



Global Agile Game Development: No Passport Required

Aðalsteinn "Alli" Óttarsson



Who am I?

- Aðalsteinn "Alli" Óttarsson
- Sr. Technical Producer
- Core Technology Group
- Joined CCP in 2001
- Originally a programmer turned producer
- I have contributed to all the EVE Online releases
 - and all the game projects we are currently working on.



13 years ago ...

Reynir, our founder, had an idea about spaceships ...

- ... flown by hundreds of thousands of (real) people over the internets in the same universe
- ... and everybody would pay us monthly for flying them
- ... and he was requesting \$5 million to make it
- ... in a 300,000 people country which predominant industry was fishing.





Sounds crazy?



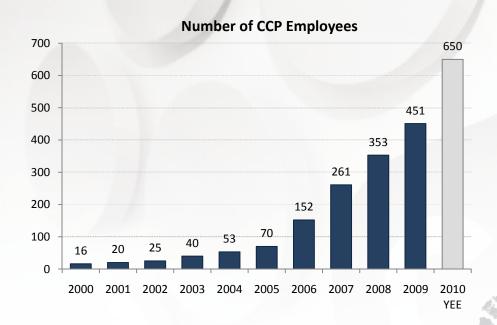
"Venturing on a project so massive in scope, so unprecedented and unproven in so many ways, is only done by either madmen or idiots..."

"...We were probably both."

REYNIR HARDARSON, creative director and founder of CCP



CCP Overview



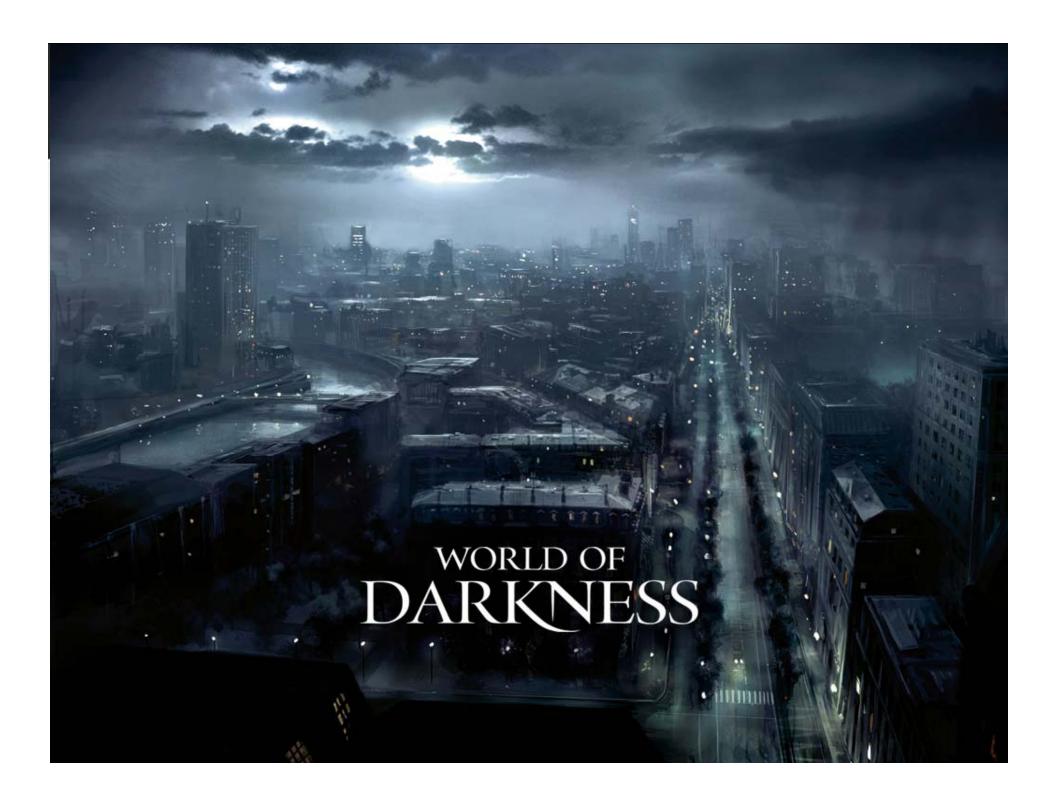
- CCP employees represent over 20 nationalities
- The number of languages spoken by employees exceed 30
- Melding the best of art, science, operations and business talent

- CCP employees are spread between four offices in three continents
- Iceland / Reykjavík
 - Headquarters
 - ~280 Employees
- China / Shanghai
 - ~100Employees
- USA / Atlanta
 - ~175 Employees
- UK / Newcastle
 - ~17 Employees
- UK / London
 - Location of servers

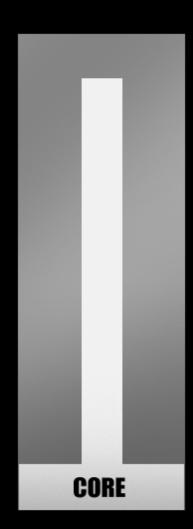


ONLINE



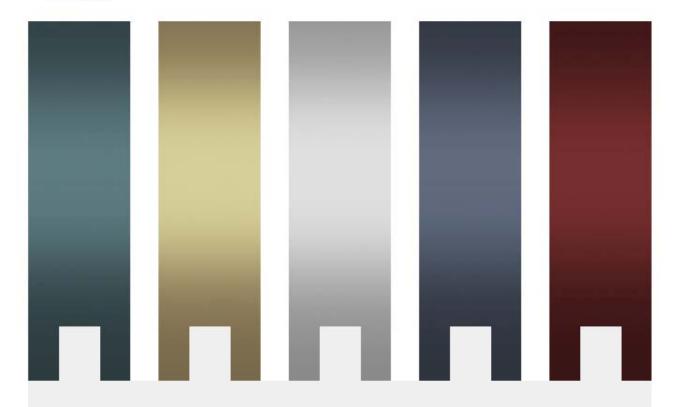












PRODUCTION
ASSET PIPELINES
TOOLS

CARBON

METRICS SUPPORT HOSTING

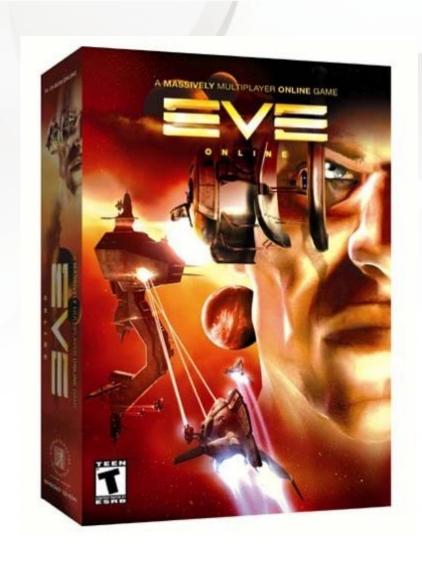


Global Development





EVE Online





EVE Online Expansions





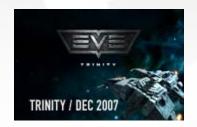














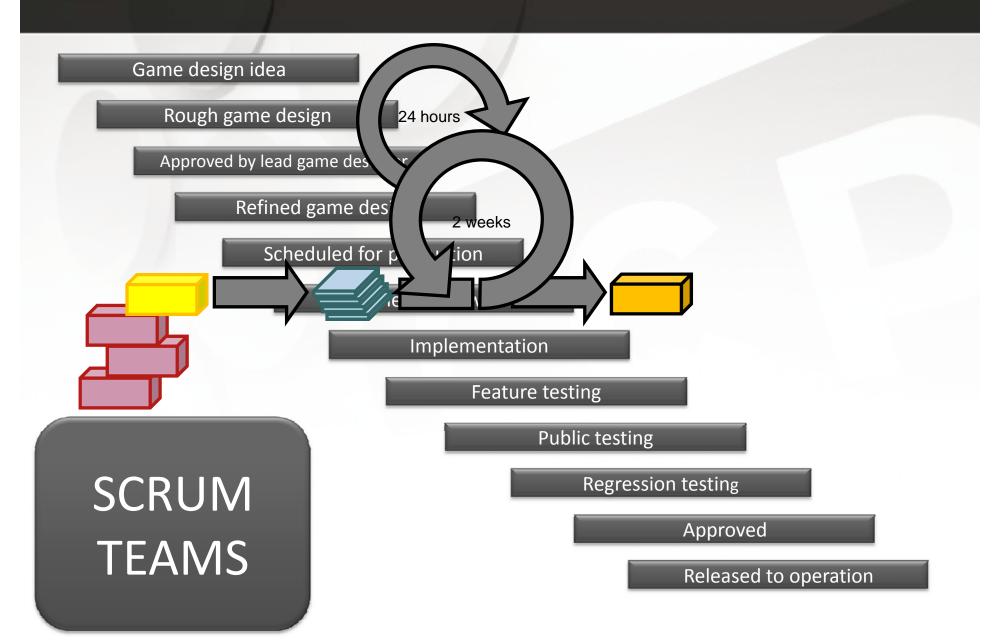








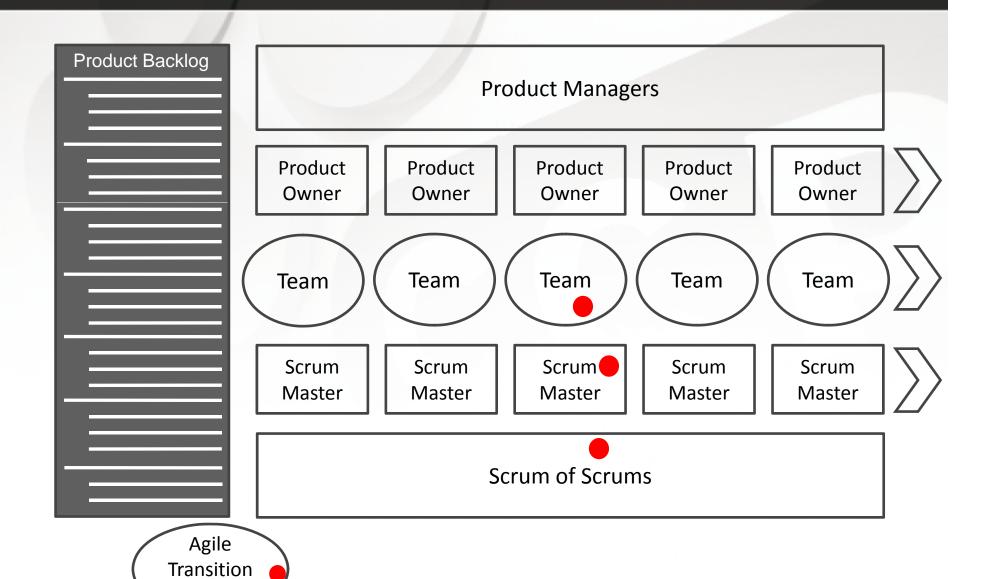
Transition EVE to Agile





Team

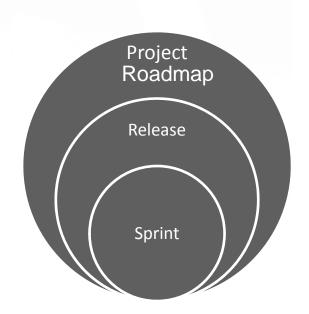
Large-scale organization





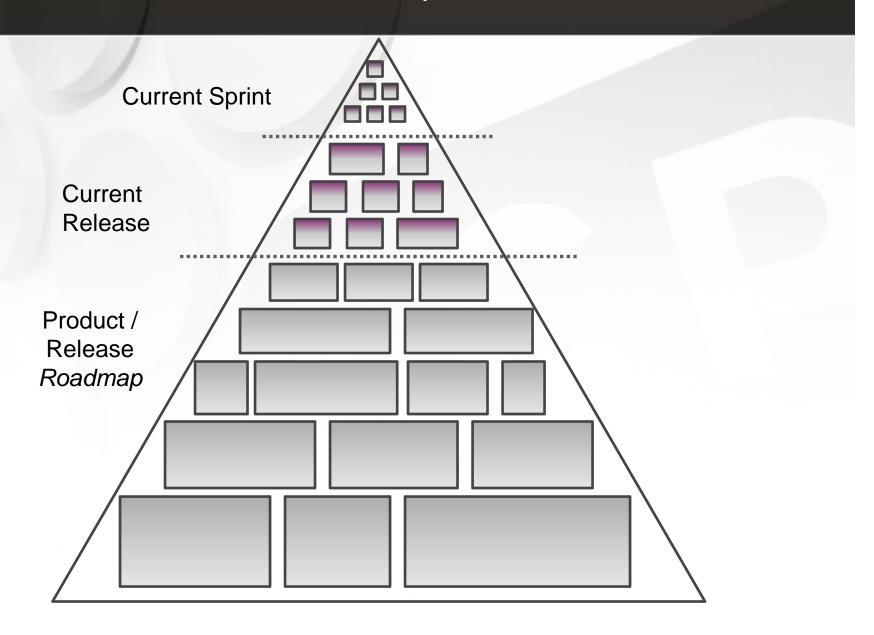
Shorter More Frequent Releases

- 4 5 Sprints plus a hardening sprint
 - Hardening sprints are for polish
 - No new feature development
- Focus around clear release goals
- Teams define, build, and verify features or components
- Output stable polished vertical slice of the product



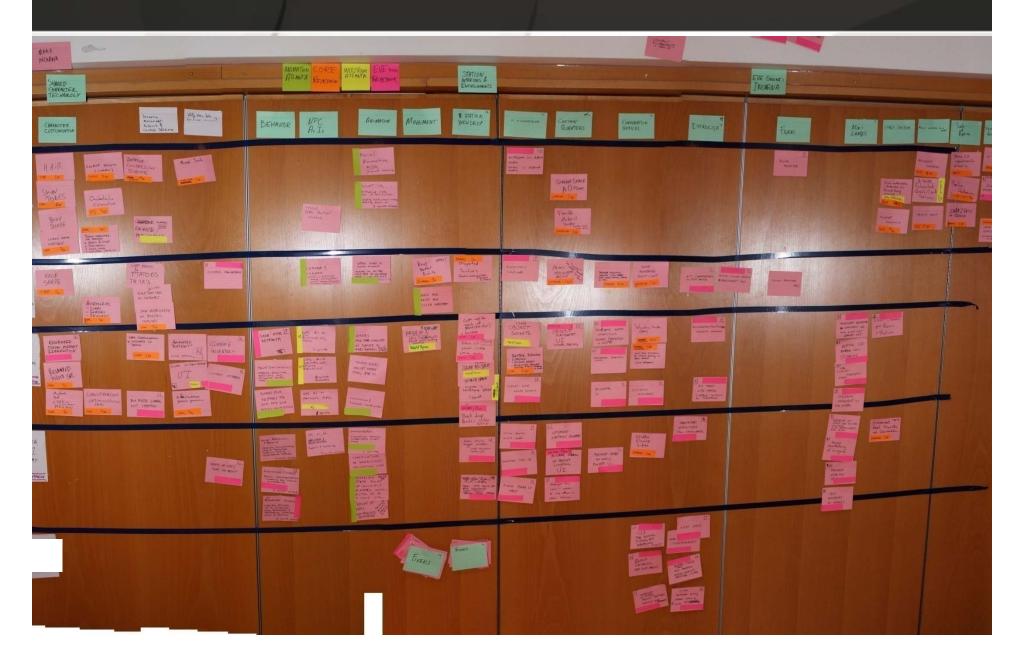


Shorter More Frequent Releases

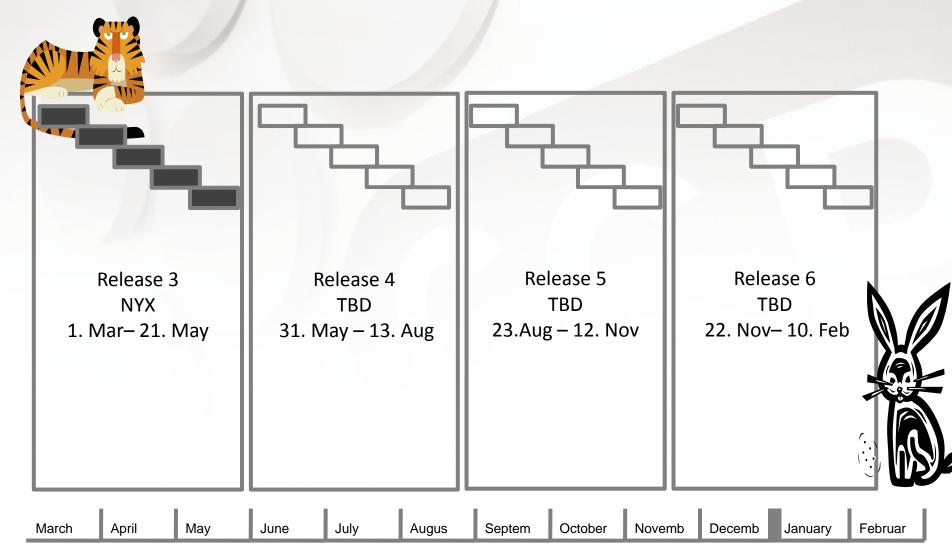




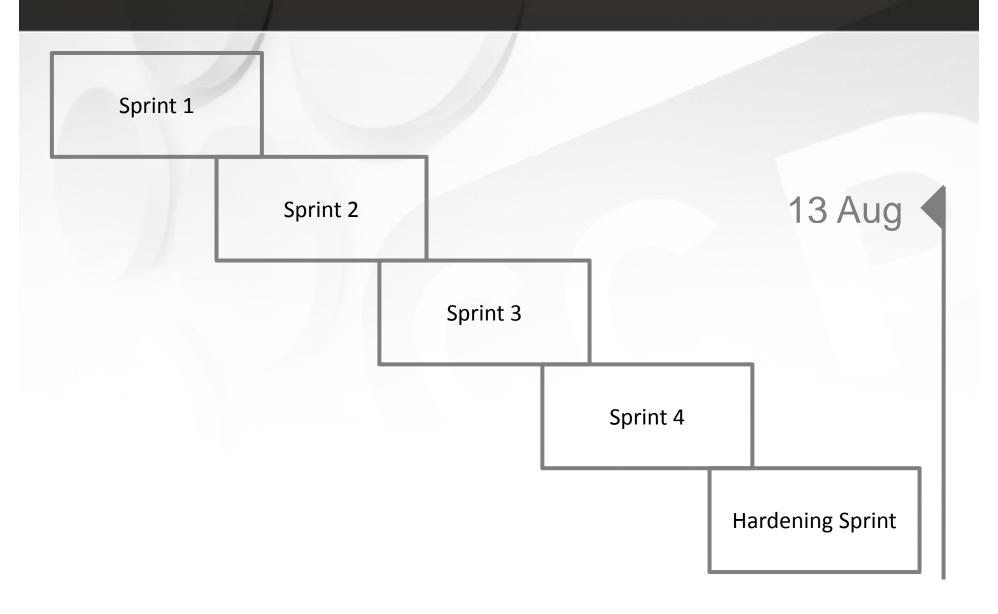
Product Roadmaps



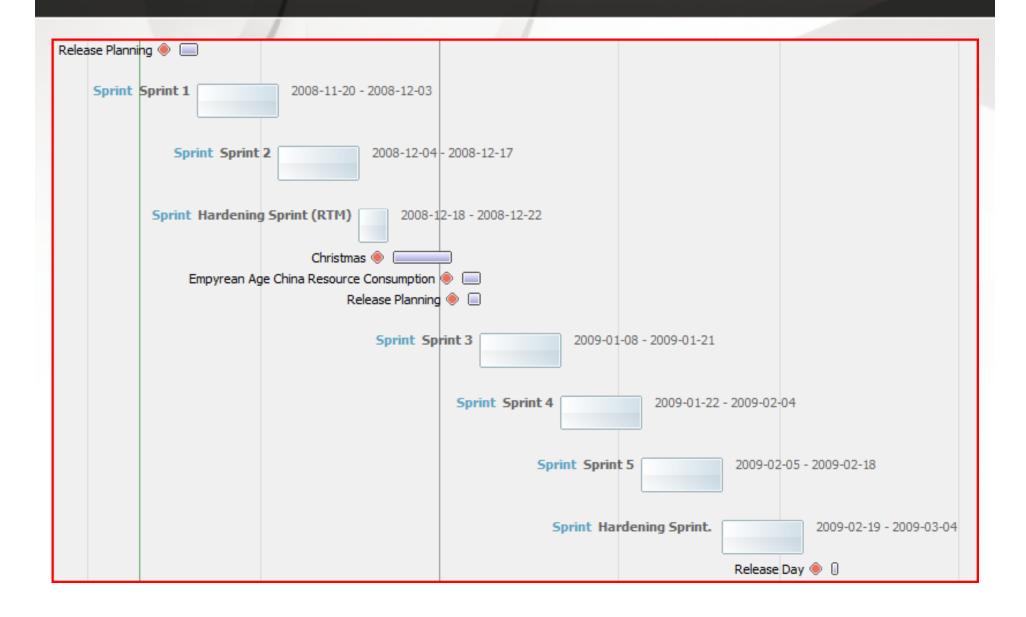




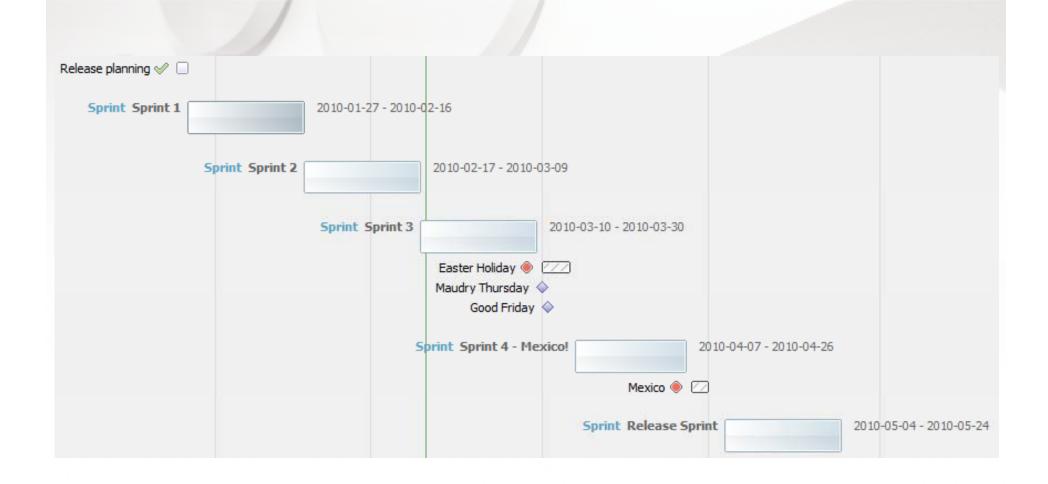












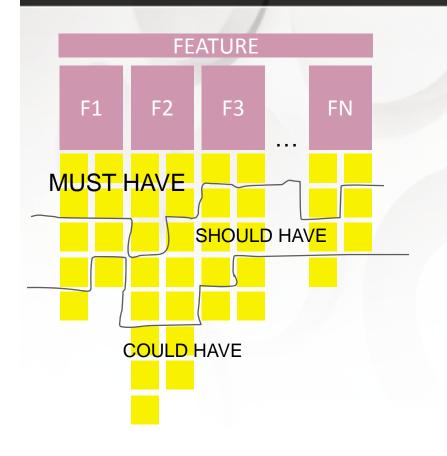


Features & Stories

How would you like to view the items? Create and structure items in a hierarchy. Let other people participate by delegating parts of product backlog. Items in a hierarchy	Items on a wall Items prioriti	sed	4 ▷
1 Insert backlog item	Hide items >> More	⊡ Find	Print
Item name Ma	ajor Feature (Epic)		
EVE Online: Tyrannis			_
☐ Planetary Interaction ☐	Sub Feature		
□ Internal Trade	Cab i catare		=
 As an industrialist, I make a trade agreement with other 	industrialists on the planet, so that I can p	orofit from specialization 🦲 🖵	
 As an industrialist, I can execute a sale based on a trade 	e agreement, so that I can profit from spe	Stories	
 As an industrialist, I can cancel a trade agreement, so the 	nat I can back out if the agreement is not b	being honor Stories	
 As an industrialist, skills can affect attributes on my pins. 	, so that I can specialize as an industrialist		
 As an industrialist, I haggle with other players at trade p 	oins, so that I'm encouraged to interact wit	h others 🗔	
 As an industrialist, pins can affect attributes on other pir 	ns, so that I can invest myself in the plane	t 🗎 🥦	
 As an industrialist, pins can affect attributes on my pins 	winthin a certain radius, so that I can inve	st myself in the planet 🗔	
□ Pins □			
 As an industrialist, building pins and links have an associa 	ated power cost, so that I cannot spam pir	ns and links on planets 📴	
 As an industrialist, my infrastructure pins function accord 	ding to spec, such that I can run my opera	tion on the planet 📴	
 As an industrialist, I can see the location and basic information 	mation of my pins on the planet, so that I o	can easily get an overview of them 📙	
 As an industrialist, I can build a particular pin within my d 	deployment zone on a planet, so that I can	expand my colony 🔚 🖵	
 As an industrialist, I can see detailed information about of 	one of my pins, so that I can manage it 📙	7	
 As an industrialist, I have a polished detailed information 	n view for pins, so that I can easily manage	eit 🕞	
□ Command Pins □			
 As an industrialist, I can deploy a command pin on a plan 	net from my cargo such that I can build a co	olony 🕞	
 As a industrialist, I can dick a "deploy command pin" but 	ton in the planet view, so that I can deploy	command pins without using a right-click me	enu 🗔
 As an industrialist, I can export commodities from the plan 	anet via my command pin, so that I can pro	ofit from my operation 🕞	
 As an industrialist, my command pin can store a finite am 	nount of commodities, so I can export them	off the planet at my leisure 📙	
· III			-
(Colombad: 4 of 120 ibarr/s)			



Features & Stories



MuSCoW Analysis

Must Have

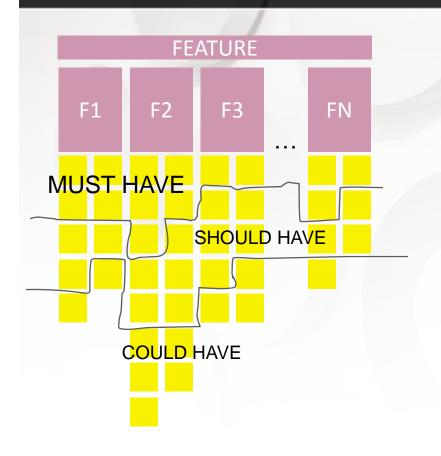
Should Have

Could Have

Won't Have

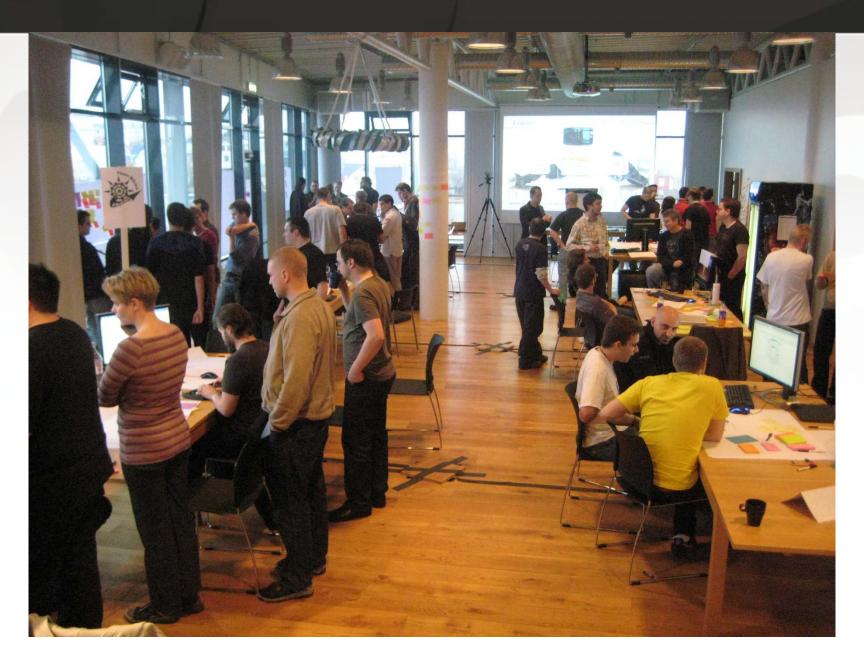


Features & Stories





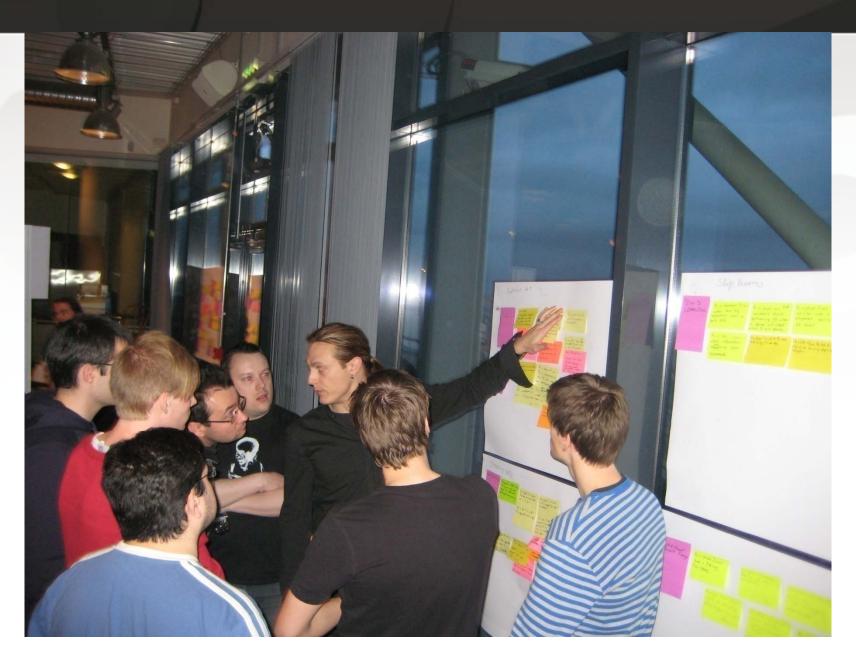












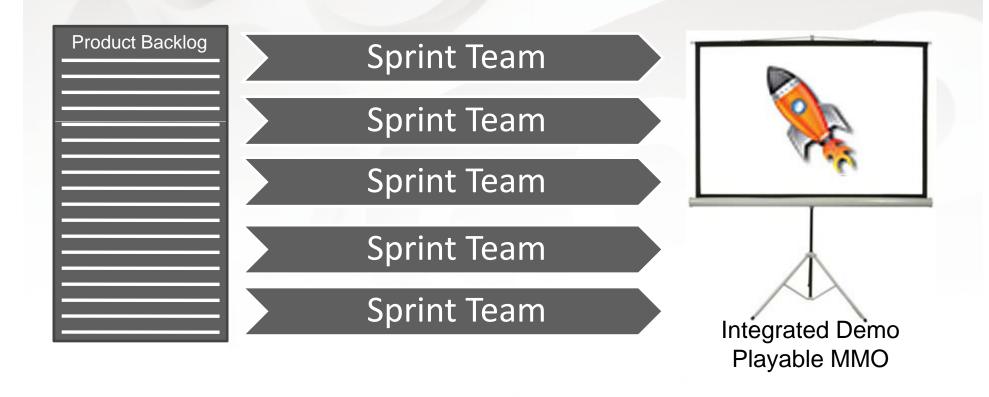






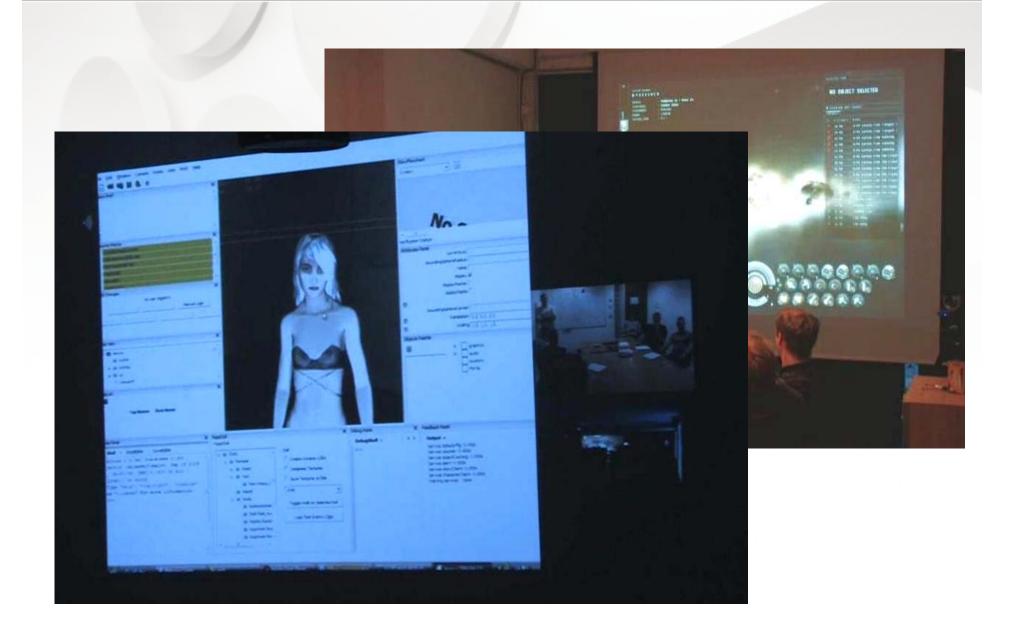


Synchronized Iteration Cadance



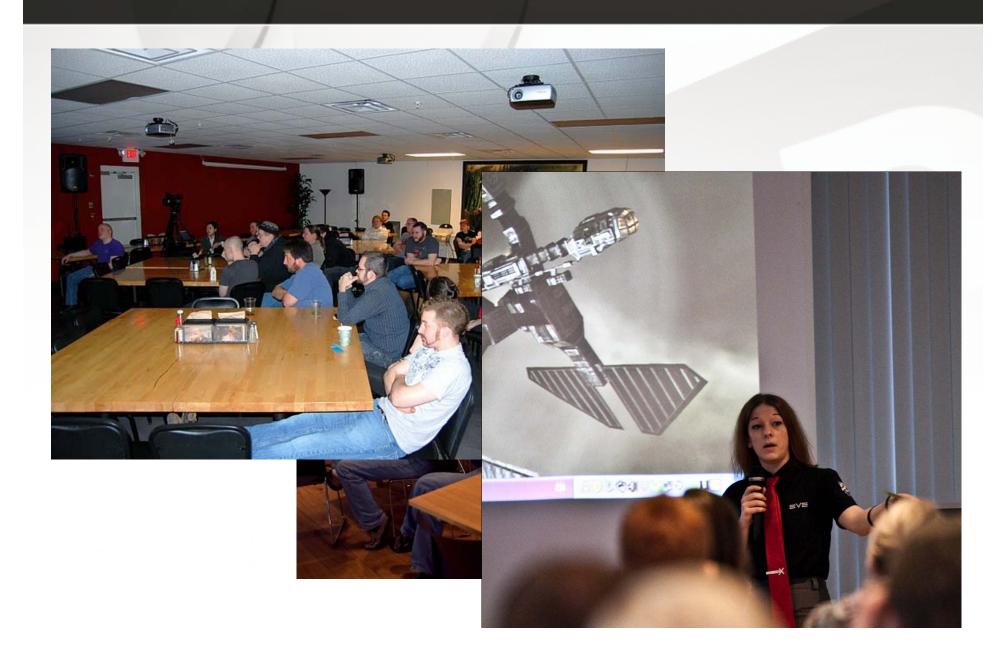


Global Sprint Review



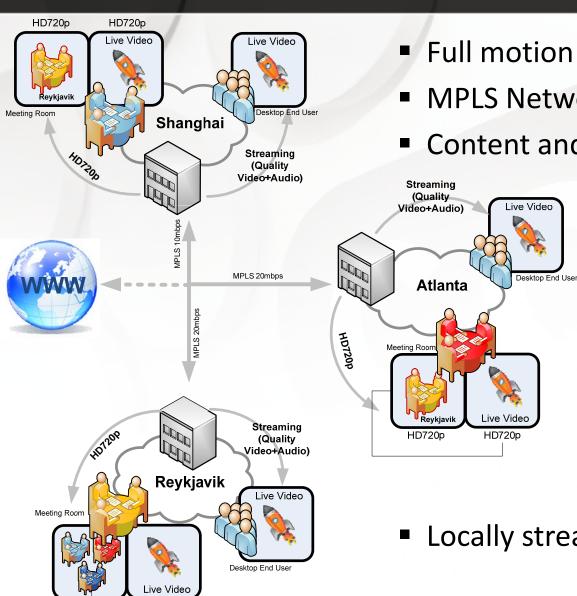


Global Sprint Review





Global Demo via HD Video Conference



HD720p

- Full motion 720p / 30 fps
- MPLS Network Infrastructure
- Content and presenter

Locally streaming in all offices.



Release Boundary

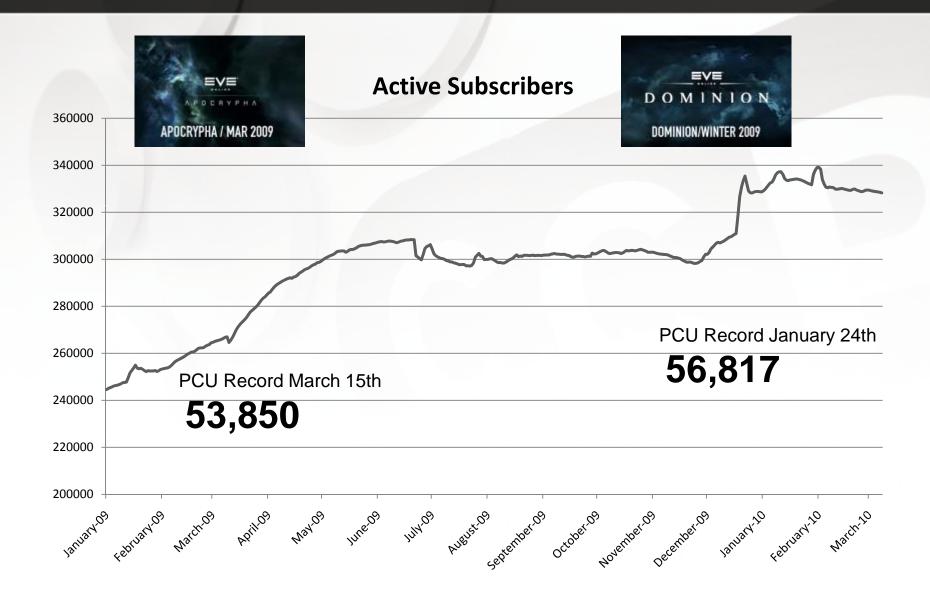
- Hardening sprints.
 - Stabilization and polishing.
 - Large scale tests.
 - Not a duping ground for sloppy work.
 eg. Bug-fixing, Tuning, Balancing.
- Release overhead
 - Creating patches & Installers
 - Uploading to CDN and verifying
 - Updating game cluster



Road to success

- Empowered Teams
- Self managing and self organizing
- Release Planning by the teams
- Shorter more frequent releases
- Tools that scale







2009 Game of the year awards









FOCUS



The Scrum Values

COMMITMENT **OPENNESS FOCUS** RESPECT **COURAGE**



- Maintaining Architectural Integrity
 - Agile methods promote emergent architecture.
 - What happens when architecture emerges from a dozen teams.
 - The role of the Technical Director / Architect.
 - Peer reviews, Teams cross reviews.



- Art and asset creation
 - Getting art, assets, levels or content "Done" in a Scrum Sprint has varied results.
 - Throw outsourcing in the mix.
 - Lean Production shares a lot of values and principles with Agile methods.
 - Lean Production methods and Scrum can coexist.



- Maintaining Legacy code
 - Agile methods promote test driven development.
 - Legacy code without test harnesses can severely affect velocity
 - Continuous Integration is a must.
 - Try to get as many test harnesses in the code and build processes as possible.



Cohesive Teams

- Keep the teams together
 - Build up well gelled cohesive teams
 - Avoid local optimization
 - Increases knowledge transfer







Applying the Keizen mindset of continuous improvement by reflection and adaptation

At all level of the organization

 Team retrospectives, Scrum of Scrums, Scrum Master Retrospectives, Product Owner Retrospectives, Release Retrospectives, Agile Transitioning Group.

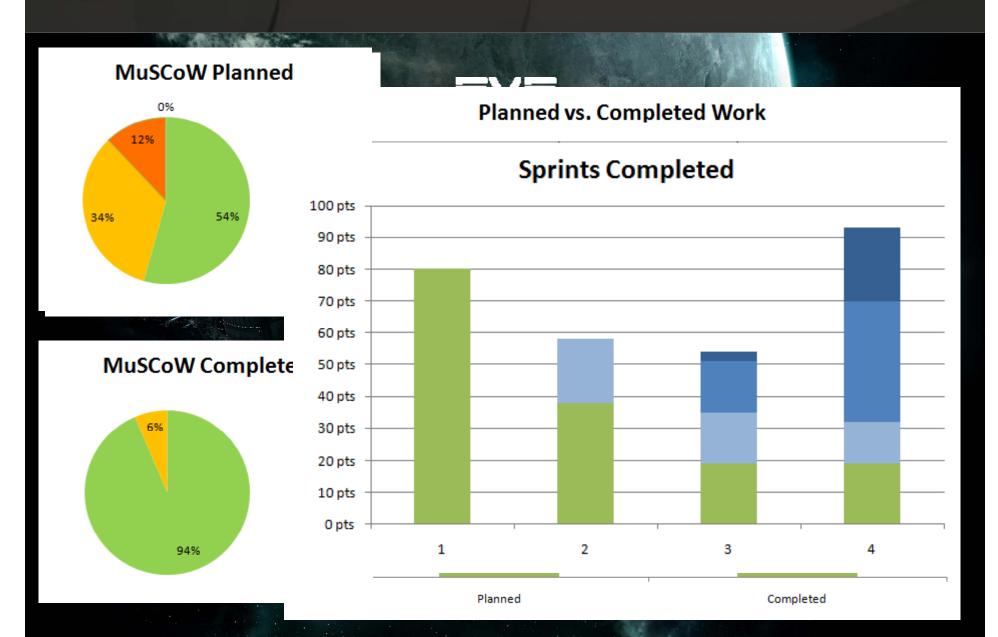
At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.



TYRANIS

- Oh No! There are only Musts
- Usage velocity for continuous improvement
- Plan for iteration











Best European Online Game:

EVE Online: Tyrannis

New PCU Record: 60.453

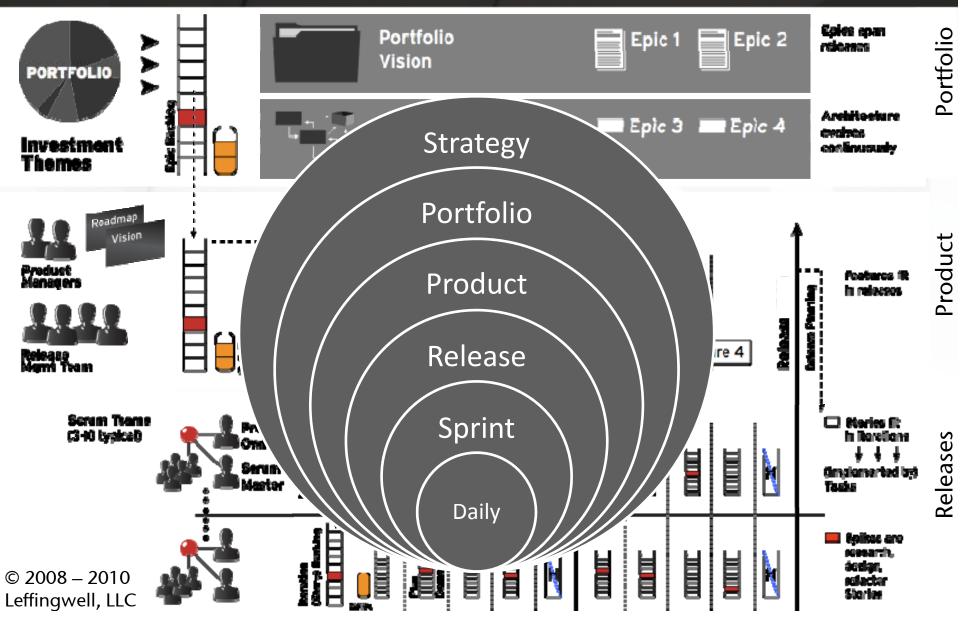


Game Design

- With multiple large intertwined game systems it is very unlikely to arrive at a good design by piecemealing it together small bits at a time.
- Game design is in essence iteration, we do it to explore multiple options ahead of implementation.
- We've implemented a framework that draws a lot of values and practices from lean thinking and lean manufacturing. The design process focuses on early iteration, mass participation, ownership of the design among the people who will implement it.
- Coming to a GDC near you.

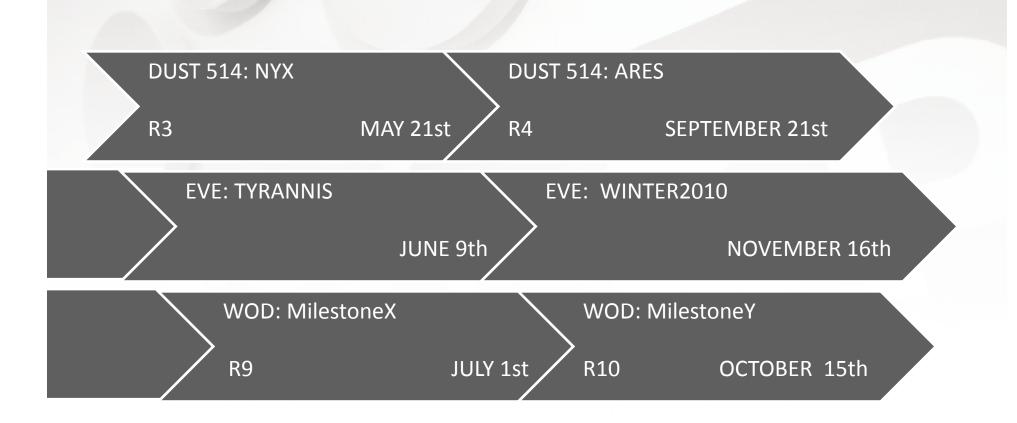


Agile drives the entire Development Organization





The CCP Release Train

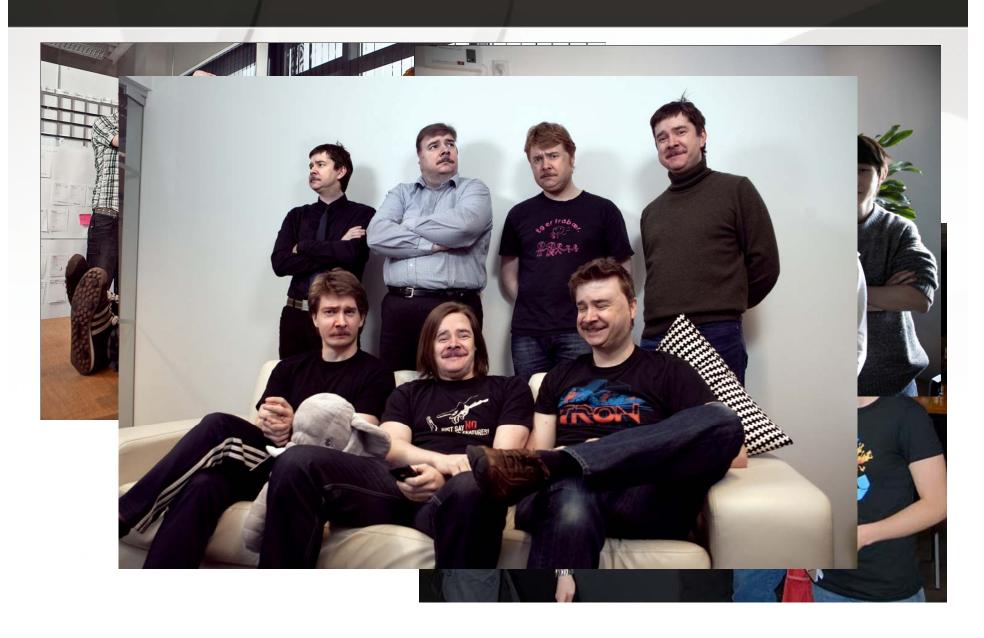


		REYKJAVIK	ATLANTA	SHANGHAI	NEWCASTLE
FEATURE COMPONENT GRAPHICS ENVIRONMENT ART	EVE	F1 ₇ C5 ₈ W1 ₉ A1 ₁₅ F2 ₇ W2 ₇ F3 ₈ F4 ₇ F5 ₈ G4 ₄	E1 ₈		
WEB	WOD	G1 ₅ G2 ₇ G3 ₄	F1 ₇ C1 ₇ E2 ₁₀ A1 ₁₄ F2 ₆ E3 ₇ F3 ₈ F4 ₃ F5 ₅		
	DUST			F1 ₆ E1 ₆ A1 ₁₁ F2 ₃ E2 ₇	F1 ₆ F2 ₃

		REYKJAVIK	ATLANTA	SHANGHAI	NEWCASTLE
FEATURE COMPONENT GRAPHICS ENVIRONMENT ART	EVE	F1 ₇ C5 ₈ W1 ₉ A1 ₇ F2 ₇ W2 ₇ A2 ₈ F3 ₈ G1 ₅ F4 ₇ G2 ₇ F5 ₈ G4 ₄	E1 ₈		
WEB	WOD	(A2 ₃)	F1 ₇ C1 ₇ E2 ₁₀ A1 ₁₄ F2 ₆ E3 ₇ F3 ₈ F4 ₃ F5 ₅		
	DUST			F1 ₆ E1 ₆ A1 ₁₁ F2 ₃ E2 ₇ F3 ₄ E3 ₆	F1 ₆ C4 ₄



Teams







Let's talk about it...



<Cue: take questions from the audience>



Contact

Aðalsteinn "Alli" Óttarsson

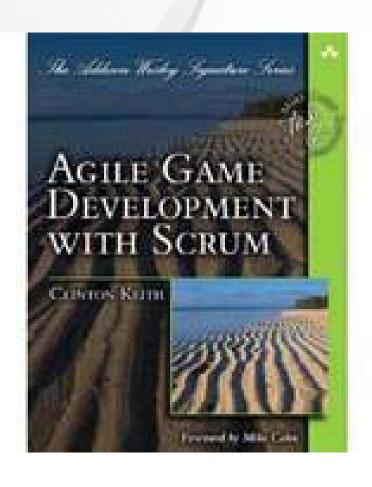
alli@ccpgames.com

http://blog.ccpgames.com/alli/





Books





Books

