

# PHD Outline

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## 1 Introduction

1.1 Thesis statement

1.2 Research design

1.3 Chapters outline

1.4 Problem statement

1.5 References

## 2 Literature Review

2.1 Motivation

2.2 Big Data

2.2.1 Value of big data

2.2.2 Big data characteristics

2.2.3 State of art

2.2.4 The dark side of the moon(big data challenges)

## **2.3 Reference architectures**

- 2.3.1 The concept of reference architectures**
- 2.3.2 Concrete architectures**
- 2.3.3 How reference architectures vary**
- 2.3.4 Value of reference architectures**
- 2.3.5 Reference architecture as the cornerstone**
- 2.3.6 Reference architectures in practice**
- 2.3.7 Reference architectures in academia**
- 2.3.8 White papers**

## **2.4 Ecommerce systems**

- 2.4.1 State of art**
- 2.4.2 Ecommerce and big data intersection**
- 2.4.3 Data-oriented ecommerce practices**
- 2.4.4 Smart ecommerce systems**
- 2.4.5 Ecommerce common modules**
- 2.4.6 Ecommerce architectures in practice**
- 2.4.7 White papers**

## **3 Research Methodology**

- 3.1 The nature of the research**
- 3.2 Research Design**
- 3.3 Design science Research**
- 3.4 Theory**
- 3.5 Justification**

## **4 Design**

### **4.1 Architectural views**

### **4.2 Fabrics**

### **4.3 TBD**

## **5 Discussion & Evaluation**

### **5.1 The prototype**

### **5.2 Architectural analysis**

## **6 Conclusion**