Lessons learnt from PayPal's vDC product development
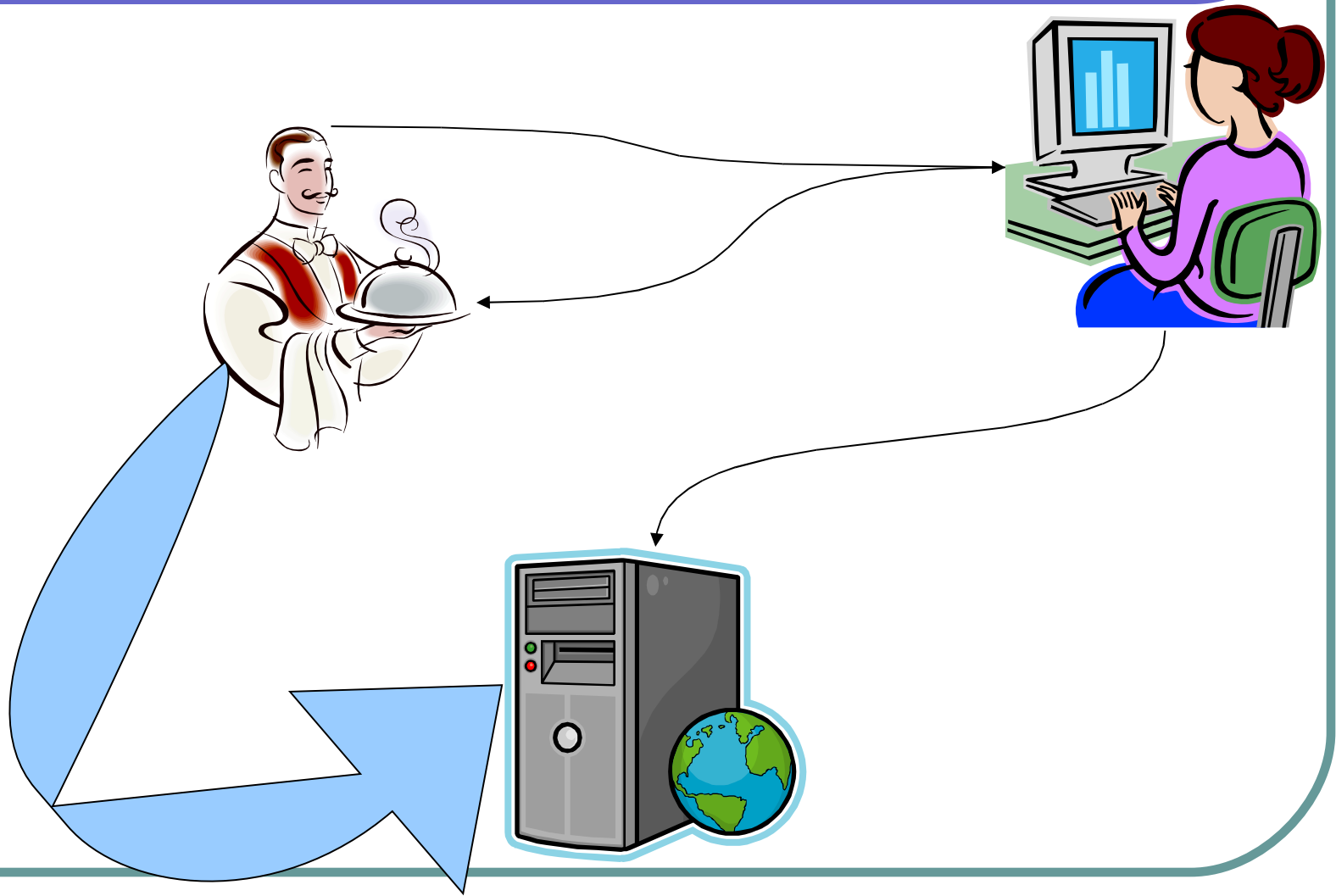
A case study

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What is vDC?

- One time use

- Only for online transactions

- Operational from a verified system

- Secure with risk mitigation in place

A Demo

Challenges

- PayPal's first attempt at integrating desktop applications with its systems
- PayPal's first case of involving 3rd party software in authentication and user/machine identification
- Several moving components

Architectural considerations

- Communication between Orbiscom server and PayPal systems
- Scaling card number generation with growing adoption
- Card information management (website, vDC desktop client)
- Security and session management

Session Management

- Web-based session management needs to be maintained

- 2 kinds of sessions need to be defined

- Sessions on webpage should be differently managed from those created for the vDC client.

Communication Issues

- gSOAP over https between Orbiscom and PayPal servers

- An extra layer of security between the entry point to PayPal system and the rest of PayPal.

Lessons Learnt

- Insufficient storyboarding
  - Jumping into designing and architecting
- Communication interfaces not understood properly
  - WSDL, but what else?
- Understanding the business requirements
  - Business requirements <--> architecture and design decisions
- Interaction between various stakeholders

Q&A