

Put a UI Developer in a Bank

See what happens





Form follows function. For financial firms, function is so fortified and secured that no pretty form could come close to it.

“Form follows function” Louis Seville.

Who’s from London?

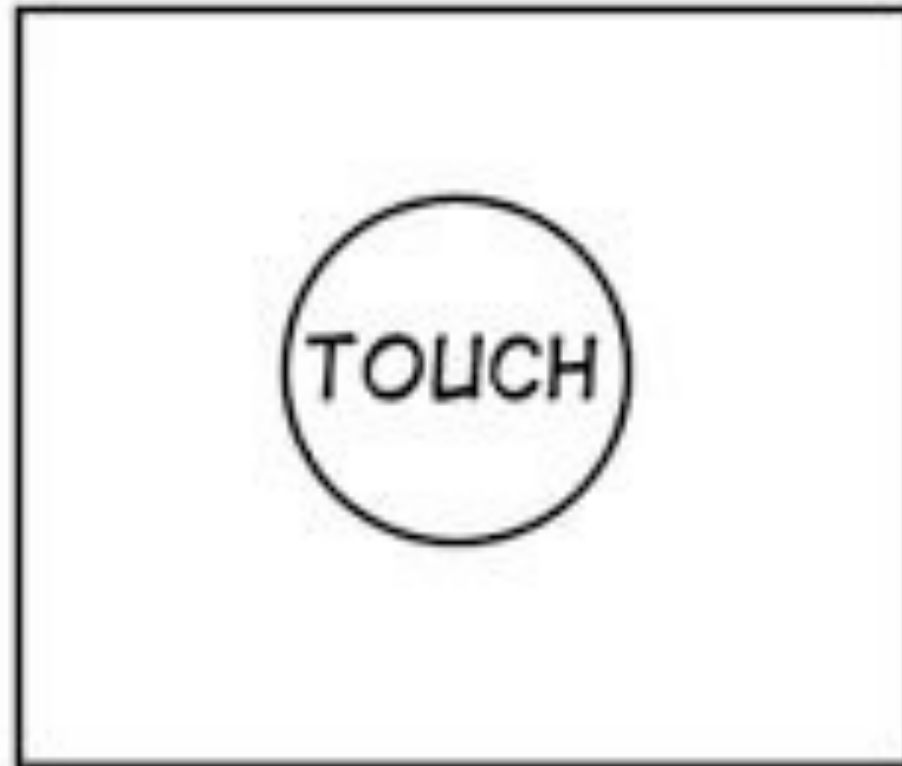
<http://blog.archpaper.com/wordpress/wp-content/uploads/2010/11/Louis-Sullivan-4.jpg>

@hdragomir

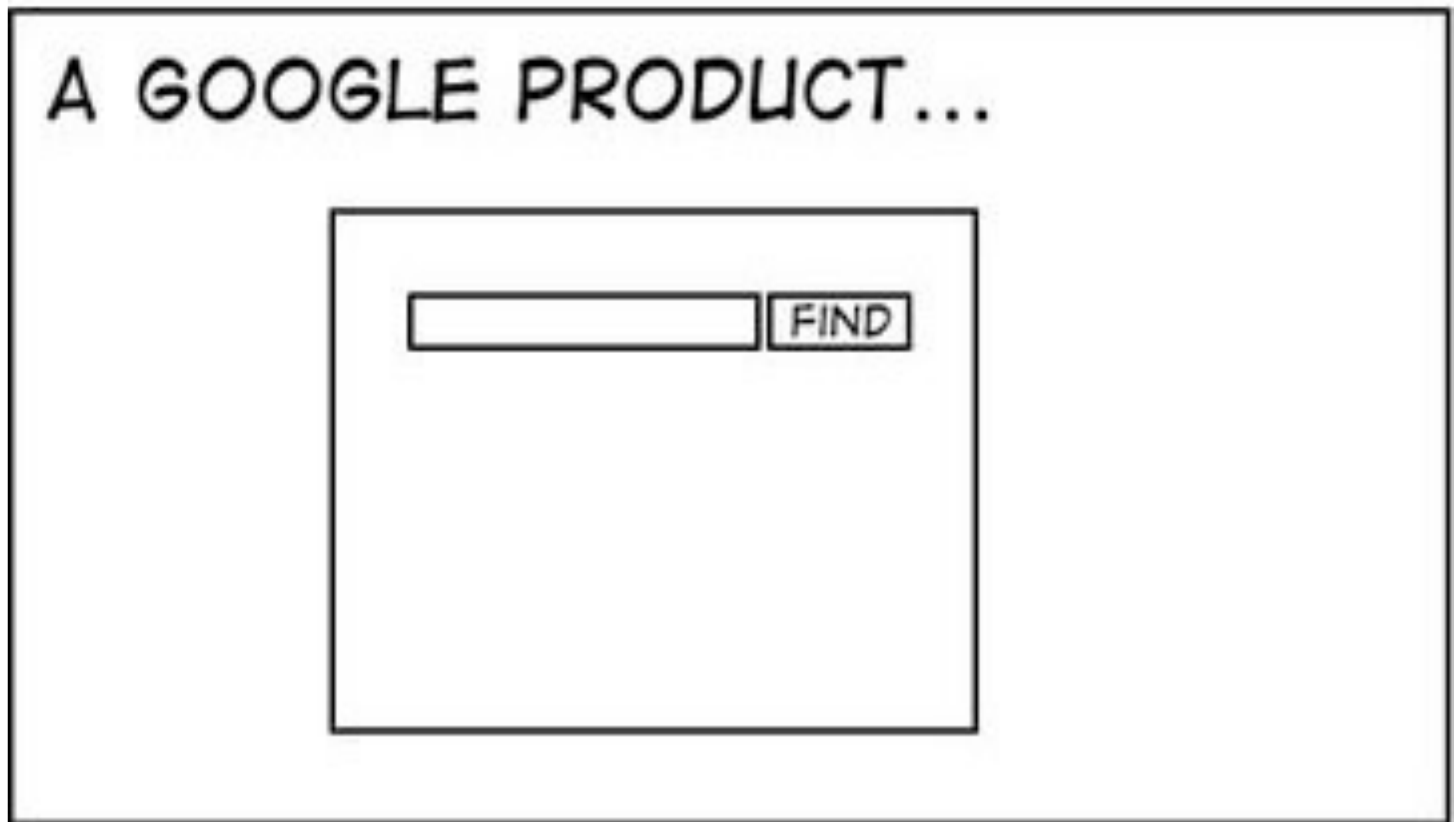


me

TYPICAL APPLE PRODUCT...



I've built a lot of simple apps that rely heavily on user interaction.



And I've built lots of apps that hide complex data models in the background, presenting the user with something that's meaningful and easy to comprehend.

Using clever tricks, those kinds of apps empower users – make them feel like superheroes

YOUR COMPANY'S APP...

| | | | | |
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OKAY

APPLY

SAVE

UNDO

HELP

DELETE

EDIT

SELECT

BROWSE

ERRORS

When I use a typical banking app, I don't feel like a super-hero. In fact, I feel quite dumb.

So I thought I could do something about the typical banking apps.

I thought the problems were easy to tackle like

browser support

"I heard you like security"

Why?



But that cake was a lie.
I have journeyed deep into the belly of the beast to learn about how the evil gets brewed, baked, packed and packaged as an app, put in the user's lap as happy managers clap.

On my first day, I got the access cards and got asked if I would be working from home.
Like a first date where you already have to watch a football game with her dad.

Because Developers



Banks are a safe haven for backend developers.
He who has rank gets his way.

More Developers!!



Trying to solve a design problem by throwing more developers at it is as effective as trying to solve an algebra problem by chewing bubble gum.



Problems watching video?

Summary

Horia Dragomir discusses approaches and tools meant to improve the development process of distributed teams.

Bio

Horia Dragomir is a UI Developer, currently working at wooga in Berlin, where he focuses on developing HTML5 Mobile games. He has spent the better part of his working days in distributed teams, employing agile methods and discovering better ways for teams to work together.

About the conference

Software is changing the world; QCon aims to empower software development by facilitating the spread of knowledge and innovation in the enterprise software development community; to achieve this, QCon is organized as a practitioner-driven conference designed for people influencing innovation in their teams: team leads, architects, project managers, engineering directors.

Don't Let Backends Design!

ever

A year ago I was saying this. Banks didn't get this memo

[0..1) In-house Designers



banks rely on agencies to do episodic design work
spec changes don't get communicated to designers and instead are shoehorned into the current design.

So then the Bank says...



and that's the way it's always been. Until people REALLY started to complain

We Fix it!



Especially the mobile apps – which at first were just the desktop app served straight up to the mobile clients.

Near-cool Mobile Webapps



... mostly made by Java Developers



Java and C# devs are really good at building Java and C# apps.

If you have to work in Eclipse or Visual Studio you start believing those are good interfaces. Those interfaces are good for editors, but make for poor interfaces for webapps.

Java + JavaScript = <3



Raise your hand if you believe this to be true

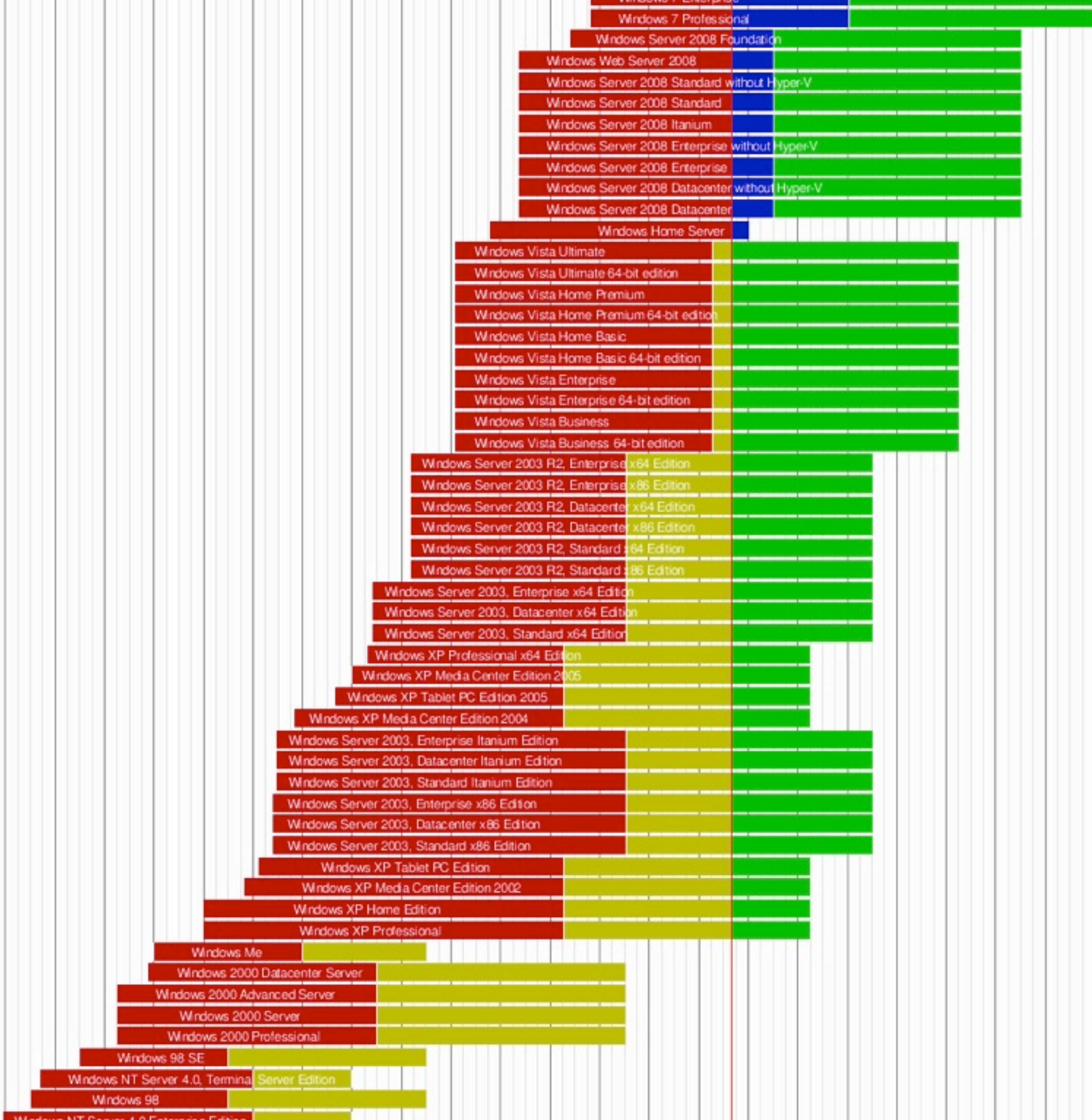
Banks are moving



As you will see later in this track.



http://www.cusai.ie/wp-content/uploads/2011/08/CAT_0676.jpg



Release Cycles

A Bank is No Startup



2weeks vs. 6months release cycles don't always sync up

Use Before Re-use



“The other team are building a thing like what we will need, let’s wait to use that.”

Talk the talk, rewrite the spec!



I sat down with the Project Owner and verbally agreed on some changes; implemented them only to see them reverted by another dev because QA said they did not match the spec.

Prey the other team will deliver



Dependencies are a hell without having to add OTHER TEAMS to the list. Plus, their delays also become your delays. Especially if they deliver something slightly different than what you were expecting.

Not All Requirements are Born Equal



Their list of supported browsers might not be the same as yours. They might be targeting mobile webkit while you're stuck with supporting IE7...

Polyfill is the transition!



Tooling

Firewalls!



they will make researching for answers a living hell. Google is not blocked, but stackoverflow is because it is a “social network” ?!?!

MAKE ME A SANDWICH.

WHAT? MAKE
IT YOURSELF.

SUDO MAKE ME
A SANDWICH.

OKAY.



Then there's the issue of installing software

MAKE ME A SANDWICH.

|

SUDO MAKE ME
A SANDWICH.



WHAT? MAKE
IT YOURSELF.

/

~~OKAY.~~ NO



You are not an admin!
Heck, you can't even install a different browser to test on.

Browserstack?



While I love Browserstack and tools of the sort, you cannot possibly begin to use them from behind a super restrictive firewall.
Especially the local tunnelling

You Get a VM



You get a VM that has IE6 on it, maybe Firefox, maybe Safari, that is managed by a sysadmin that's grumpier than a mountain lion in heats gone hungry. And you have to time share it with all the other teams.

dynaTrace





You go to the knife store and ask for a knife.

http://www.equalreviewer.com/wp-content/uploads/2011/12/gerber_gator_machete.jpg



<http://media2.shop57.org/628-1047-large/baionette-garand-m1.jpg>

Nonono, a steak knife



<http://www.colt22rimfire.com/uploads/images/m16rifle/left.jpg>

We also have you the gun so you can kill your own cows to make steaks yourself.



"whining scripting guy who needs a macs to 'debug.' Why can't he debug like real men?"

Getting a Mac on your dev network. I still think that was my biggest ripple in that bank.



Having a mac helps with debugging webapps on iDevices
Made sense because we were focusing on iDevices...

It felt like the good old days; you didn't have device labs back then. You'd have to go to the mall and pray the WiFi was working in the phones department that day.

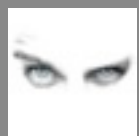
When we got our first bug on iDevices, I had to discover the problem at home on my Mac.
And I couldn't charge the bank for the time because I said I would not be working from home

Who Do You Work For?



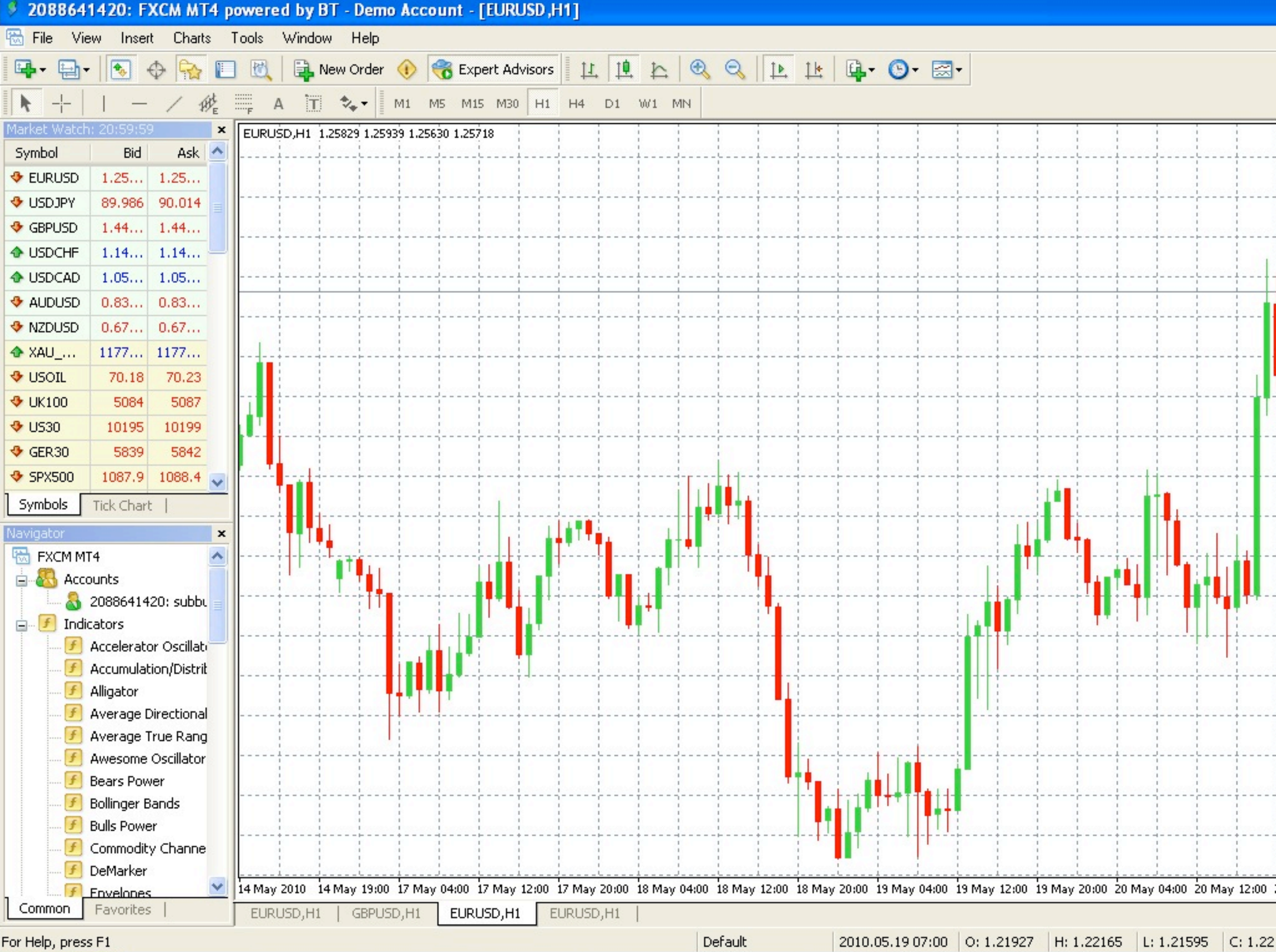
Your manager or your user?

50 Shades of Grey



Managers are happy with an app like this.

When I joined the bank, other teams were making fun of the project I was on by calling it 50 Shades of Grey



Managers want people who are good at building stuff like this



And who are very good at defending their code, decisions and poor performance with cool PowerPoints

vl



And that's how the first versions were built

theSuperFunctionNameThatTellsYouWhatItDoes() {



by bank-experienced developers who write well functioning code

```
theSuperFunctionNameThatTellsYouWhatItDoes() {  
    return window.a={asd:{b:”c”, d:’4’+2}.s(fda)}}().asd  
}
```



that is unmaintainable, in order to secure their senior position in the bank.

“When a junior can’t work with the code, it’s obviously because he’s a junior”



http://farm5.static.flickr.com/4016/4439159065_f81cb4474d_o.png

And they are very good at stuff like this



But don't let them decide the layout of your app



But they wanted to go mobile, and heard that HTML5 is cross platform. Like Java – and that was the winning argument.

iOS 6



They also heard that Android users are poor.



iOS 6



So they made HTMiOSL5 apps that replicate iOS UI styles poorly



!OS



And ended up with apps that made sense to no-one, were confusing and felt odd and sluggish



Senior guys in banks know how to tickle their bosses.

do your thing



do your thing



do your thing



do *your* thing



do *your* thing



This is how I changed the main copy style more or less without telling anyone

Fight for your right to CSS



Safest place you can make changes. Changes that improve the UI.
Changes most other devs will not understand, though.

main.css



Maindotcssitis

Policy, Policy, Policy



Do they do progressive enhancement or graceful degradation?
Do they guard for failure first or as a last resort?
That mentality needs to be in your code.

Safely do your thing





Start with the lowest IE



Once that is covered, you can use whatever you want to conditionally load stuff smarter browsers can use. IE10 is included in smarter browsers.

Oh, and let me tell you how the devs in the bank finally got Chrome and Firefox...



iOS 6



Your desktop app is probably your main focus, but you're going to have to provide the same functionality to your mobile users. Especially iPad users.



iOS 6



Once iOS is done, you can start covering the corner cases that Android will come with. Your bank will probably not pay you for this as they might still not see value in Android.

Common Sense



Feature Priority



You'd imagine you get a crazy amount of metrics in banks... nope
Find out what your users are doing and make it easy for them to do it.
Like transactions, transactions overview.

Do not simply remove the other features. Everything you can do on your desktop you should be able to do on your tablet. Don't dumb it down.

Hire In-house Designers



And keep them involved in the product's lifecycle.
Let them adapt the design over time, as features and needs evolve

Platform Awareness



Don't reinvent the wheel, or force skateboarders to use bikes. Harness what each platform – iOS, Android, Windows Phone, Linux – offers and make it easy for your users to understand what your controls do.

Proper Dev Environments



I hate visual studio, yet so many banks' workflows are so closely tied to it that it's almost impossible to use something else. This needs to change.



Once banks start covering those 4 areas, not only will their banking apps get better, it will be easier for them to find people willing to make their apps better.

Maybe, in a not so distant future, we will actually be able to smile and be pleased with the universe while sending money to our loved ones from our super cool mobile banking apps.