Software Engineering
In Practice

Start the conversation
Peter Gfader
@peitor
Agenda aka Todo aka The Plan

• My story
  o Who is Peter Gfader?
  o What do I do?

• Collect questions and Pain

Examples:
  o What would I do if I would be 20 years old?
  o Which books influenced me the most?
About You
About Me
Süd Tiroler (Italiener)
Studiert in Wien -> TU Wien
Österreich 2 Jahre
Italien 4 Jahre
Sydney Australien 3 Jahre
Schweiz 7 Jahre
3 years in Australia
2008 - 2011
Peter Gfader

Position: Solution Architect
In Australia
  30 consultants
  5 UX designers

In China
  20 developers
Mentor & Induction Manager

Neue Mitarbeiter Onboarding
Get them up & running ASAP
Ausarbeitung von Einführungsprozess
5 “Induction Days”
Australia’s biggest Shopping website
Australia’s biggest Shopping website

• Team Lead
• Weekly Reviews with client on-site
• 2 Developers in Australia
> 1 Mio $
• Performance
• HUGE Traffic
“Search”
Australian LinkedIn portal
“Search”
Australian LinkedIn portal

- Performance
- Full Text Search
- Complex authorization
University of Technology

SQL Server 2012 for Developers

Overview

SQL Server 2012 for Business Intelligence

Overview

Developing Window and Web Application with C# and VB.NET

Duration: 3 hours x 5 weeks

Price (ex GST): $1,650

UTS Sydney
SSW Consulting has 20 years experience developing awesome Microsoft solutions that build on top of SharePoint, .NET, Dynamics CRM and TFS.

We focus on 3 things:
- Getting you a working app
- Keeping you informed
- Supporting your app

SSW offer custom software solutions to progressive businesses. Recent projects have utilized the latest Microsoft technologies including ASP.NET, MVC, Silverlight, WCF, LINQ, C#, VB.NET, SQL Server, SharePoint, Dynamics CRM, HyperV, DPM and Exchange Server.

Adam Cogan is SSW’s Chief Architect. His position as one of only two Australian Microsoft Regional Directors helps SSW deliver cutting edge Microsoft technology solutions. SSW has also successfully hosted the Sydney .NET Users Group for the past 20 years.

Real-Time Auction System

proudly developed by SSW and AuctionsPlus

AuctionsPlus is a service provider for electronic online auctions established in the mid-1990s. AuctionsPlus approached SSW to re-develop their existing online Auction Platform on a newer technology, to improve the throughput and workflow of the Auction system and to enhance the user experience. The existing technology has a number of limitations, was hard to maintain and presented an old and tired interface to the end-users.

Baby steps to success

In 2 week iterations, the team achieved their project objectives and succeeded in releasing the software in March 2011. The 3-week trial phase enabled the team to collect all user feedback and to make sure that everyone was happy with the final product.

Solution

The solution was built on SQL Server, IIS, WCF, ASP.NET MVC and Silverlight. Using Silverlight helped to overcome some limitations that would not have been possible in other technologies such as Java and HTML+JavaScript, without being too dependent on the web browser and operating system.

Benefits

Reports from end-users show that the new auction platform is easier to use, better performing, and quicker to get common tasks done.

Happy internal users, happy developers then finally happy end-users, was achieved in a time frame of 10 months.

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Peter Cofader Team Lead | +61 4 0510 1066 | PeterCofader@ssw.com.au
AuctionsPlus

Performance: 250ms
Scalability: 1000 users simultaneous

Dev time: 1 year
6 Developers, 1 UX Specialist

> 1.5 Mio $ AUD
Me as offshore developer

- Working from Italy for Australia
- 9 hours time difference
Me as offshore developer

- Working from Italy for Australia
- 9 hour time difference
Zühlke
since 2011
Organisator

https://www.meetup.com/Software-Craftsmanship-Zurich/
Report Generation Tool

• 100 people
• High performance
• Data quality
Coding Nights @Zühlke

Every 2nd Wednesday
Code & Fun
How does it look like?

Working @ Zühlke
Zühlke “Rent a Startup”

https://www.zuehlke.com/ch/de/rent-a-startup/
MyZurich

- https://www.youtube.com/watch?v=0GuScMdgciI&list=PL992A35B3EFD12663
• Clean Code Kurs
• 60 Teilnehmer
  o Entwickler, Architekten
  o Java + .NET
SIEMENS

swissport

PILATUS

SOS KINDERDORF

BIT ORF UFIT UFIT

USTER®

Think quality

ZURICH

SIX GROUP

Software Craftsmanship Zürich

https://www.meetup.com/Software-Craftsmanship-Zurich/

PRIVATE LIFE

COACH

TRAINER

DEVELOPER
Public Speaker
Articles
USE SCRUM + CONTINUOUS DELIVERY TO BUILD THE RIGHT THING

Wednesday, August 29, 2012 - Peter Glauder in Community Publications

How often do you release your product to your end users? How often do your end users see and use your product? Do you release in sync with your Sprint length, after the Sprint Review? Is the Sprint Review meeting the only valid release point? When do you plan your releases? Learn how the cadence of Scrum and Continuous Delivery can help you build the right thing, and when implemented properly, release it on time to ultimately deliver superior value to your customers.

[Read the full article...]
Scrum und Continuous Delivery kombinieren

Gemeinsam stark

Zügige Rückmeldungen von Nutzern helfen, neue Merkmale schnell umzusetzen. Damit Entwickler und Endanwender zusammenfinden, lassen sich Scrum und Continuous Delivery gut kombinieren.

...Zu den wichtigsten Konzepten agiler Softwareentwicklung gehört schnelles Feedback, am besten in Form kleinerer und größerer Feedbackzyklen, je nach Produktionsstadium; Abbildung 1 zeigt die verschiedenen Zyklen und ihr Zusammenwirken in einem Überblick. Dieses Feedbackkonzept hat sich in den vergangenen Jahren zur Idee von „Continuous Delivery“ entwickelt, also zur „kontinuierlichen Auslieferung“ des jeweiligen Systems, das im Lauf dieser Zyklen permanent neu überarbeitet wird. Dies soll es ermöglichen, das Produkt mit Produkten macht, die es vor fünf Jahren noch gar nicht gab [3].

Um in diesem Wettlauf mithalten zu können, muss sich ein Unternehmen anpassen und auf Kundenbedürfnisse und -wünsche schnell reagieren können. Dies lässt sich durch einen erfolgreichen Einsatz von Continuous Delivery gewährleisten – wobei „continuous“ nicht gleichzusetzen ist mit „ständig“, wie der Kasten Continuous oder on-Demand? verdeutlicht.

Probleme bei der Freigabe
My communities
Professional Scrum Developer Trainer

improving software development with Scrum.org™
200 Trainers worldwide

MVPs, Agile Coaches, Software Consultants

http://www.scrum.org/find-a-scrum-expert/
Peter Gfader’s brain noise

Did BBC learn about the China earthquake via Twitter or via the US geological office?

More and more news magazines are using Twitter as their news source. Did a fake news entry ever get published? We might never know ;)

Article from 2008
http://www.bbc.co.uk/blogs/technology/2008/05/twitter_and_the_china_earthquake.html

Posted 3 days ago 0 Comments
Tagged: twitter, news, myth.

Are “Done” Increments your first step to agility?

Great article by David Starr and Ken Schwaber with lots of gems

Delivering a done increment is critical to being successful with agile software development. Using real-world and theoretical examples, the authors demonstrate the difference between perception of “done” and the reality of “done.”
Peter Gfader's Adventures With Organisations.

Book Review: Tribal Unity from Em Campbell-Pretty @prettyagile

I got this book recommended by a Spotify coach and had quite high expectations.
http://blog.gfader.com/

~200 views / day
Microsoft Advisory Board für Visual Studio vNext

• Provide feedback
• Talk to the Visual Studio Team
• Elected with 100 developers
What made me grow the most?
“Strong Style”
Pair Programming

http://llewellynfalco.blogspot.com/2014/06/llewellyns-strong-style-pairing.html
Mob Programming

https://www.agilealliance.org/resources/experience-reports/mob-programming-agile2014/
What made me grow the most?

- Feedback
  - via blog, twitter, reviews, retros, working in Pairs
- Getting out the comfort zone
- Coaching Stance
- GTD
- Find your Yoda
Q & A
Innovation ist ein Teil deiner DNA?

Jetzt informieren und bewerben: zuehlke-careers.com

Talent Pool, um in Kontakt zu bleiben

Peter Gfader
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Books to Read
• The Pragmatic Programmer
• Growing Objected Oriented Software Guided By Tests
  http://www.growing-object-oriented-software.com/
• Clean Code - Robert Martin
• Software Architecture For Developers – Simon Brown
  https://leanpub.com/u/simonbrown
• Your Code As a Crime Scene – Adam Tornhill
What is PretoTyping?
Prototype Example (Pinocchio)

Simulate living room ambience effect of flat screen TV (compared to CRT)

Around 2002

From Tom Kelly „the ten faces of innovation“
Prototype Example (Explainer Video)

Test vision of cloud service offering - Dropbox

https://www.youtube.com/watch?v=7QmCUDHpNzE
Exercise: How would you prototype this?
# Pretotyping

http://www.pretotyping.org/

Design Agency Trolls Ikea Places Its Product In Store- WALHUB
https://www.youtube.com/watch?v=XVnqSIVG6WE
UX
• https://goodui.org/
AB Tested User Experience
Agility – Why Now?
Why Now?

Employment Options
• 1) The employee
• 2) The independent consultant
• 3) The entrepreneur
What is a successful project?
What is a successful project?

Project A

Scope

SUCCESS

Budget
Schedule

Customer

Happy stakeholder

Users

Development team

Henrik Kniberg
What is a successful project?

Project A

- Scope
- Budget
- Schedule

SUCCESS

Project B

- Scope
- Budget
- Schedule

Happy stakeholders!
What is a successful project?

Project A: SUCCESS
- Scope: ✔
- Budget: ✔
- Schedule: ✔
- Happy stakeholders: ✔

Project B: FAILURE
- Scope: ✗
- Budget: ✔
- Schedule: ✔
- Happy stakeholders: ✗

Project C: SUCCESS
- Scope: ✗
- Budget: ✔
- Schedule: ✔
- Happy stakeholders: ✔

Happy stakeholders:

Henrik Kniberg
Always Ask „Why?“
Always ask Why
Always ask Why

We need to get to the other village without getting wet.

Options:
- Bridge
- Ferry
- Tunnel
- Move the villages together
- Reroute the river
Do Less
100% resource utilization = 0% flow

High resource utilization

Fast flow
Beware the “productivity” illusion!

- Nobody actually wants software.
- Your job is to produce as LITTLE software as possible to solve the business problem.
Ask for the „End user“
Minimize distance between Maker and User

1. People (number of handoffs)
2. Time (feedback delay)
Agile Stuff
What is all this stuff?

XP
Kanban
Lean
Crystal
DSDM
RUP
Scrum
SAFe
Enterprise Scrum
Agile
What problem does Agile solve?
Uncertainty.
«We don’t know»
Uncertainty.

«We don’t know»

Stacey Matrix

http://www.gp-training.net/training/communication_skills/consultation/equipoise/complexity/stacey.htm
Comparing Agile And Plan-Driven

Visibility

Ability to Change

Business Value

Risk

Plan Driven

Agile
What is agile?

A **mindset** to deliver value faster and continuously improve the way doing it.
Slice your problem
Inspect and Adapt
A mindset to deliver value faster and continuously improve the way doing it. #Idefineagile

https://twitter.com/peitor/status/425718700290105344
You need more than a mindset

- Scrum
- Agile
- Pair Programming
- User Stories
- Planning Poker
- Relative Estimation
- Release Planning
- Just in Time Planning
- User Stories
- Collective Ownership
- Planning Poker
- Continuous Delivery
- Build Automation
- Test Driven Development
- CI
- Continuous Deployment
- Design for Operations
- Refactoring
- Information Radiators
- Pair Working
- Relative Estimation
- Design Patterns
- Burndown Charts
- Executable Specifications
- ATDD
- Specification by Example
- BDD
- Pair Programming
- Emergent Architecture
- Reducing Technical Debt
- Continuous Delivery
- Build Automation
- Test Driven Development
- Continuous Deployment
- Design for Operations
- Refactoring
- Clean Code
- Agile

@peitor
http://agilemanifesto.org
Can you admit that you don’t know?
You should!
You should!

Or someone else does
Uber, the world’s largest taxi company **owns no vehicles.**
Uber, the world’s largest taxi company owns no vehicles. Airbnb, the world’s largest accommodation provider owns no real estate.
**Uber**, the world’s largest taxi company **owns no vehicles**.

**Airbnb**, the world’s largest accommodation provider **owns no real estate**.

**Facebook**, the world’s most popular media provider **creates no content**.
Uber, the world’s largest taxi company owns no vehicles. Airbnb, the world’s largest accommodation provider owns no real estate. Facebook, the world’s most popular media provider creates no content. Instagram, the most valuable photo company, sells no cameras.
Uber, the world’s largest taxi company owns no vehicles.
Airbnb, the world’s largest accommodation provider owns no real estate.
Facebook, the world’s most popular media provider creates no content.
Instagram, the most valuable photo company, sells no cameras.
Netflix, the fastest growing television network, lays no cables.
Uber, the world’s largest taxi company owns no vehicles. Airbnb, the world’s largest accommodation provider owns no real estate. Facebook, the world’s most popular media provider creates no content. Instagram, the most valuable photo company, sells no cameras. Netflix, the fastest growing television network, lays no cables. Alibaba, the world’s most valuable retailer has no inventory.
Suprises?
• Flexible Workplace
• Kommunikation
• Continuous Learning
Get Inspired
# Inspire by
What exists already

- http://37signals.com/bootstrapped
- http://www.producthunt.com/
- http://betalist.com/
# Inspire by Failure & Feedback

- [http://autopsy.io/](http://autopsy.io/)
- Amazon 2 ** reviews
What do you start tomorrow?

Continue the conversation
Homework

• Check the links on my Twitter feed https://twitter.com/peitor

• Sign the Agile Manifesto http://agilemanifesto.org