



THE UNIVERSITY OF
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SWEN90016
Software Processes & Project Management

Risk Management Case Study

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2021 – Semester 2
Lecture 3

slido



In one (or 2) word(s), how would you describe risk?

① Start presenting to display the poll results on this slide.



Who is responsible for identifying and analysing risk (in Formal approaches)

① Start presenting to display the poll results on this slide.



Why should we manage risk?

① Start presenting to display the poll results on this slide.

Risk Planning Risk Management Plan



1. Plan Risk Management
2. Identify Risks
3. Perform Qualitative Risk Analysis
4. Perform Quantitative Risk Analysis
5. Plan Risk Responses
6. Control Risks

Kinds of Risks:

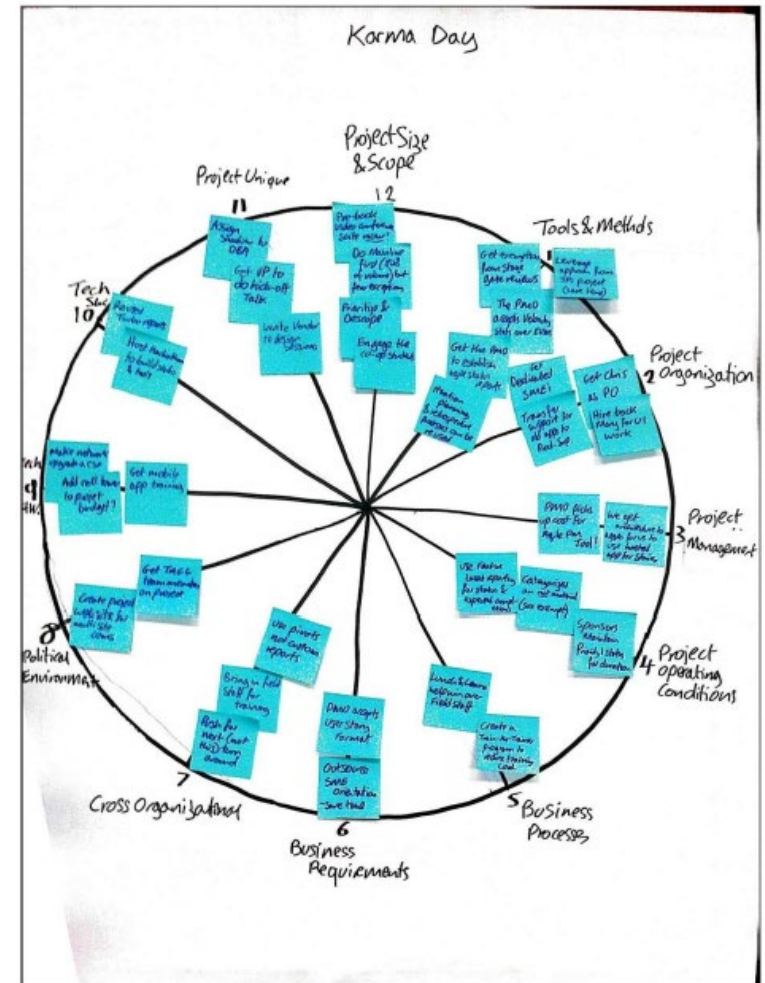
Project
Product
Business

Identification Techniques:

| | |
|---------------|---------------|
| Pondering | Interviewing |
| Brainstorming | Checklists |
| Delphi | SWOT Analysis |

Agile Risk Management- Identification

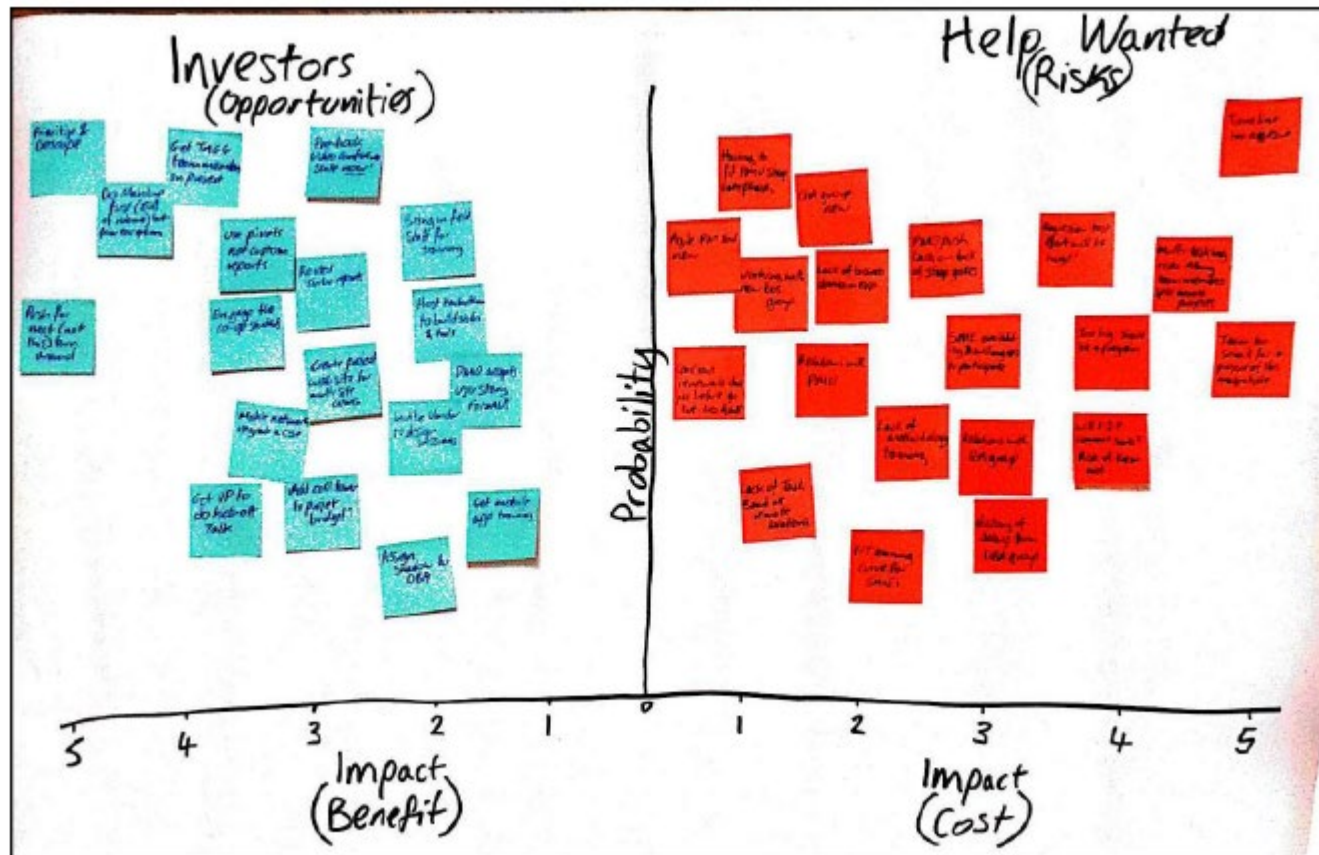
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Griffiths, M. (Aug 2012). Collaborative Games for Risk Management A walkthrough of the method and games used to implement a whole team approach to proactive risk management. <https://leadinganswers.typepad.com/files/collabortive-games-for-agile-risk-management-1.pdf>

Agile Risk Management- Analysis

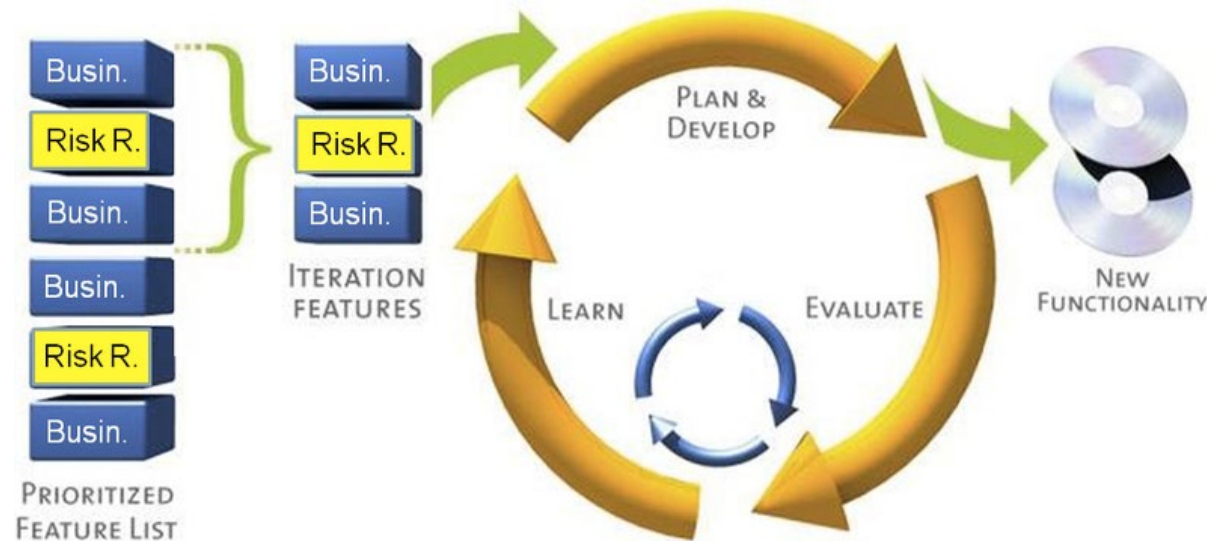
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Identify – Capture risks in Product Backlog

Analyze – Product Backlog groomed, and priority given to all User Stories, including those which capture risk



Respond – Mitigate Risk in Sprint

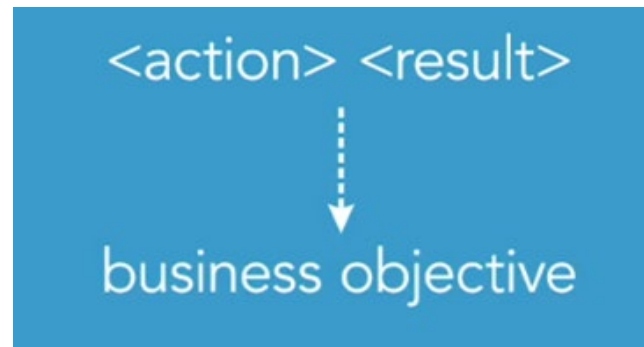
Monitor – During Sprint Review, Retrospective & Planning

leadinganswers.typepad.com/leading_answers/2007/09/agile-risk-mana.html

Sprint Review risk evaluation

The format of a **risk item** in the Product Backlog can vary

Optionally use Feature-Driven Development (**FDD**) syntax, (when the role is not obvious)



www.mountaingoatsoftware.com/blog/not-everything-needs-to-be-a-user-story-using-fdd-features

An FDD feature is written in this format:

[action] the [result] [by|for|of|to] a(n) [object]

As examples, consider these:

Estimate the closing price of stock

Generate a unique identifier for a transaction

Change the text displayed on a kiosk

Merge the data for duplicate transactions

<https://www.mountaingoatsoftware.com/blog/not-everything-needs-to-be-a-user-story-using-fdd-features>



Scrum master manages risk daily by removing impediments- just in time
Product owner- Business risk managed by product owner; Add risk items; Prioritisation of Product Backlog
Developers - Cost estimation Story Points
Dev team + Product owner/client – Daily Stand-ups, Sprint planning, Sprint Retrospective and Sprint Review

Risk identification techniques

- Pondering
- Interviewing
- Brainstorming (WBS) learn about in project scheduling!
- Checklists:
- Delphi Technique:
- **SWOT Analysis**

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Pondering (This is one of the initial risk assessment tasks used in many projects_

- This simply involves an individual taking the “pencil and paper” approach of risk identification, which involves sitting and thinking about the possible risks that could occur in the project

Interviews/questionnaires

- Interviewing project stake holders, or asking them to fill out questionnaires, to harness their knowledge of a domain
- It is unlikely that a risk manager in a software project will have sufficient knowledge of the methods and tools to be employed to provide a comprehensive view of the risks, so input from stakeholder and domain experts is essential

Brainstorming

- The team can use a *risk framework* or the *Work Breakdown Structure (WBS)* to identify threats and opportunities
- The key is to encourage contributions from everybody
- The group then discuss and evaluate

Checklists

- This involves the use of standard checklists of possible risk drivers that are collated from experience
- These checklists are used as triggers for experts to think about the possible types of risks in that area

Delphi Technique

- A group of experts are asked to identify risks and their impact
- The responses are then made available to each other anonymously
- The experts are then asked to update their response based on the responses of others – repeated until consensus is reached

Google Checkout was an

Online payment processing service provided by Google

Aimed at simplifying the process of paying for online purchases

Discontinued on November 20, 2013 and the service moved to Google Wallet (now called Google Pay).^[1]

Users would store their credit or debit card and shipping information in their Google account

Purchase at participating stores by clicking an on-screen button.

Google Checkout provided fraud protection and a unified page for tracking purchases and their status.

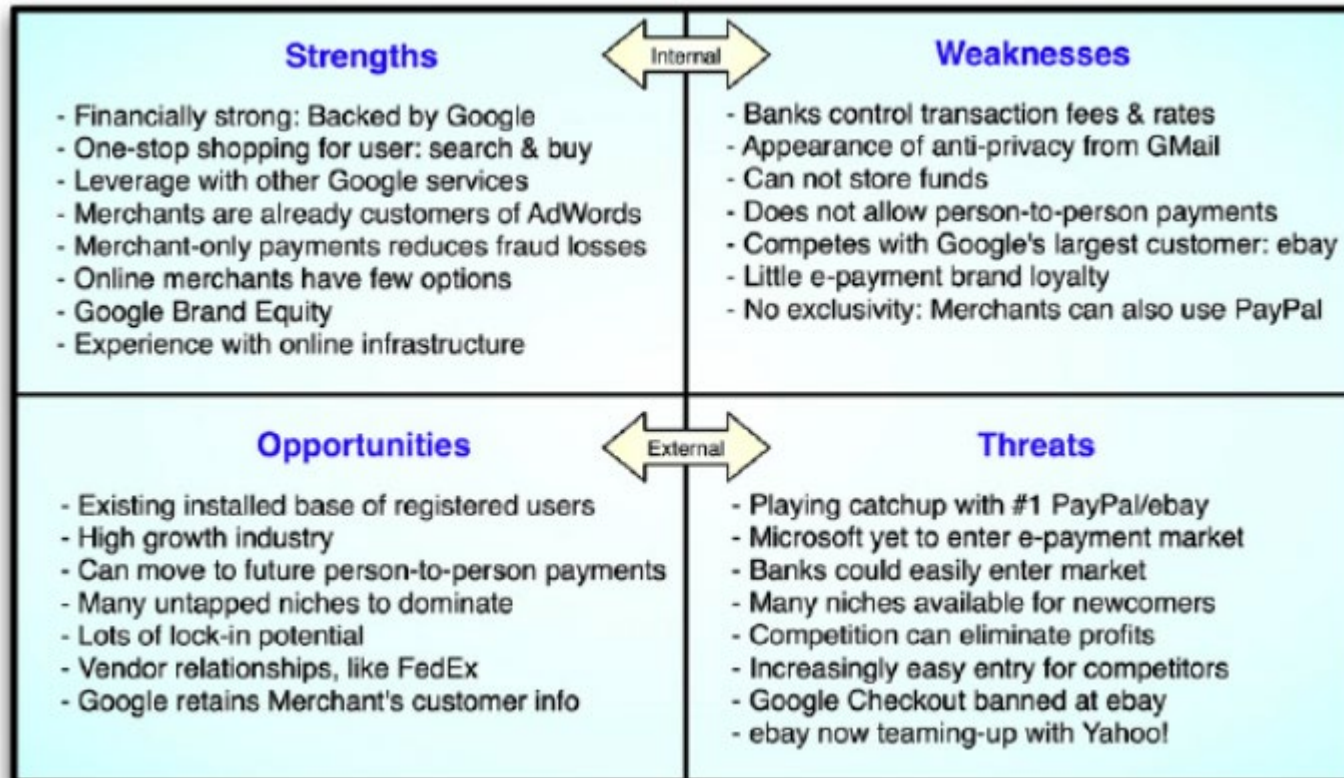
Google Checkout

| | |
|---|---|
|  | |
| Developer(s) | Google |
| Initial release | June 28, 2006 |
| Final release | Online / June 28, 2006; 15 years ago (US), April 13, 2007; 14 years ago (UK) |
| Operating system | Cross-platform (web-based application) |
| Website | pay.google.com  |

https://en.wikipedia.org/wiki/Google_Checkout

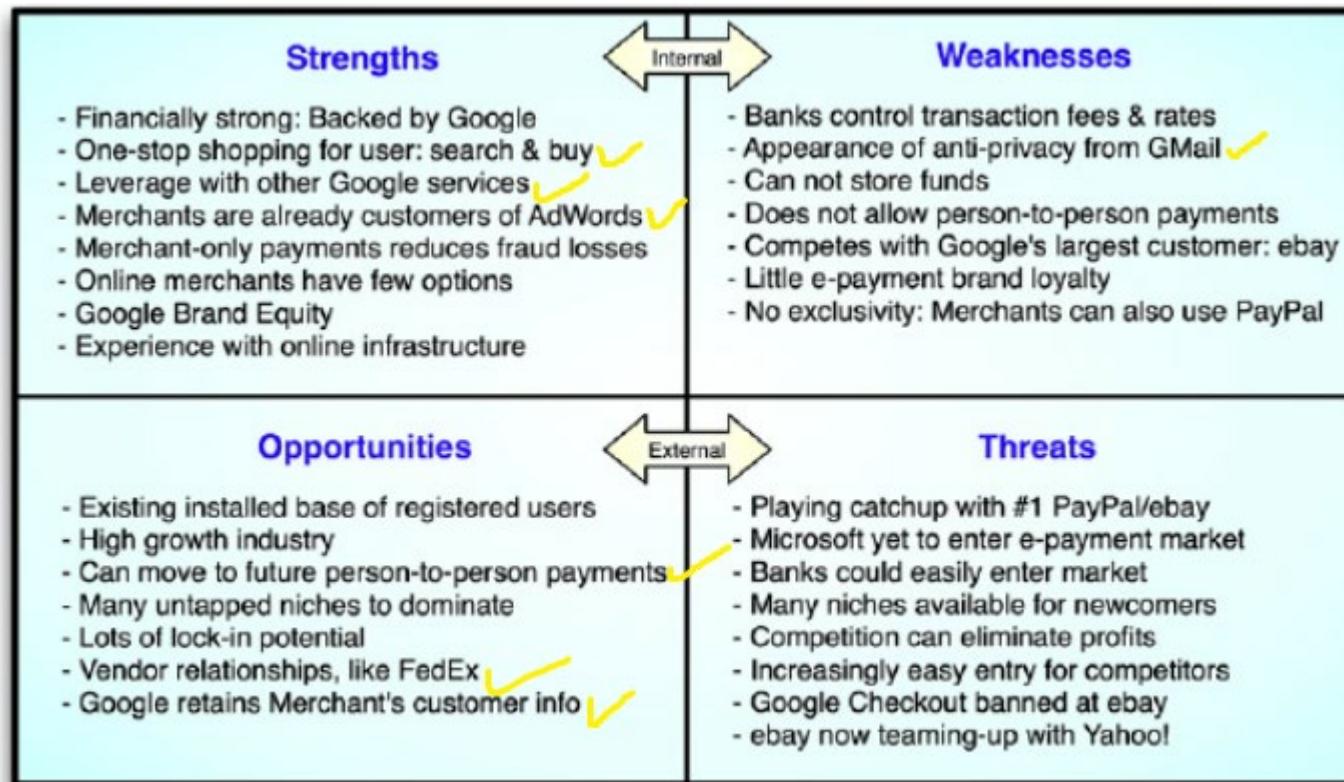
Risk Analysis

SWOT analysis of Google Checkout. **S**trengths, **W**eaknesses, **O**pportunities and **T**hreats



Fenwick, David & Daim, Tugrul & Gerdri, Nathasit. (2009). Value Driven Technology Road Mapping (VTRM) process integrating decision making and marketing tools: Case of Internet security technologies. Technological Forecasting and Social Change - TECHNOL FORECAST SOC CHANGE. 76. 1055-1077. 10.1016/j.techfore.2009.04.005.

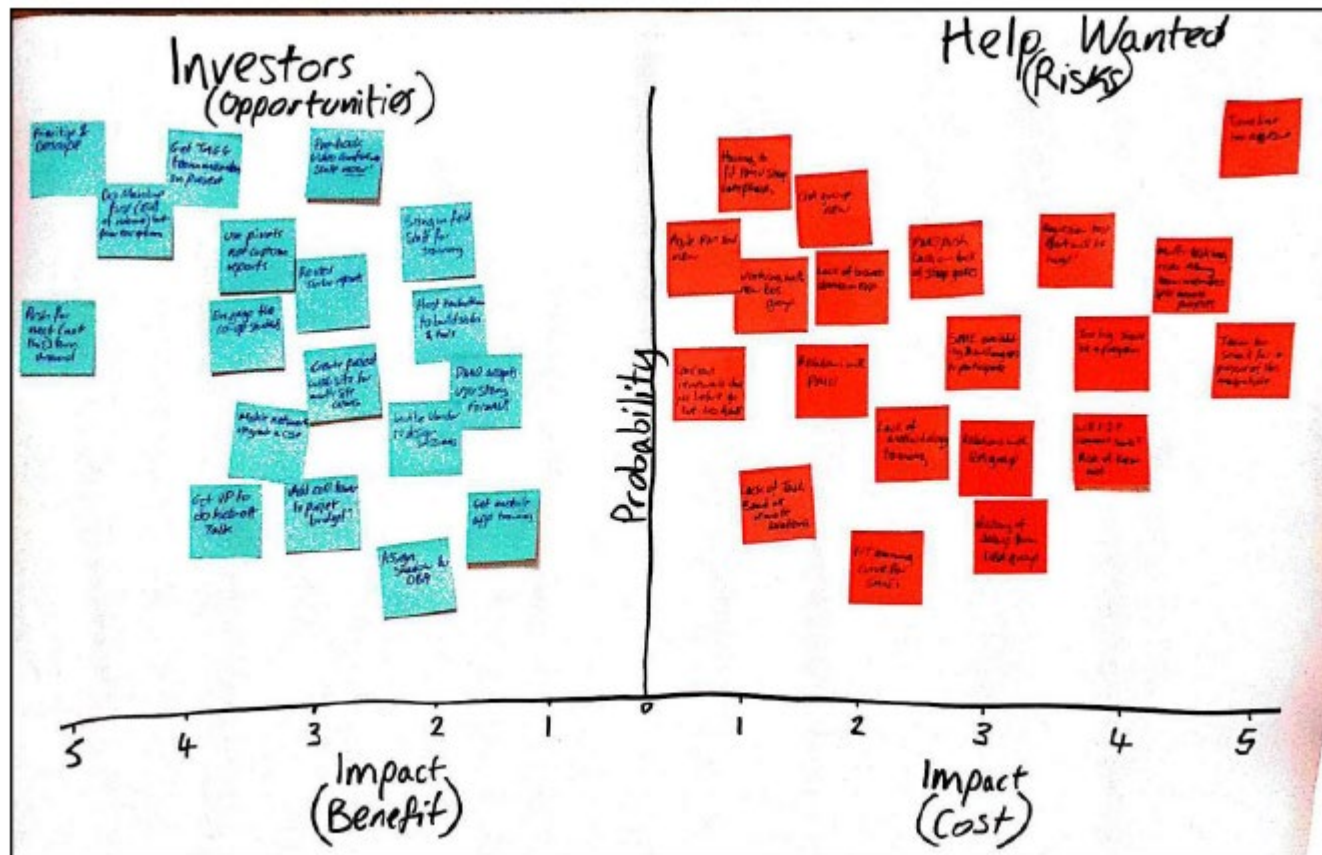
SWOT analysis of Google Checkout.



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Risk Response Strategies

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