# IMPROVING DATA COLLECTION AND MODELLING OF PERCEIVED QUALITY IN PUBLIC TRANSPORT SYSTEMS

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#### Contents

- Introduction and objectives
- The evolution of the PhD
- Conclusions









## Introduction and Objectives

- Main Objective (Initial):
  - Plan and apply a methodology that will allow the perceived and delivered quality in public transport services to be measured in real time. Therefore, service performance and user perception will be tracked continuously. The collected information will be used in service contracts to create an incentive/penalty plan to improve the service.

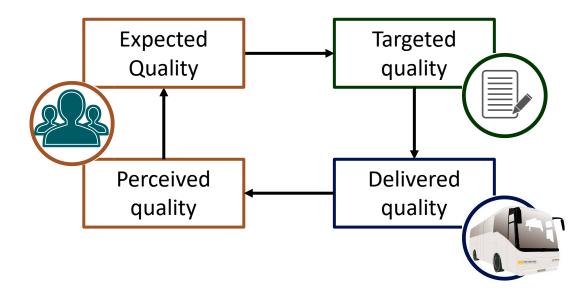
- Real objective:
  - Publish enough papers (3) to get the Phd done.





## Introduction and Objectives

UNE EN-13816



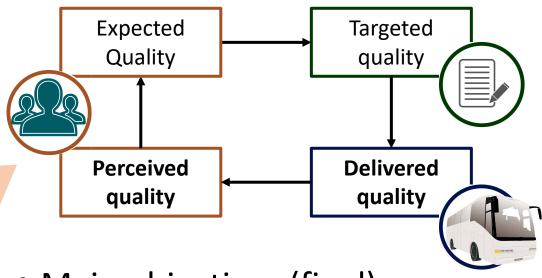




#### Introduction and Objectives

#### **UNE EN-13816**

**Perceived quality** is the final level of quality perceived by the user. The difference between perceived and expected quality shows the level of satisfaction with the service. It is established by carrying out satisfaction surveys.



- Main objectives (final):
  - Make faster surveys.
  - Improve modelling and analysis.













 Master's thesis: Perceived quality model using weighted variables.





Improve and summarise
 Master's thesis



Transport Policy

Volume 67, 15 September 2018, Pages 31-39



Modelling perceived quality for urban public transport systems using weighted variables and random parameters

Eneko Echaniz A ™, Luigi dell'Olio, Ángel Ibeas

Dec. 2015

2016

2017

2018

2019

2020

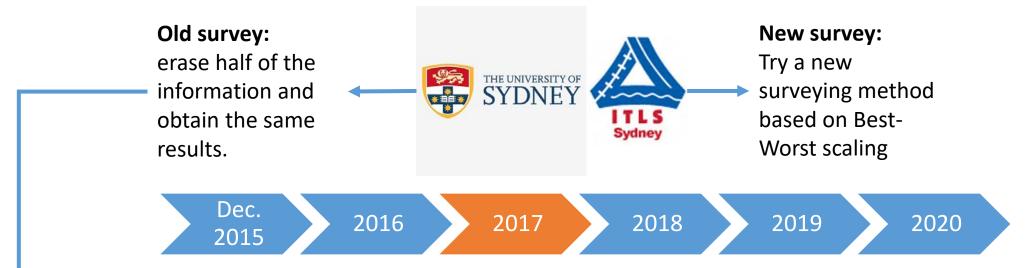


Conference paper: Modelling perceived quality for urban public transport systems using weighted variables and random parameters

Journal paper







Paper draft: Modelling user satisfaction in public transport systems considering missing information

- Surveys are too long
  - Gather less information
  - Change analysis and modelling technique





#### **New Survey – Journal paper:**

Comparing Best- Worst and Ordered Logit approaches for user satisfaction in transit services. (sent in early 2019)





Dec. 2016 2017 2018 2019 2020

**Conference paper:** Modelización de la satisfacción en los sistemas de transporte público con datos faltantes

Journal paper: Modelling user satisfaction in public transport systems considering missing information (sent in August)



Paper draft









Wait

Published: 28 March 2019

Modelling user satisfaction in public transport systems considering missing information

Eneko Echaniz <sup>™</sup>, Chinh Ho, Andres Rodriguez & Luigi dell'Olio

Transportation (2019) Cite this article

248 Accesses | 2 Citations | 0 Altmetric | Metrics



#### Transportation Research Part A: Policy and Practice



Volume 130, December 2019, Pages 752-769

Comparing best-worst and ordered logit approaches for user satisfaction in transit services

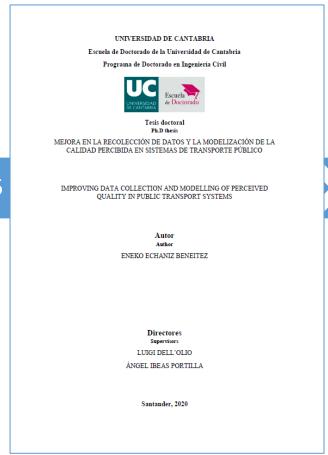
Eneko Echaniz <sup>a</sup> <sup>ス</sup> <sup>∞</sup>, Chinh Q. Ho <sup>b</sup> <sup>∞</sup>, Andres Rodriguez <sup>a</sup> <sup>∞</sup>, Luigi dell'Olio <sup>a</sup> <sup>∞</sup>











2019 2020

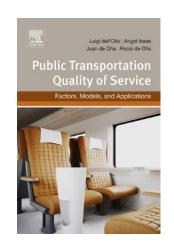
The End



2020



#### The evolution of the Phd





Ruben Corders
Angel Ibeas
Luigi dell'Olio
Borja Alonso
Models

Ruben Corders
Angel Ibeas
Luigi dell'Olio
Borja Alonso
Models

Dec.

2015

S2R Proposal prep

2017

2016



Open Access Article

2018

Effects of the COVID-19 Lockdown on Urban Mobility: Empirical Evidence from the City of Santander (Spain)

2019





#### Conclusions

- Contributions have exceeded the required minimums:
  - 5 Journal papers published (4 included in the thesis)
  - 4 Conference papers
  - 2 international stays
  - 1 book chapter
- There is nothing else to do but defend the thesis.

# THANK YOU

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