

**\* Agile Test Evolution:  
*Changing Test Strategy over time***

**DSM Agile, Sept 9, 2016**



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# Agile Software Development: A Manifesto

## We Follow These Principles

Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.

Welcome changing requirements, even late in development. Agile processes harness change for a customer's competitive advantage

Deliver working software frequently, from a couple of weeks to a few months, with a preference to the shorter timescale.

Business people and developers must work together daily through the project.

Build projects around motivated individuals. Give them an environment and support they need, and trust them to get the job done.

The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.



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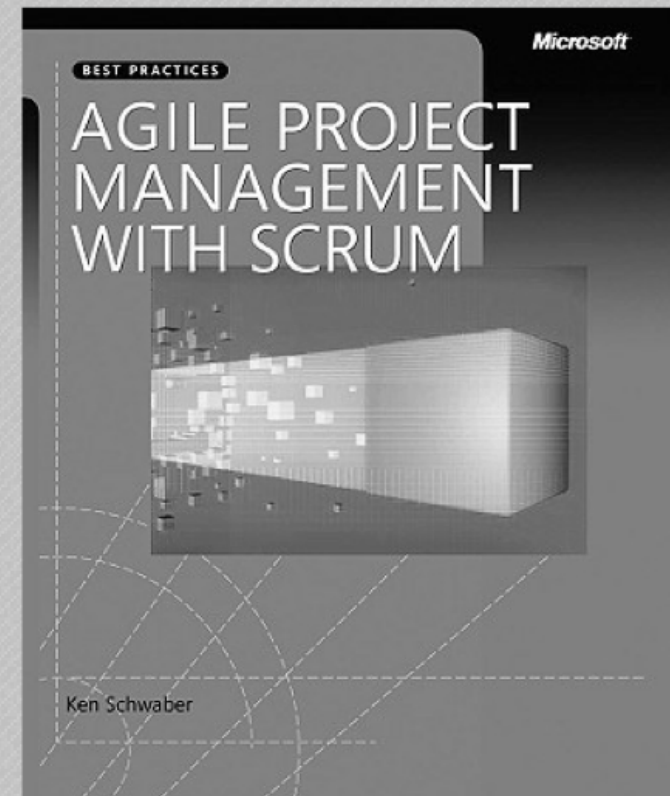
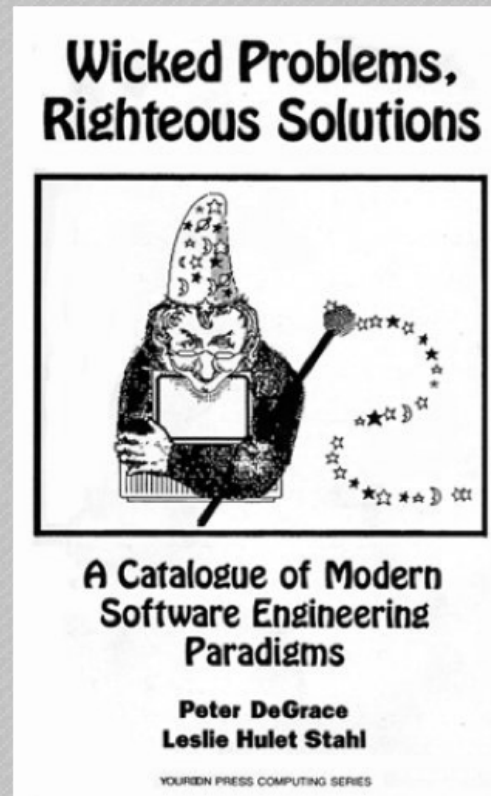
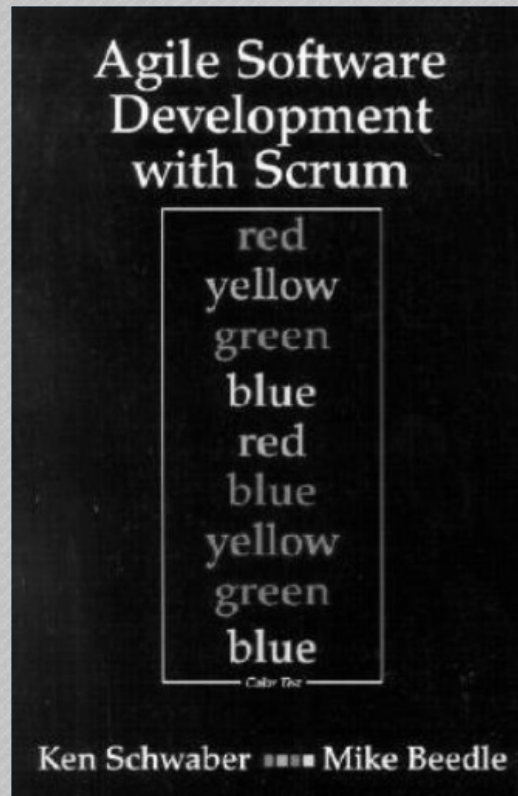
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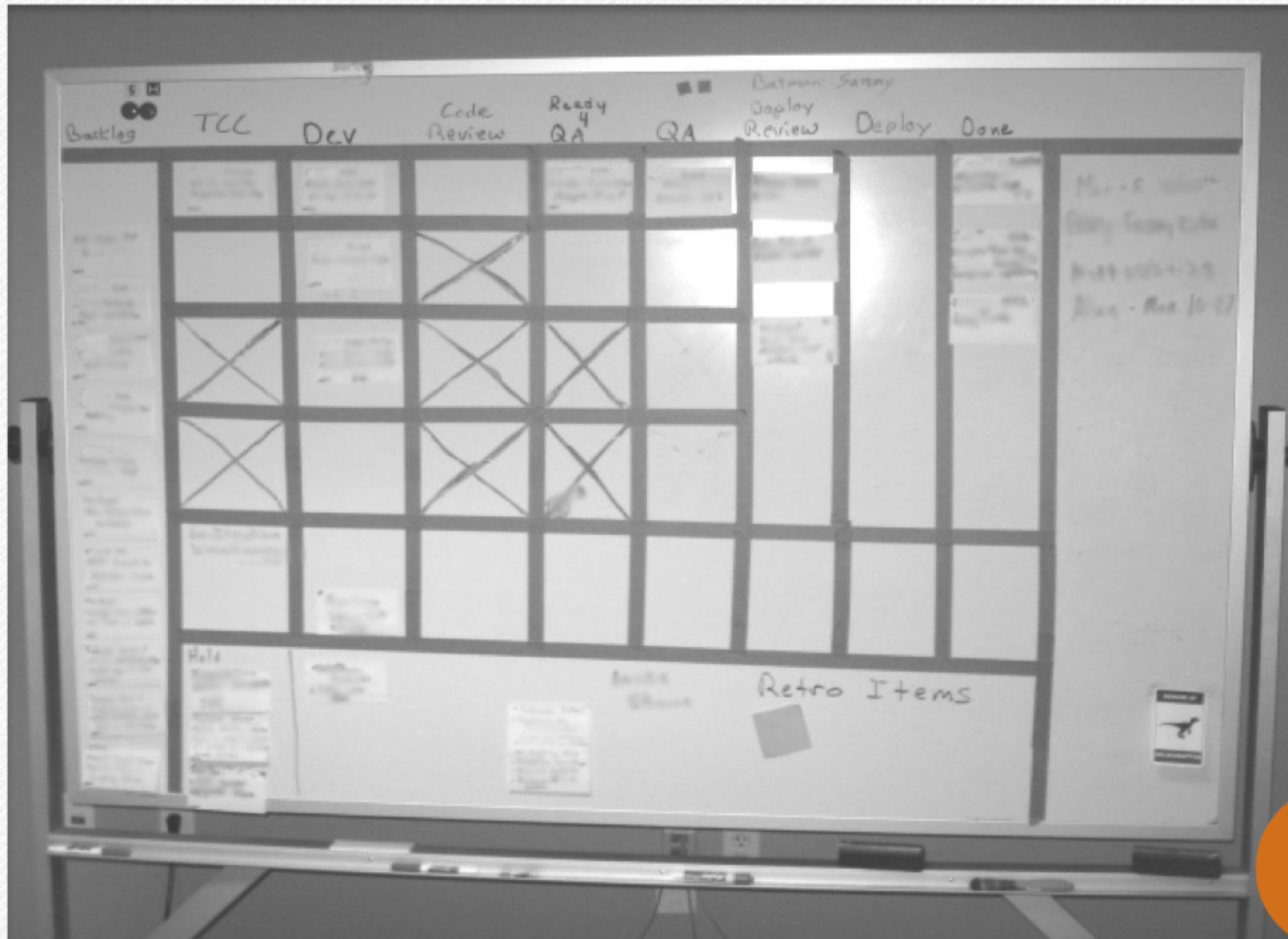
# Scrum



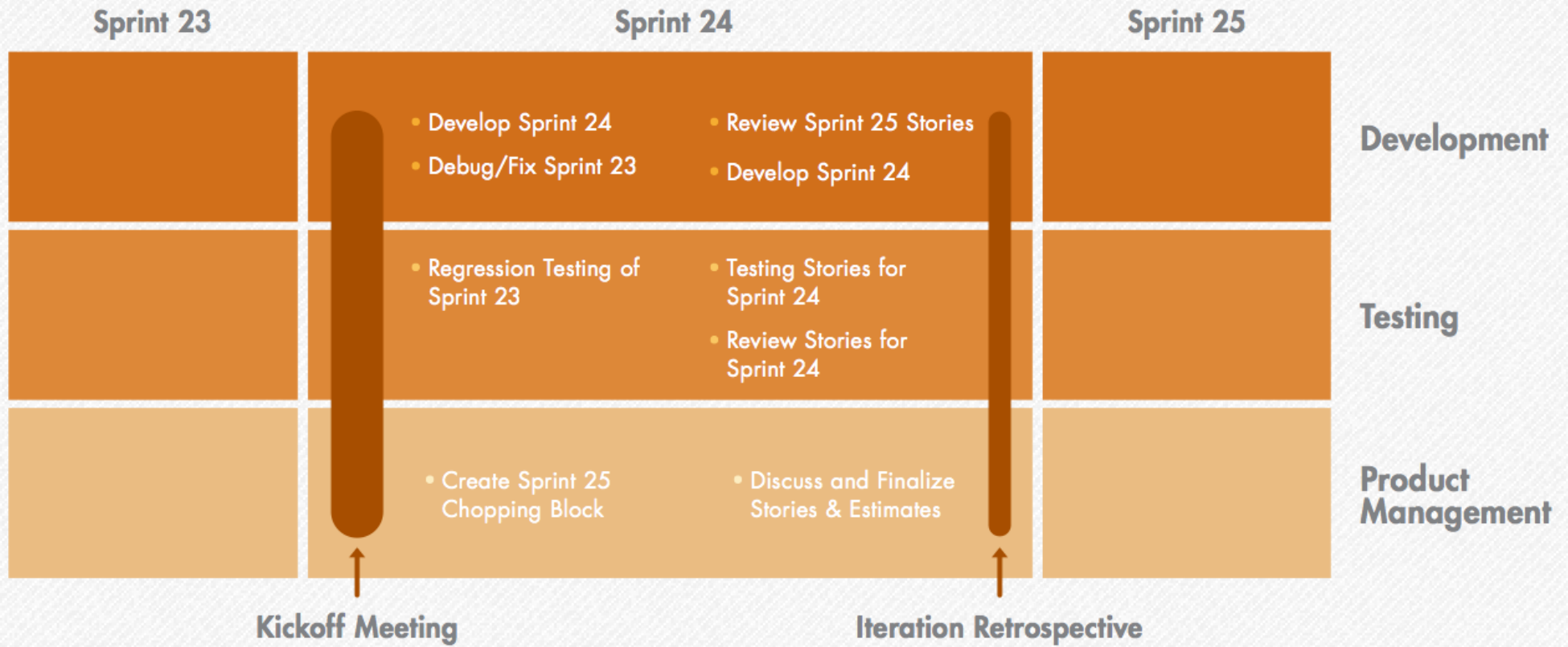
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# The Flow Problem



# Scrum in Practice





# The Accordion Effect



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# Failure Demand

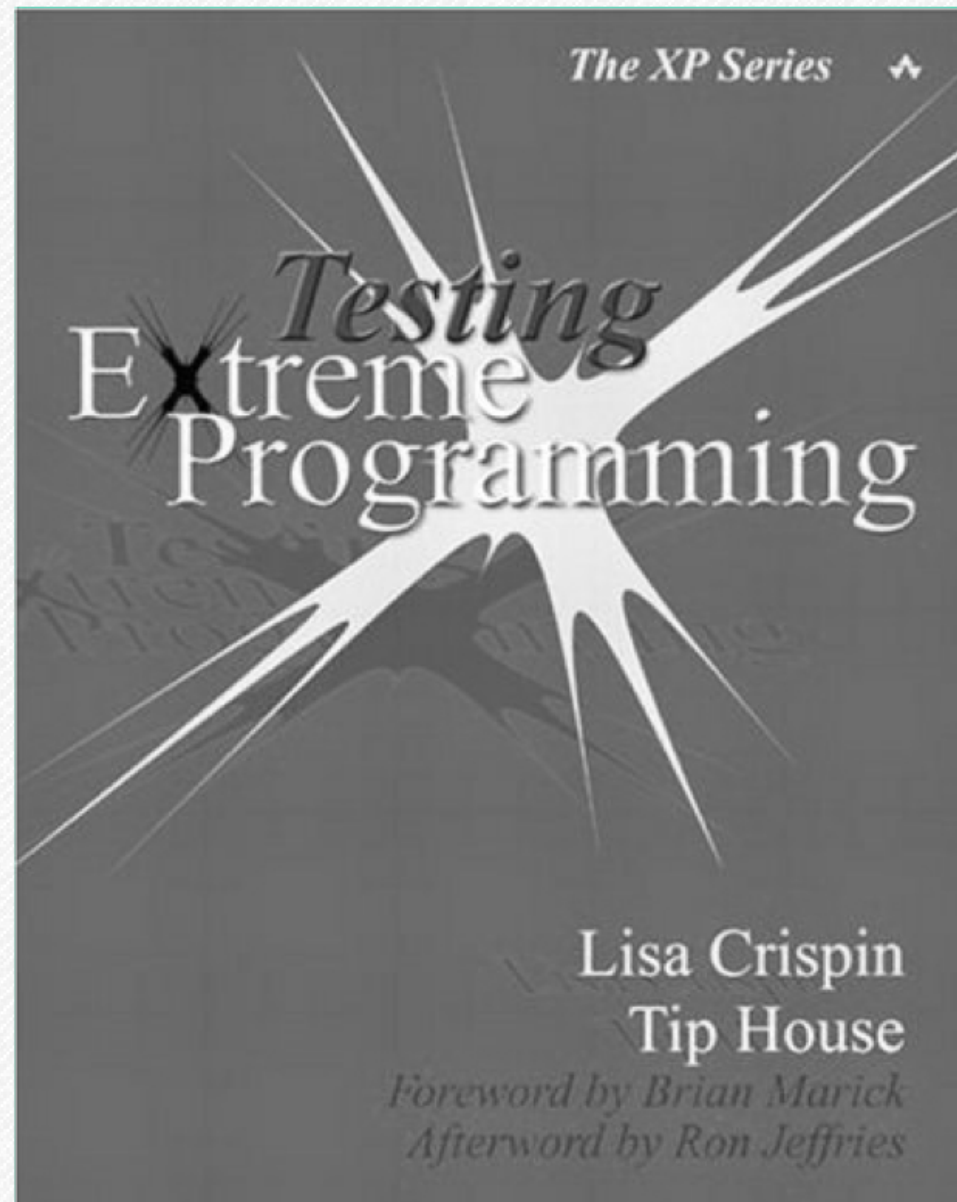


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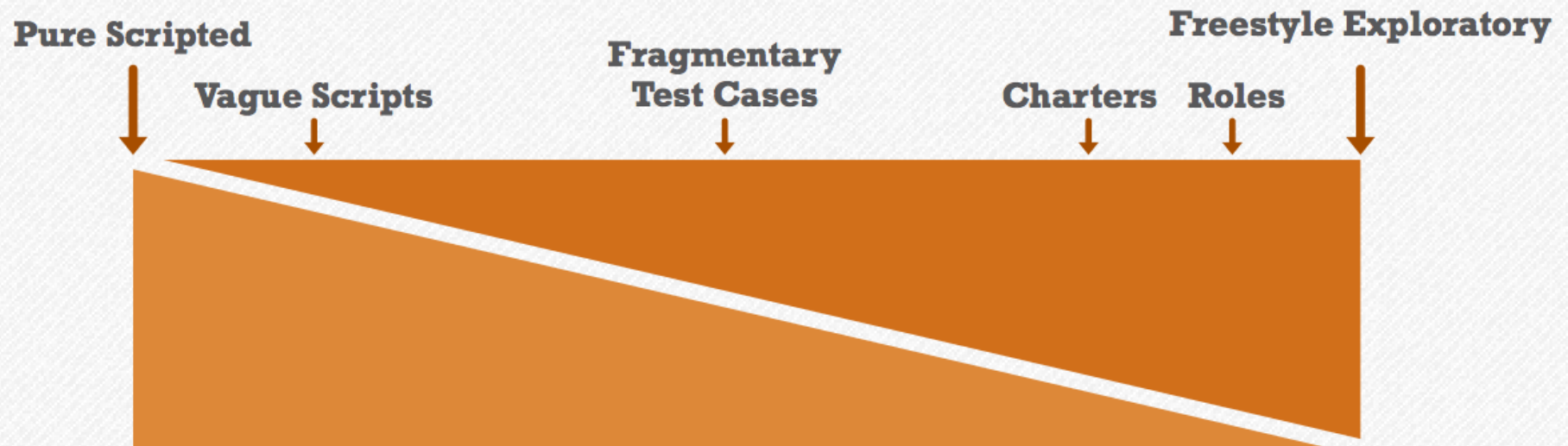
# The First Set of Advice



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# Heavy-Weight Scripts



Source: Jon Bach, "The Case Against Test Cases"



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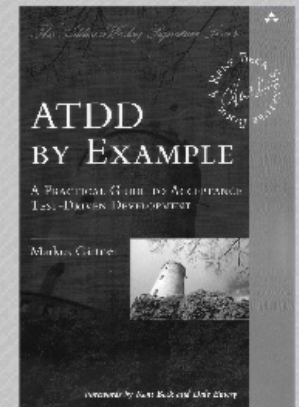
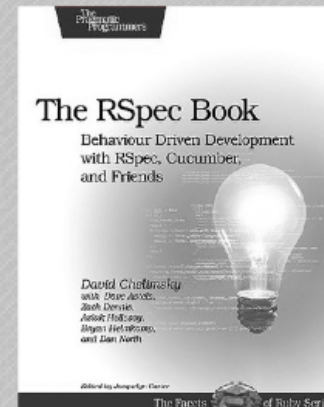
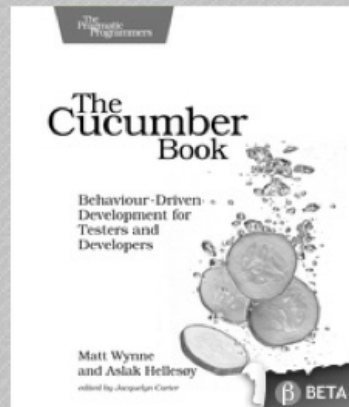
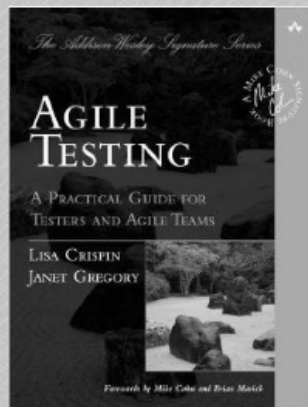
# ATDD, BDD, & The 3 Amigos



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# ATDD, BDD, & The 3 Amigos



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# Regression Test Strategy:

## Check the API, Poke the GUI

Test  
Edit  
Properties  
Refactor  
Where Used  
Search  
Files  
Versions  
Recent Changes  
User Guide  
Test History

FrontPage.

### EligibleCountBasedOnSampleMonth

TEST RESULTS [\[history\]](#)

Running Tests ... OK

DataExport.Fit.Acceptance.Fixtures.DoMonthlyExportTest

Setup Clients

Client Id	Product Id
1	111111

Setup Orders

Order Id	Client Id	Product Id	Eligible	Duplicate	Processed	Processeed within this month
1001	1	111111	Y	N	Y	Y
1002	1	111111	Y	N	N	N
1003	1	111111	Y	Y	Y	Y
1004	1	111111	Y	Y	N	N
1005	1	111111	N	Y	N	N
1006	1	111111	N	Y	Y	Y
1007	1	111111	N	N	Y	Y
1008	1	111111	N	N	N	N

Generate

Check Headers

Product Id	number submitted	number eligible orders	number processed
111111	8	4	4

Check Status File

Client Id	Product Id	Administration Count	Partial Count	Warning Count	Eligible Count
1	111111	4	0	0	4

FrontPage - EligibleCountBasedOnSampleMonth





# Regression Test Strategy:

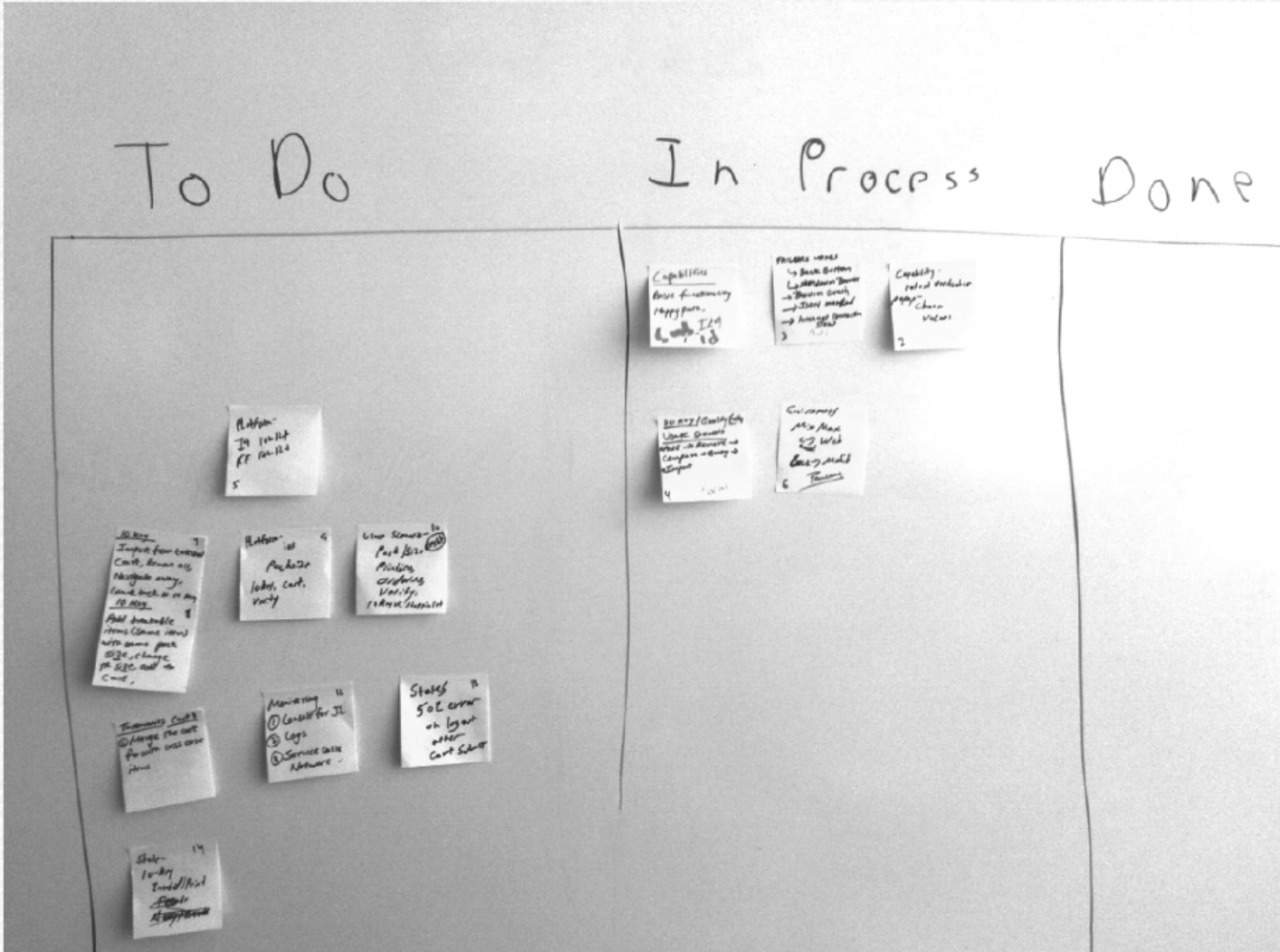
## Low Tech Testing Dashboard

Features	IE 9	Webkit	iOS	Android
Product Details	Q:7 C: 9(matt)	Q:6 C: 8 (Sreejit)	Q:7 C: 5 (Paurang)	Q:7 C: 5 (Paurang)
Cost Summary	Q:9 C: 3 (matt)	Q:7 C: 5 (Sreejit)	Q:7 C: 7 Sandhya	Q:6 C: 6 (Paurang)
Order History Details	Q:6 C: 8 (Sreejit)	Q:6 C: 7 Arun	Q:7 C: 6 (Paurang)	Q:7 C: 6 (Paurang)
Delivery Date	Q:9 C: 6 (matt)	Q:8 C: 7 Arun	Q:7 C: 7 (Paurang)	Q:7 C: 7 (Paurang)
Cost Summary	Q:7 C: 5 (Sreejit)	Q:7 C: 7 Arun	Q:8 C: 7 (Paurang)	Q:8 C: 7 (Paurang)
Account	Q:6 C: 6 (subid)	Q:6 C: 6 (subid)	Q:8 C: 7 (Subid)	Q:8 C: 6(subid)
Home/Multiple Accounts	Q:7 C: 5 (Sreejit)	Q:7 C: 5 (Sreejit)	Q:7 C: 5 (Paurang)	Q:5 C: 7 (Paurang)
Buy To Purchase	Q:6 C: 8 (Sreejit)	Q:6 C: 7 Arun	Q:3 C: 7 (Paurang)	Q:3 C: 7 (Paurang)
Item Validation	Q:6 C: 6 (subid)	Q:6 C: 6 (subid)	Q:6 C: 6(subid)	Q:6 C: 6(Subid)
Pricing	Q:7 C: 8 Beth	Q:7 C: 8 Beth	Q:5 C: 7 (Paurang)	Q:5 C: 7 (Paurang)
Receipt	Q:8 C: 7Sandhya	Q:8 C: 7Sandhya	Q:7 C: 7 Sandhya	Q:8 C: 6(subid)
Product Details	Q:7 C: 5 (Sreejit)	Q:7 C: 5 Arun	Q:8 C: 8 (Paurang)	Q:8 C: 8 (Paurang)
Cost Summary/Approval	Q:7 C: 1 (Subid)	Q:7 C: 1 (Subid)	Q:6 C: 6 (Paurang)	Q:6 C: 6 (Paurang)
User/Account Preferences	Q:3 C: 5(Sreejit)	Q:3 C: 5Arun	Q:2 C: 10 (Sandhya) Account Preference	Q:2 C: 10 (Paurang) Account Preference
Offline Mode	NA	NA	Q:9 C: 4 (Paurang)	Q:9 C: 4 (Paurang)



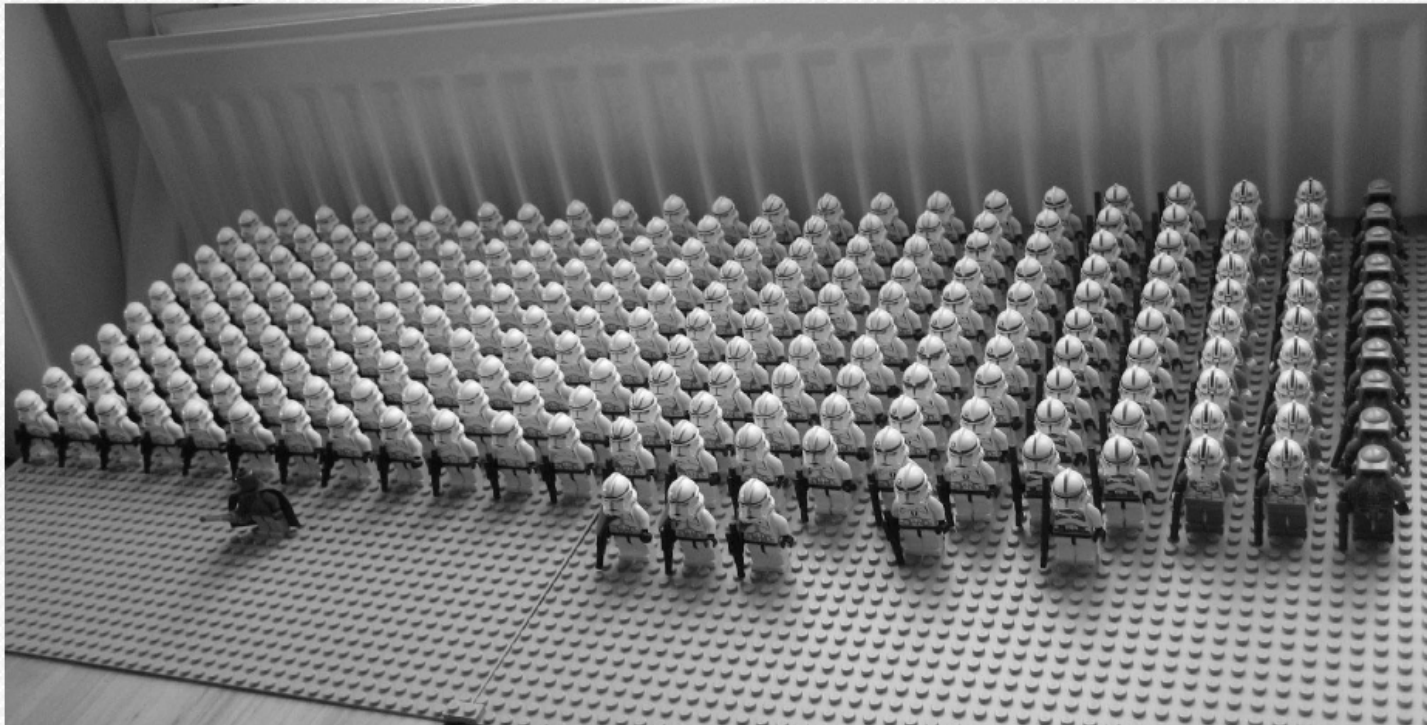


## Regression Test Strategy: Customize Test Ideas for This Release



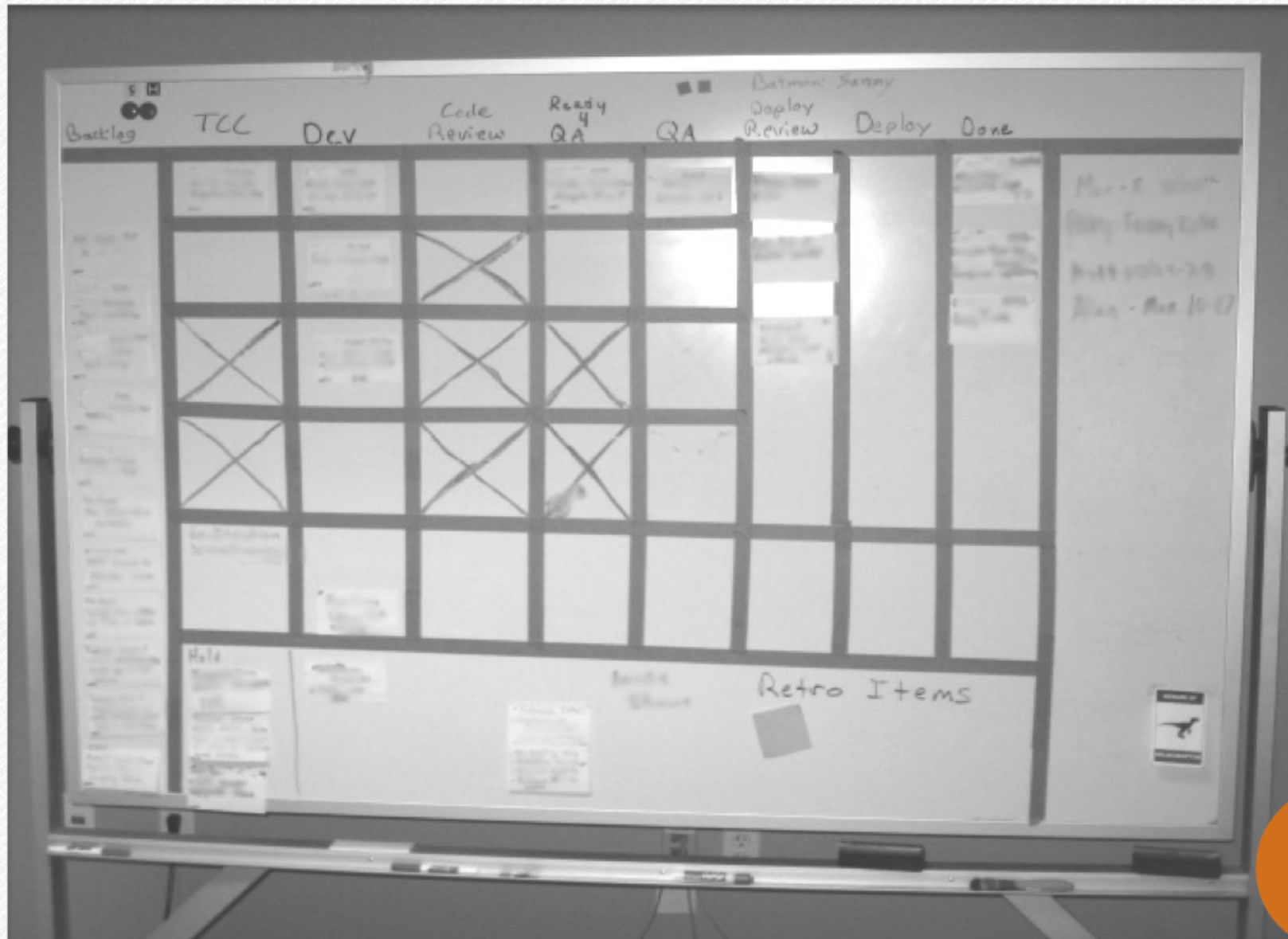
# Regression Test Strategy:

## Massive Simultaneous Exploration

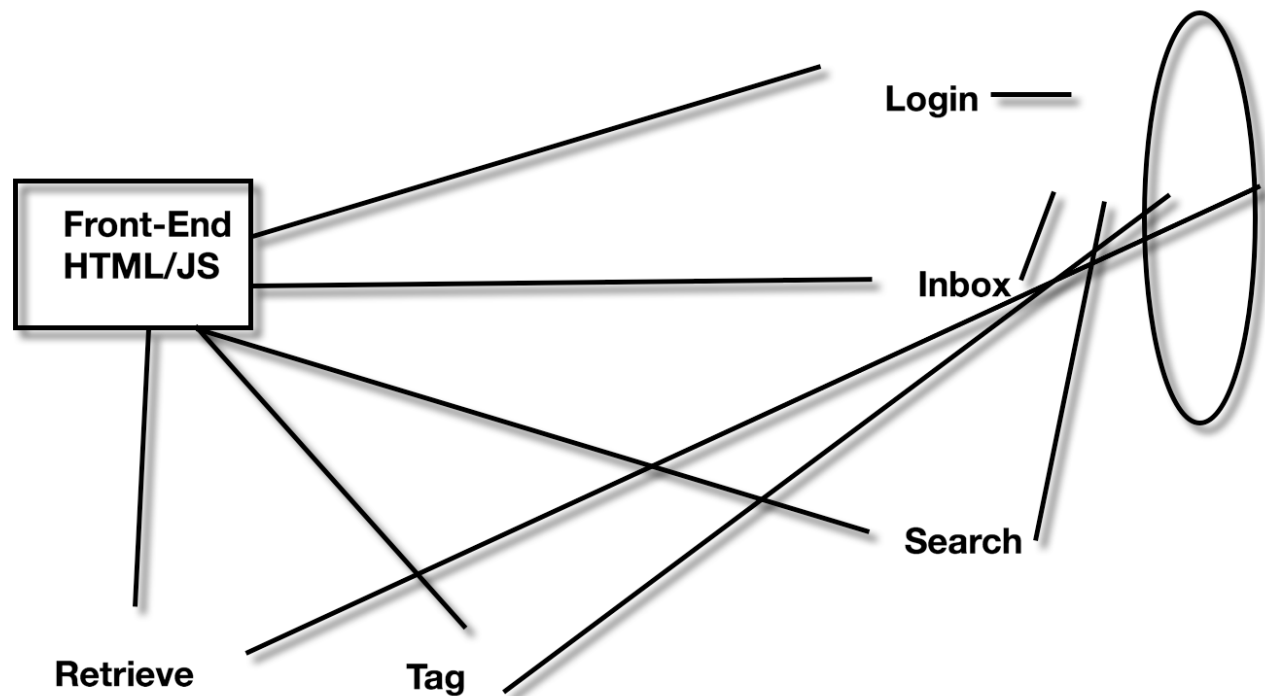




# Reduce Work In Progress

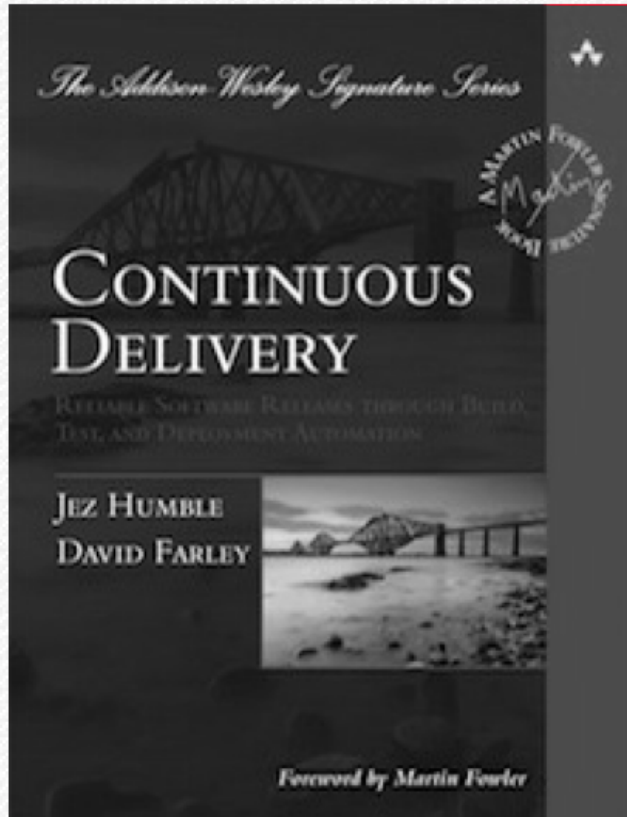


# *Isolated Components*



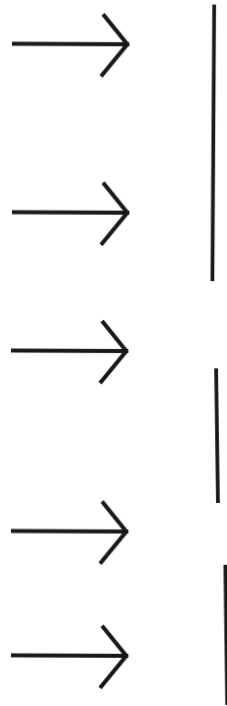


# Continuous Delivery



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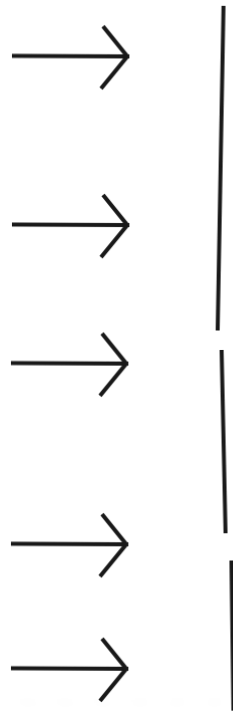
# *The Swiss Cheese Model*



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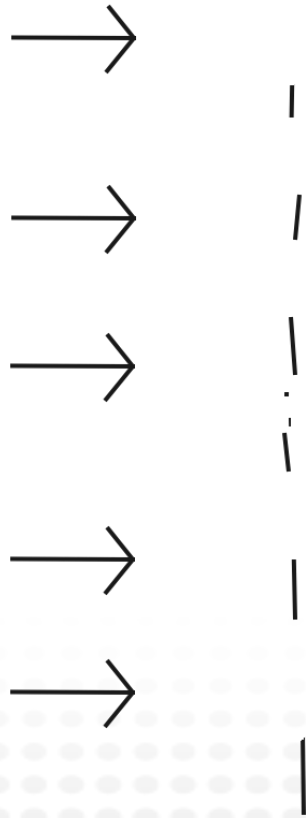


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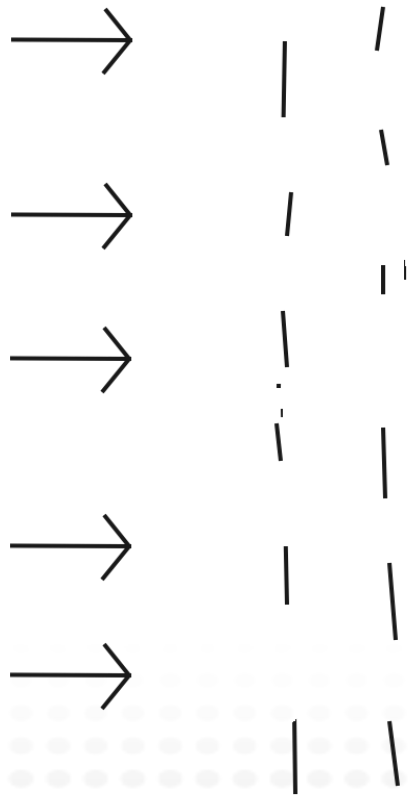
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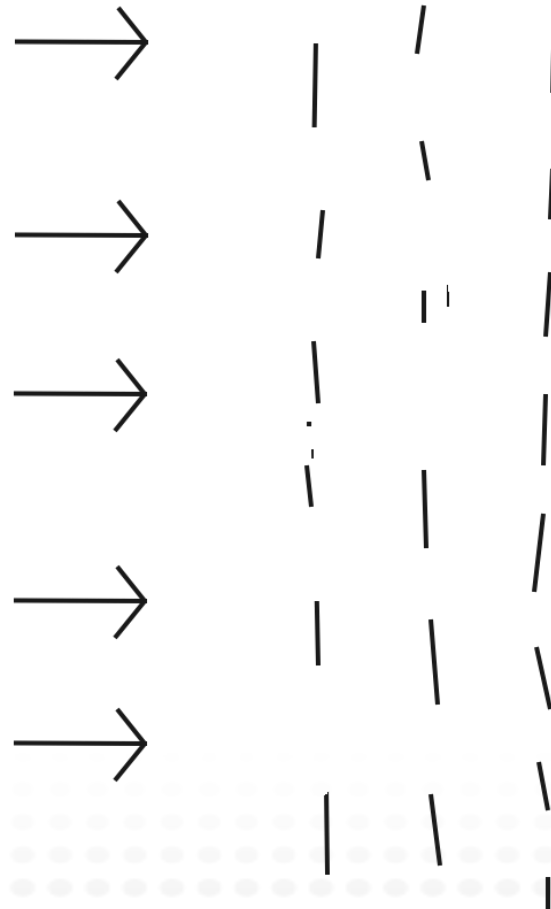


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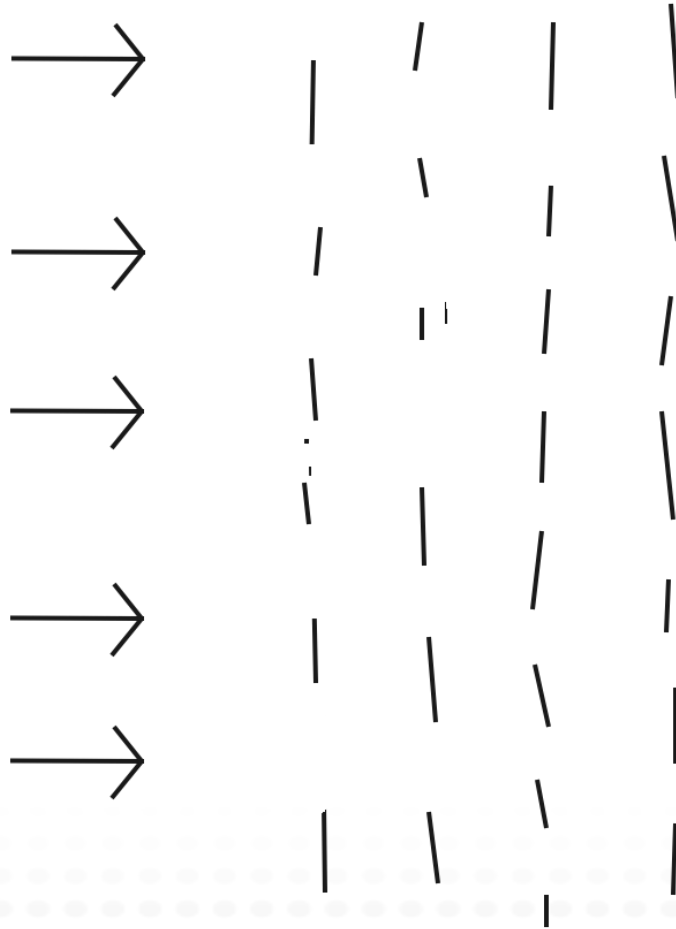
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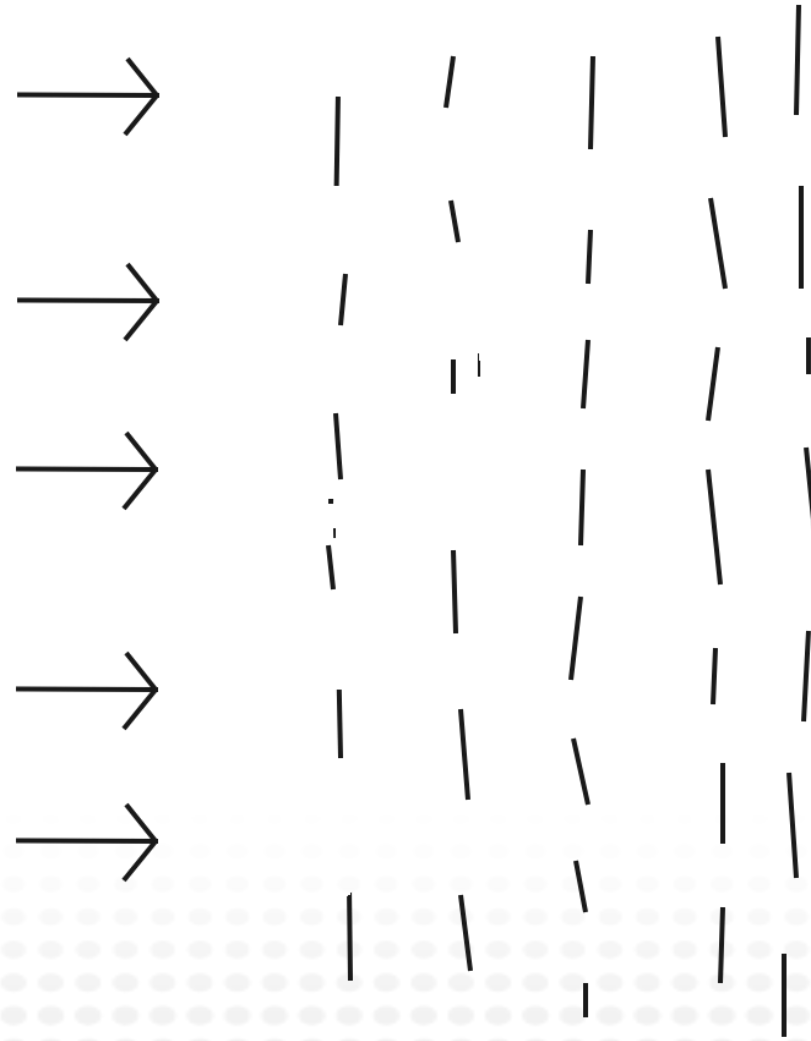


# *The Swiss Cheese Model*



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# *The Swiss Cheese Model*



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# What Are Your Questions?



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# Tomorrow



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# Bonus Section



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