



THE UNIVERSITY OF
MELBOURNE

SWEN90016
Software Processes & Project Management

SDLCs Case Study

Marion Zalk

Department of Computing and Information Systems

The University of Melbourne

mzalk@unimelb.edu.au

2021 – Semester 1

Lecture 3

Background

Early '90s, sending and receiving payments online between individuals was not an easy process.

People didn't even imagine the possibility of such transactions, even though banks and other financial institutions had the means of conducting them.

Used in 200+ countries in the world.

50+ currencies

A success story

An example of first mover advantage.

- 1998: Initial product created to encrypt word documents
But no one wanted to keep word documents secret
Encrypted money transfer between PalmPilots
The **first tool** to transfer money electronically
Built web interface as a sales demo tool **ACCIDENT**
PalmPilot device not popular, so demo-ed the tech on the web
- 1999: Encrypted money transfer **service** component
- 2000: Merge with an online bank (Elon Musk- X.com)
- 2001: Changed name to PayPal (Confinity + X.com)
- 2002 Listed on NASDAQ; Acquired by Ebay

Slow down

2002 -

Company was small, they could rapidly build solutions which put them at the leader

Innovation began to decrease, release cycles increased from weeks to months and many months

2008 - 6 key drivers for the slow down

1. Annual Planning –defined and documented in a Product Requirements Document (PRD) which could take months and were often out of date before coding began.

[1]

Slow down

2. Complex quarterly planning

New process for planning to allow for more flexibility, added complexity

3. Domain bottlenecks

Divided the environment into 85 domains, unintended consequence was a bottleneck at certain key areas (necessary for every project). These included risk, compliance, payments.

4. Developer context switching

To enable more projects to kick-off, developer were assigned to multiple projects during planning. This context switching reduced productivity of the individual and team.

[1]

Slow down

5. Traditional waterfall development

To facilitate and coordinate efforts across the organisation, they used waterfall. Those teams that had developed using grass root agile efforts were forced to follow the strict process of Waterfall.

6. Integration testing cycles

To ensure quality of each release- rigorous testing required, code branches grew and integration and testing cycles increased even for the smallest change- 6 weeks of integration testing cycle to ensure it didn't break the site.

[1]

Results

People (developers) were frustrated.

Exec management was frustrated.

Customers were frustrated

What happened?

[1]

Results

2012

PayPal promoted David Marcus- President
Focus was on the customer

Kirsten Wolberg joined as Lead Technology Business Operations
(had experience with agile as CIO at salesforce.com)

Alignment executive sponsorship and leadership with the employees and this enabled PayPal to embark on a radical transformation.

[1]

References

[1] (10 March 2021) PayPal Enterprise Transformation

Available:

https://www.paypalobjects.com/webstatic/en_US/mktg/pages/stories/pdf/paypal_transformation_whitepaper_sept_18_2015.pdf