# Your Path to Safe Coding that Works Every Time

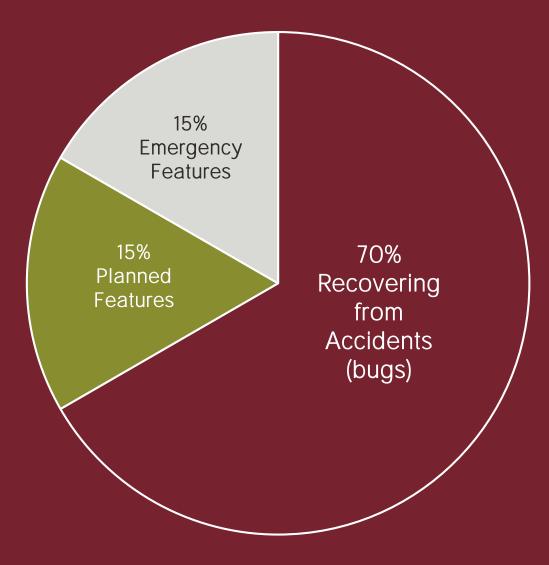
#### Creating a hazard free environment one day at a time.

sales@digdeeproots.com



**DEEP ROOTS** 

### Where time is spent in product development...



Does this seem too high?

Consider time spent on...

- Triage meetings
- Bugs (in all the ways)
- Stories that creep into next week
- Constraining features to cost
- Stabilization weeks
- Integrating legacy code

Also, did you think about downstream?

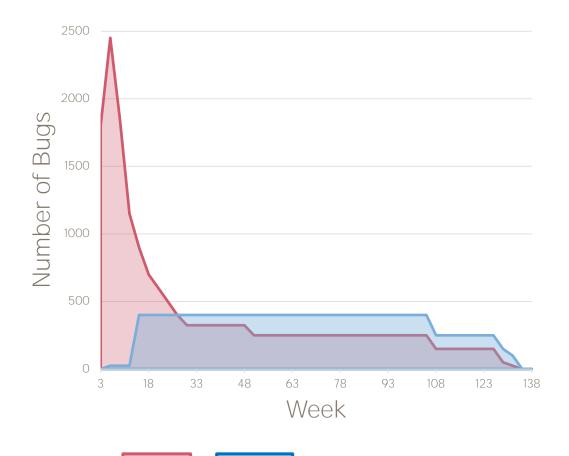


# **That's What One Client Felt**

Here's their Zero Bug Story



# Chapter 1: Many Bugs



Fixed

New

- Each story introduced 5-20 new bugs.
- 80% of bug fixes introduced a new bug.



## Chapter 2: Our Solution

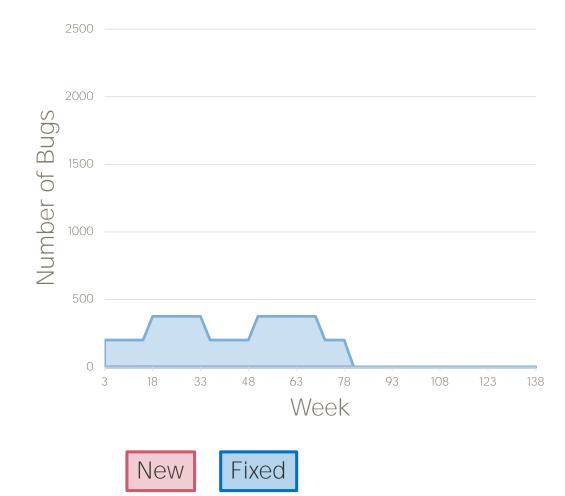
- 1 month to shift core behavior + 7 months to shift the active code.
- Change had universal support: 100% of managers and 100% of engineers.

Focus on Safety

- 1. Treat bugs as Injury Accidents
- 2. Fix the Hazards that cause them



## Chapter 3: After Our Solution

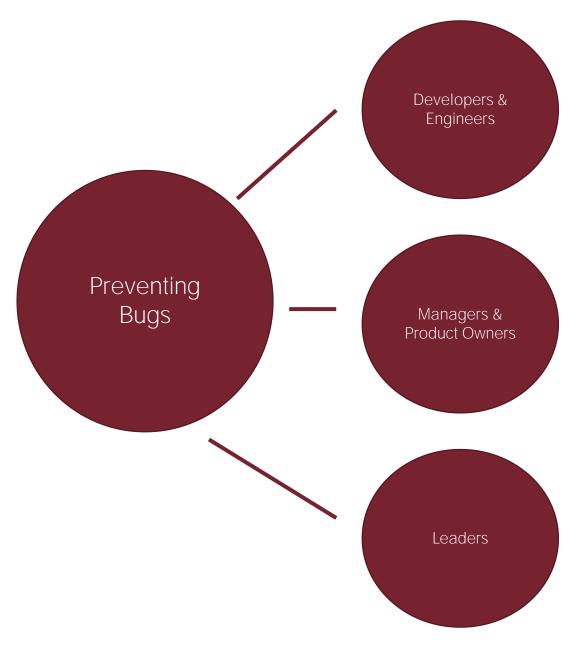


- No month had more than 2 new bugs
- 1% of stories had any bugs.
- <0.1% of bug fixes introduced a new bug.



# Here's What We Did





#### Code by Refactoring<sup>™</sup>

Progressively add practices that reduce the number of bugs written and allow preventing future bugs without paying more now.

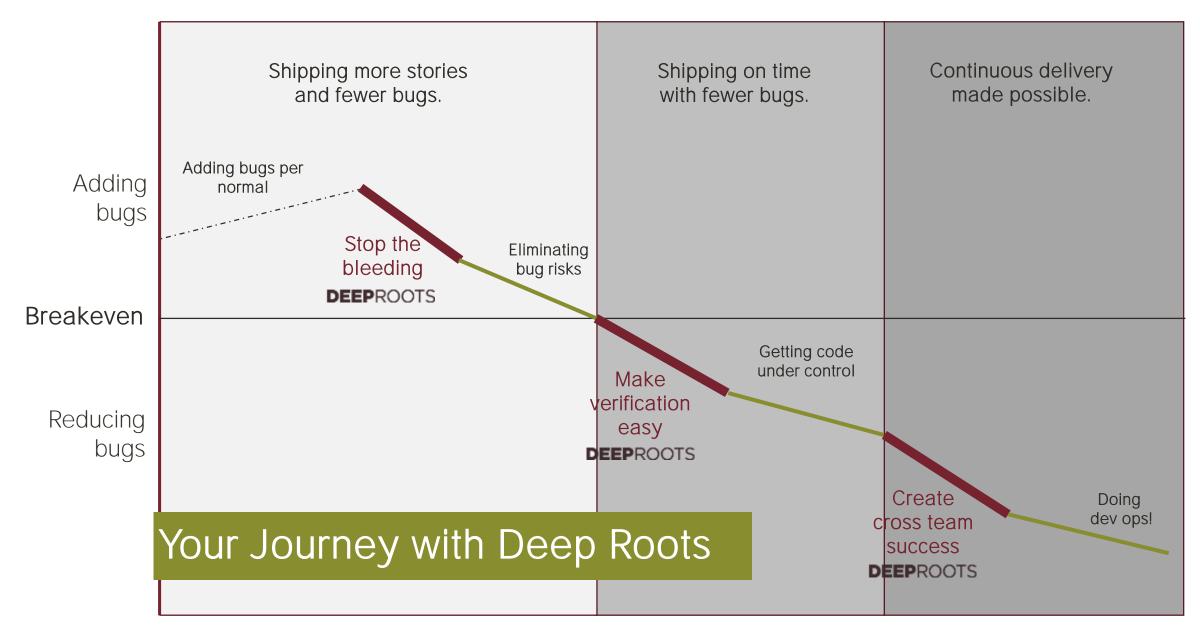
#### Safeguarding™

Amplify your existing bug-fixing habits with practices that identify and eliminate the hazards that led to those bugs in the first place.

#### Growing Responsible Ownership™

Create an organization that owns their technical debt and solves more problems than the leaders can simultaneously track.







Shipping more stories	Shipping on time	Continuous delivery	
and fewer bugs.	with fewer bugs.	made possible.	
Making your job easier!		Start shipping on demand	
No more blame,	No more bugs	No more	
workarounds, or fear of	Start shipping	cross team	
legacy code	On-time, every time	dependencies	



Sto	Phase One: op the Bleeding	Phase Two: Make Shipping Easy		Phase Three: Create Cross Team Success	
	pping more stories and fewer bugs.	Shipping on time with fewer bugs.		Continuous delivery made possible	
	ss firefighting ss time on defects	<ul> <li>Automatically verify whole product at every commit</li> <li>Less in-team stress</li> <li>Ship on time</li> </ul>		Not blocked by other teams	
	gned prioritization ween features and tech ot			<ul> <li>Ignore technical constraints when prioritizing work</li> <li>Sustained technical excellence</li> </ul>	
4 Months		9 Months		6 Months	
1 Month Together	3 Months on your own with check-ins	3 Months Together	6 Months on your own with check-ins	3 Months Together	3 Months on your own with check-ins



## Describing the Path

#### Financial Debt

Control the spending.



Resolve >50% of all bugs and >50% of story development time **by** refactoring hard-to-read code.



Teams begin addressing the team-specific top risks.

Technical Debt

Stop the bleeding.

Pay off expensive credit card debts.

Resolve 25% of all bugs and enable automated verification **by** refactoring duplicate code and non-local interactions.

Pay off less expensive personal loan debts.

Eliminate schedule dependencies, the need for release-level stabilization, and 10% of all bugs **by** refactoring cross team code dependencies.

Teams own tech debt funding

decisions and ROL

Teams expands its quality ownership to include sustainability, secession, and other teams. Make shipping easy.

Create cross team success.

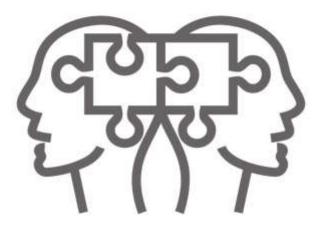


# What Makes Us Different?



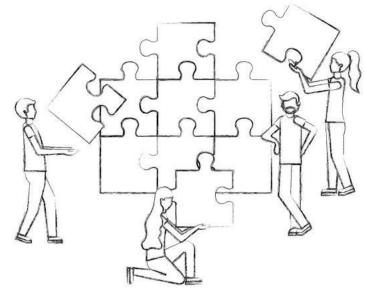
## We don't train. We change behaviors.

On the Job We provide habit shifts integrated in the work every day.



#### Scale Across Teams

We provide structure that unlocks your in-house expertise





### **Exposing**



### Building

Training exposes people to new ideas.

Trying new concept on simple problem out of context.

Learning a pre-defined set of slides and topics.

Engaging in a fun workshop for the day.



A learning culture helps people change behaviors.



Learning on the job in your real context in small batches.

Experimenting with targeted feedback.

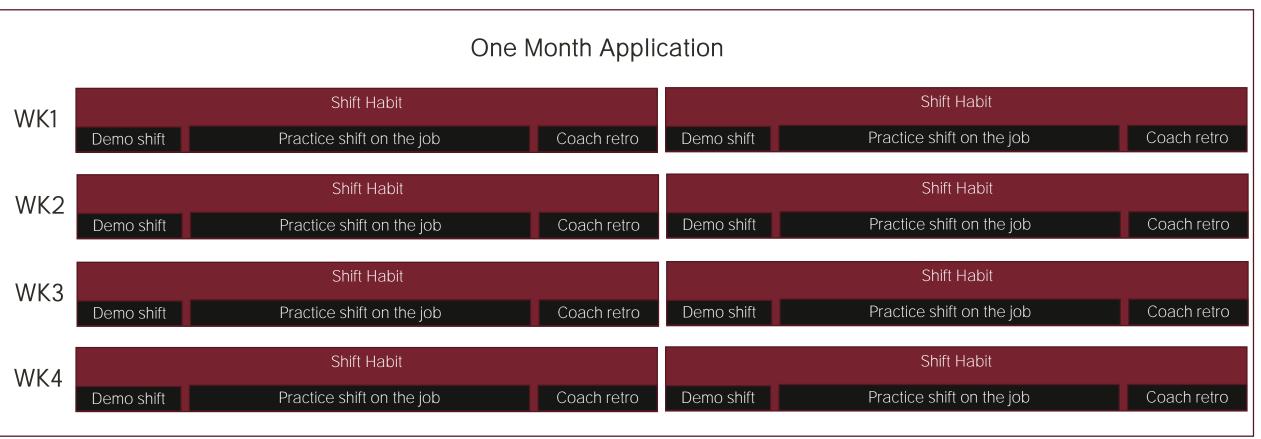


Engaging behavioral change that lasts.



## How we work.

#### One day workshop



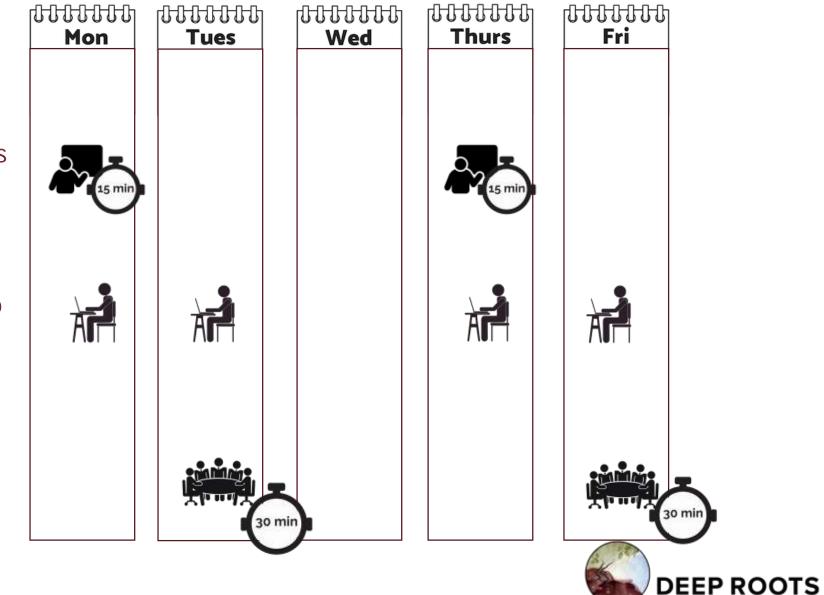


## A Week in the Team's Life

Experience demo with Deep Roots to identify what to shift

Integrate daily practice on the job to apply and make change real

Share stories with Deep Roots to make it sustainable



## Ready for Zero Bugs?

## Contact us for help!



sales@digdeeproots.com

