less features** than the necessary to achieve **customer and user satisfaction** through **solving a problem or need**."*

The customer doesn't know what he wants!

What we say about them…

“The customer doesn't know what he wants!”

“The customer is never pleased!”

“The customer keeps requesting changes!”

“We did what he asked, but it didn't work out!”

“The customer requested it, but he'll never use it!”

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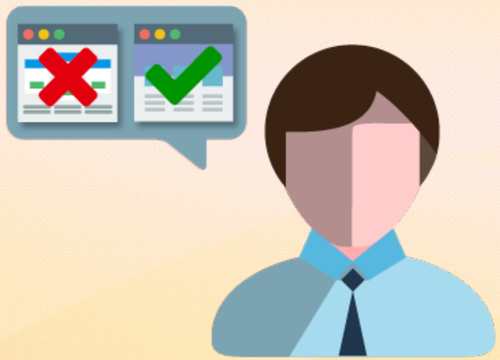

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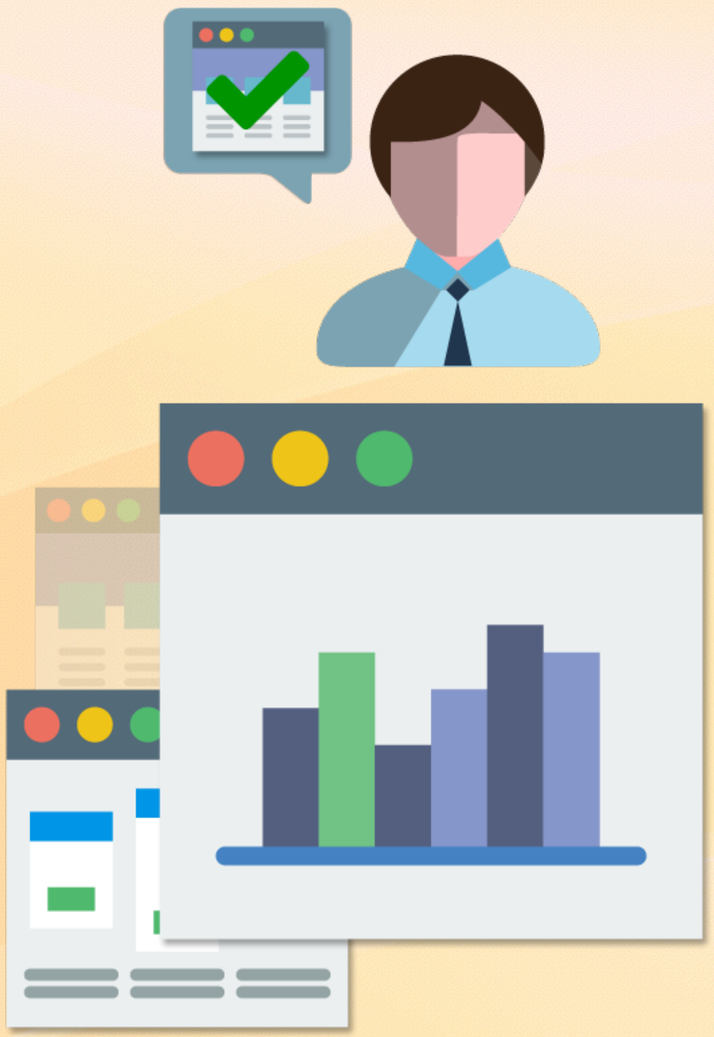

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If the customer doesn’t know what he needs…

The **customer**
is not the one to
define the product!

The Customer…

…cannot see clearly, is immersed in the problems.

…thinks about features/solutions, not problems.

…doesn’t know how to prioritize.

…can’t manage the product, has his time taken.

…doesn't know how to define the product iterative and incrementally.

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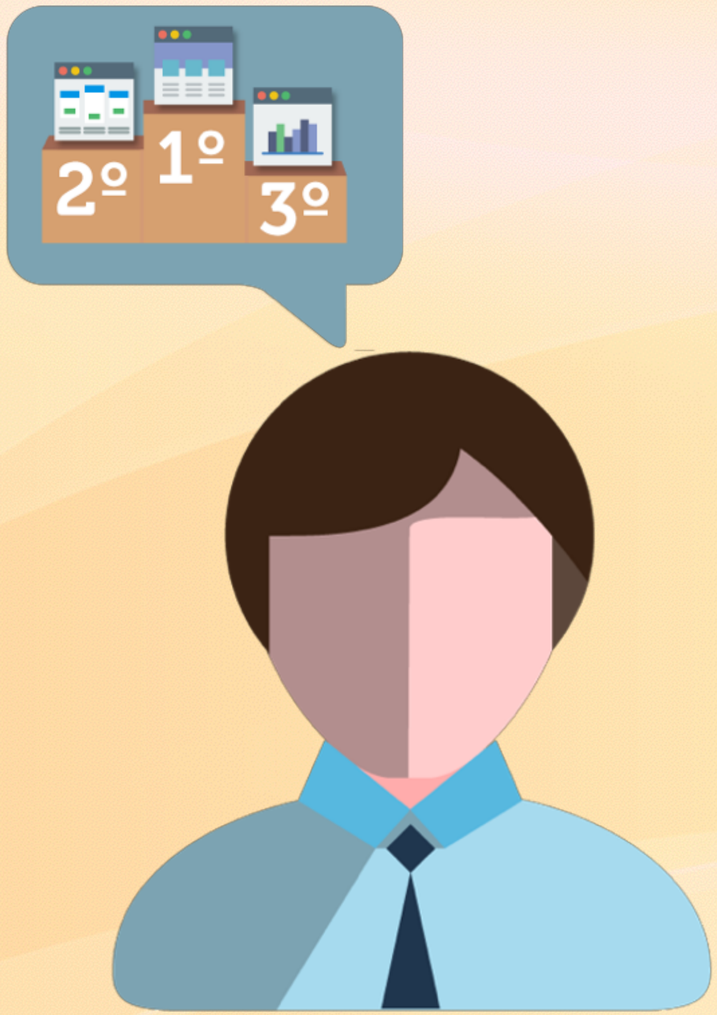

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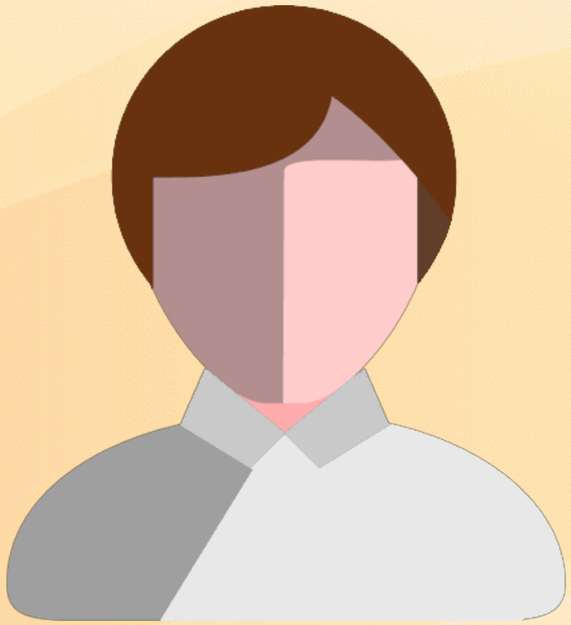
Defining the product: whose responsibility then?

Our Role on Software Development

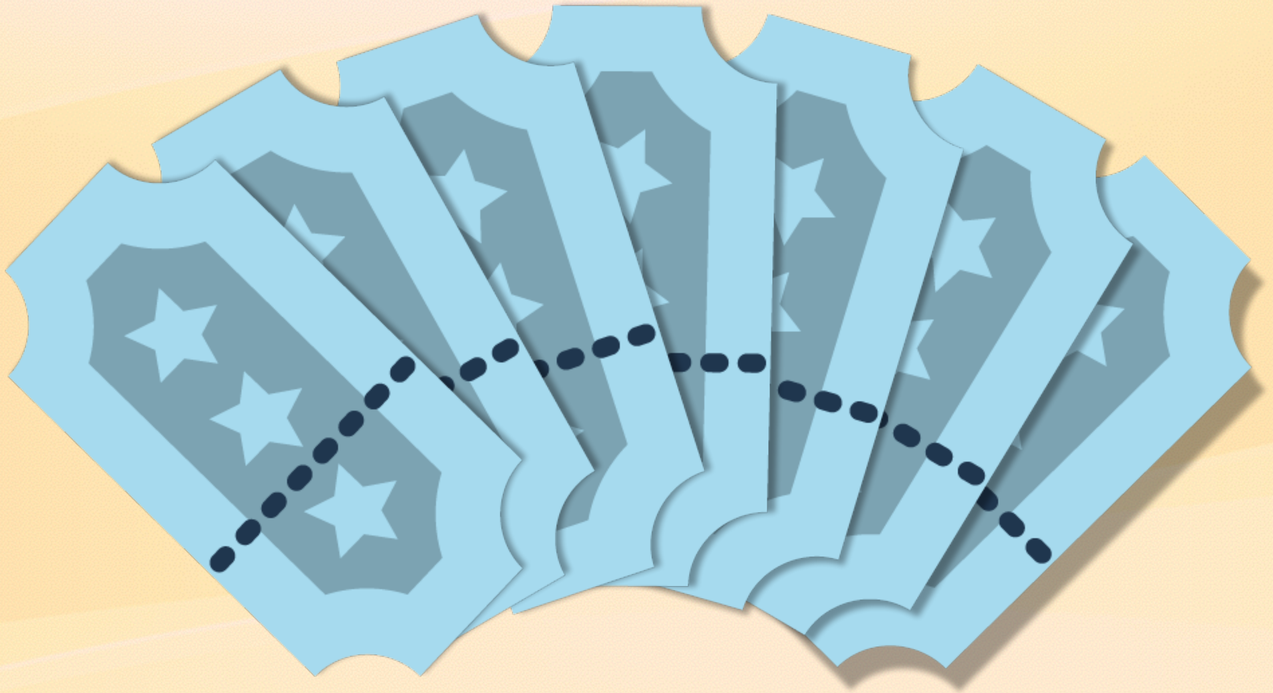
*"A product with **no more and no less features** than the necessary to achieve **customer and user satisfaction** through **solving a problem or need**."*

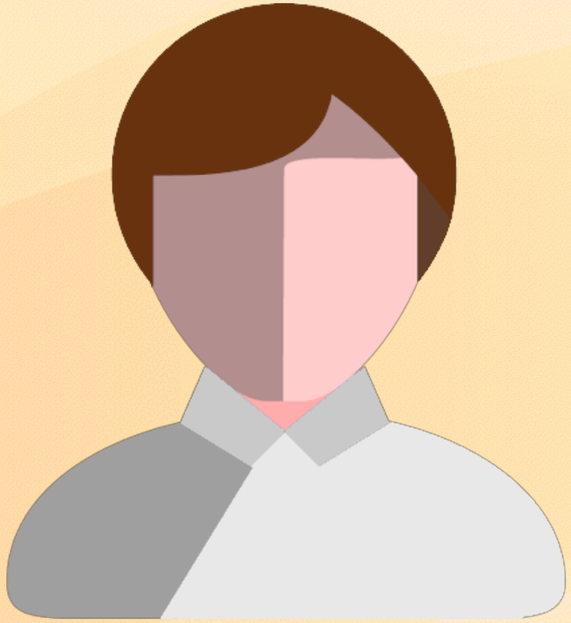
- What do you want?
- What do you need?



So, we <u>MUST NOT</u> just ask the customer what he wants or needs!

NOT TICKET TAKERS





It’s our
responsibility to
define a great product
for the customer

It’s an investigative work of hypothesis (in)validation

Lean Products:
Basic Principles

Lean Products Basic Principles

1. Start with what already works today, if anything.

2. Focus on problems to be solved, not on features to be developed.

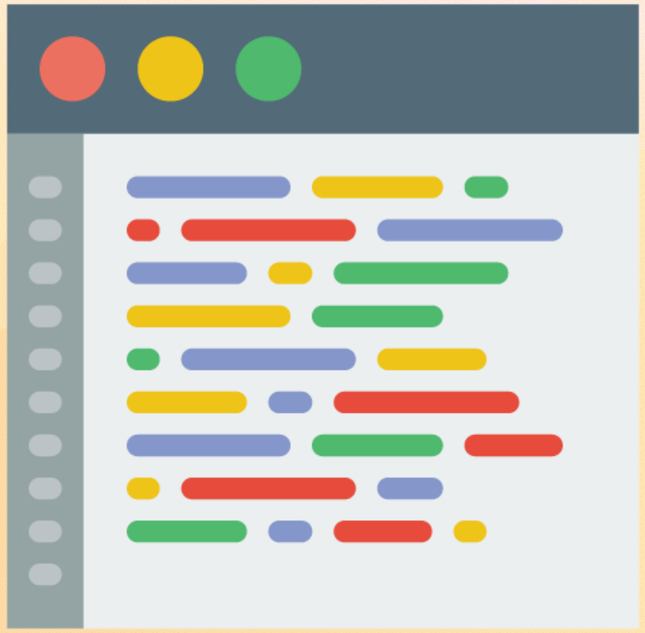
3. The customer doesn't know what she needs. Satisfy the customer by defining what will be developed next.

4. Create value in baby steps, using extreme simplicity in every increment of solution. Complexity comes incrementally, and only as needed.

5. Reduce risk by creating and taking every opportunity to deliver value. Develop each working solution in a very short time frame and put it to use.

6. Get as close as possible to the real use, measure it and understand it. The user can only provide true feedback after using it.

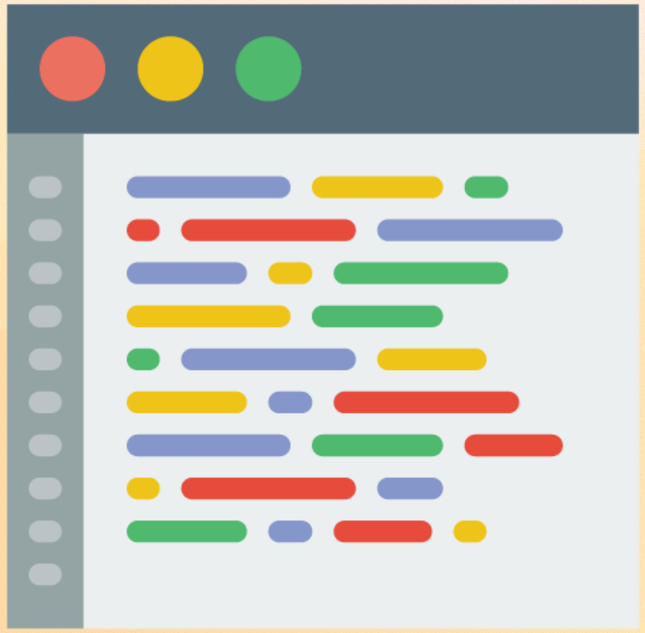
Lean Product:
Useful Patterns



Example: Driver's license exam

- Enable candidates to do theoretical exam online. Outsourced company gets bonus by # of exams applied

- **Value:** allow instant result for candidate
- **Actual project:** 6 months
- **Simulation:** static html exam for instant result. Inspector gathers scores manually
- **Initial Results:** 1/w to deliver 40% of BV
- **Later:** more static html exams, then rand. questions from DB, then reg. forms



Example: Access to processual data for lawyers

- Enable law firms to integrate their systems to get judicial process data

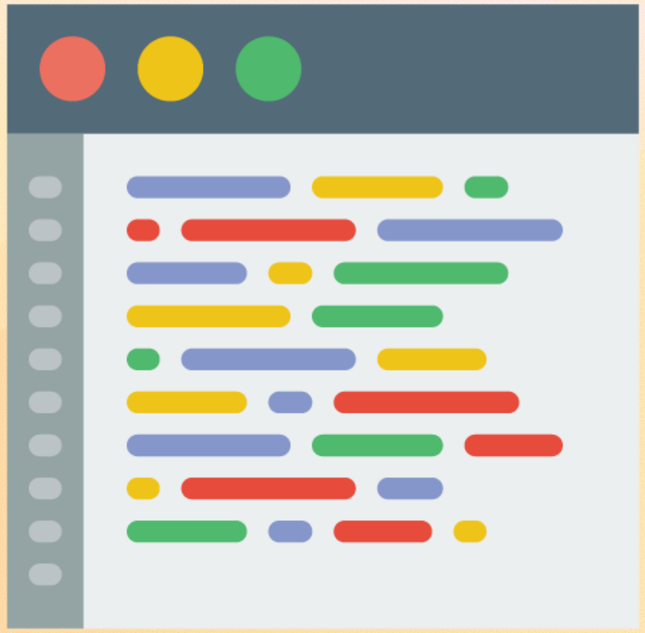
- **Value:** reduce time to access data
- **Actual project:** 5 years, huge system
- **Simulation:** scan, OCR and index all files, available as webservice for search
- **Initial Results:** 4/w to deliver 80% of BV
- **Later:** alerts on changes, history, document upload

Pattern: End to End Dimmer

- **Description:** flow with multiple steps or actions, currently either software, manual or inexistent. Aims to solve an end to end problem. Most usual pattern

- **Proposed solution:** solve the end to end problem from the beginning with the minimum necessary and sufficient (critical steps). Improve problem resolution with dimmer

- **Example:** any online store



Example: Pension request approval

- Automate pension approval process, currently manual

- **Value:** reduce errors
- **Actual project:** 2 years
- **Simulation:** single calculation step responsible for about 50% of the errors
- **Initial results:** 2 weeks to deliver 50% of the business value
- **Later:** next step causing more errors

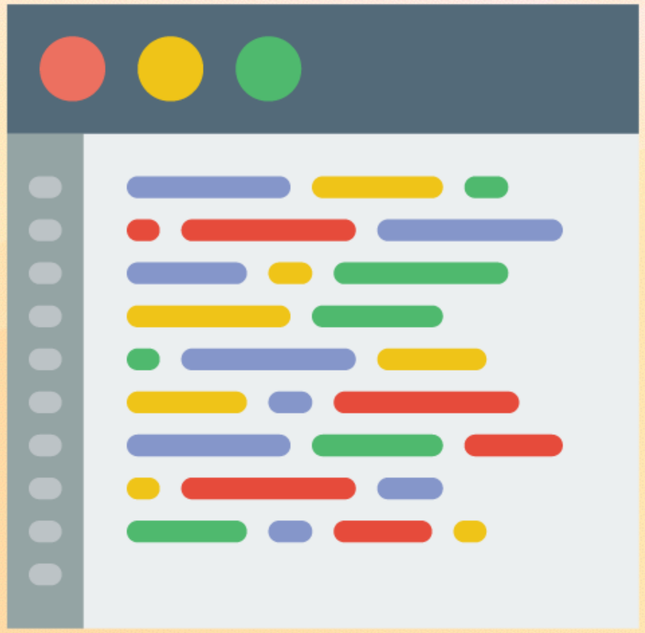
Pattern: Metric Improvement Dimmer

- **Description:** existing flow with multiple steps or actions, currently software or manual. Aims to improve a metric (e.g. errors, sells, risk on code maintainability)

- **Proposed solution:** dimmer; replace flow step/action by flow step/action with new software; prioritize from the step or action which better improves the metric

- **Example:** automate a manual process
- **Example:** reformulated version of a working software

Example: Amazon International



- Expand Amazon internationally, using local currency and tax system

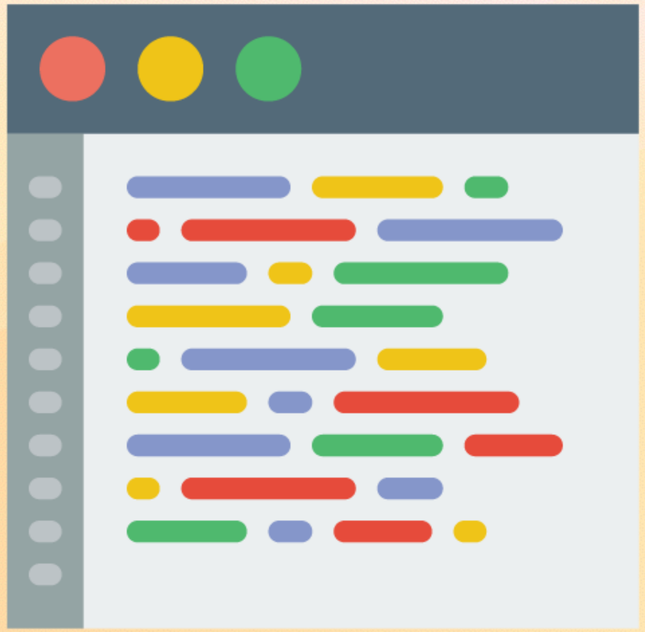
- **Value:** increase sells
- **Actual project:** 1 1/2 years
- **Simulation:** start with China, believed to increase sales in 30%
- **Initial results:** 1 1/2 month to deliver 30% of the business value
- **Later:** prioritize region by mkt size

Pattern: 1, 2, n

- **Description:** system to work on multiple areas with similar *modus operandi*, but different rules. Currently, software or inexistent. Aims to improve (expand) a metric

- **Proposed solution:** Prioritize based on improving the metric. Choose 1st area. Create specific solution. Choose 2nd. New specific solution. Choose next. Now, create generic solution, using learning from 1, 2 and 3 as guide

- **Example:** whole module used for a specific purpose, now to be used in different places



Example: Promotion for strategic position

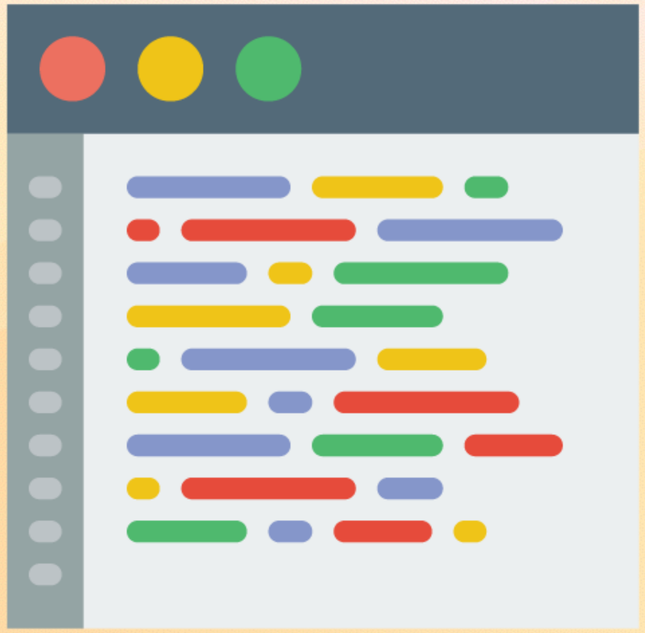
- Provide set of recommended people por open seat

- **Value:** ease and better target decision for open seats
- **Actual project:** 1 year
- **Simulation:** use existing curriculum system; add needed data; force update;
- **Initial Results:** 1\m for 100% of B.V.

Pattern: Process Extension

- **Description:** working process which needs to be extended, currently software or manual
- **Proposed solution:** append to what currently works just the sufficient to solve the problem (e.g. new database fields, filters, screens etc.)
- **Example:** old software, small changes will answer to broader needs

Example: Health plan provider acquisition



External Shell

- Integrate systems from five different acquired health providers

- **Value:** reduce response time to procedure request
- **Actual project:** 4 years
- **Simulation:** shell to connect to systems via Selenium
- **Initial Results:** 1 1/2/m for 70% of BV
- **Later:** transfer plans gradually to main

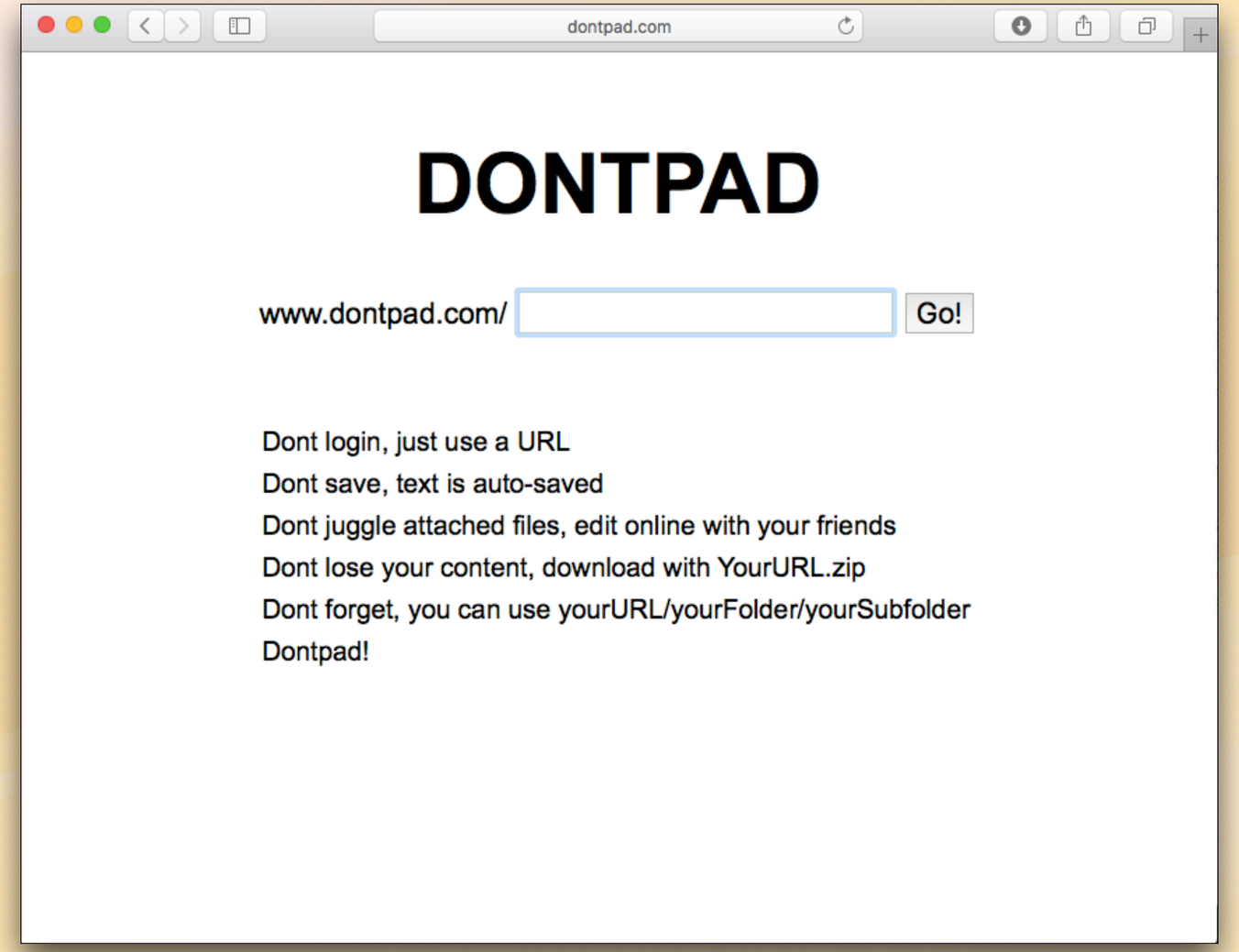
Pattern: External Shell

- **Description:** multiple data sources to be unified/integrated and accessed by a common interface

- **Proposed solution:** create a shell to access the multiple data sources from a single interface. If necessary, use a migration strategy for the data (e.g. little by little to one of the sources), gradually removing the other data sources

- **Example:** merger or acquisition with different running systems with data that needs to be integrated

One of our Lean Products



Thank you!

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