

The fourth isENBIS conference
"Application of Statistics in Service Engineering"



הכנס הרביעי

של הקבוצה הישראלית ליישומי סטטיסטיקה
בתעשייה ובעסקים
isENBIS

"נושאים נבחרים בהנדסת שירות"

בית חיל האויר, הרצליה
יום שלישי, 30 נובמבר 2010



European Network for Business
and Industrial Statistics

The mission of ENBIS is to:

- Foster and facilitate the application and understanding of statistical methods to the benefit of European business and industry**
- Provide a forum for the dynamic exchange of ideas and facilitate networking among statistical practitioners (a statistical practitioner is any person using statistical methods whether formally trained or not)**
- Nurture interactions and professional development of statistical practitioners regionally and internationally .**

- הארגון •**
- כנסים •**
- סדנאות •**
- פרסים •**
- פרסומים •**

**Alessandro
Di Bucchianico
Director**

**Andrea Ahlemeyer
Past President and Treasurer**



**Irena Ograjensek
President**



European Network for Business
and Industrial Statistics

ENBIS Presidents

-  2000 Henry Wynn
-  2001 Dave Stewardson
-  2002 Tony Greenfield
-  2003 Poul Thyregod
-  2004 Shirley Coleman
-  2005 Fabrizio Ruggeri
-  2006 Ron Kenett
-  2007 Andrea Ahlemeyer-Stubbe
-  2009 Irena Ograjensek

Past Conferences

- ENBIS1 Oslo
- ENBIS2 Rimini
- ENBIS3 Barcelona
- ENBIS4 Copenhagen
- ENBIS5 Newcastle
- ENBIS6 Wroclaw
- ENBIS7 Dortmund
- ENBIS8 Athens
- ENBIS9 Goteborg
- ENBIS10 Antwerp



European Network for Business
and Industrial Statistics

ENBIS10 Antwerp (12-16, September 2010)





ENBIS10 Antwerp (12-16, September 2010)



The Israeli Economy - 2009

Facts & Figures

- ❑ GDP (\$Billion) 194.8
- ❑ Population (5/2010, Million) 7.6
- ❑ GDP per capita (\$ PPP) 27,800
- ❑ Foreign Trade (% of GDP) 67%
- ❑ Total Exports (% of GDP) 34.7%
- ❑ Unemployment (4/2010) 6.9%
- ❑ May 2010 - Israel's accession to the OECD

The Israeli Industry

- ❑ Share of business sector 21%
- ❑ Industrial Sales (\$Billion) 22.3
- ❑ Industrial Exports (% of sales) 5%
- ❑ Employees
- ❑ Main branches: Chemicals, Elec

A methodology for realignment of quality cost elements

Dr. Shuki Dror
Dept. of Industrial Engineering and Management, On
Frank College, Ashdod, Israel
ENBIS 2010

Effective Research

ENBIS10 Antwerp (12-16, September 2010)





European Network for Business
and Industrial Statistics



The 2010 ENBIS Challenge

(Sponsored by JMP)

Using An LPCVD Simulator for Fun and Profit

Introduction

This year's ENBIS Challenge is about optimization, more specifically about maximizing profit when you have limited resources.

The ENBIS Challenge

<http://www.enbis.org/awards/challenge/challenge2010/index>



<http://web.econ.unito.it/deinde07/>

**Joint ENBIS-DEINDE 2011 Conference
Statistics for Business and Industry**

Turin, Italy

March, 16-18, 2011





ENBIS11 Coimbra

Portugal

4 – 8 September 2011



The University of Coimbra was founded in 1290. It is one of the oldest universities in continuous operation in Europe and the world, the oldest university of Portugal, and one of its largest higher education and research institutions with approximately 20,000 students.





European Network for Business
and Industrial Statistics

Conference workshops - the ENBIS Academy

- Workshop on data mining
- Workshop on operational risk management
- Workshop on simulation of clinical trials
- Workshop on statistics for innovation and the design process
- Workshop on statistical consulting skills
- Research methods in practice: customer and employee opinion surveys
- Workshop on reliability
- Advanced fields of statistical modelling
- Wild River DoE workshop
- Workshop on teaching process improvement using a virtual manufacturing process
- Six Sigma in healthcare
- Statistical leadership
- The world needs to know: communicating our work
- New experimental design techniques and how to use them

innovation

statistical consulting

designed experiments

data mining

operational risks

reliability

Six Sigma

clinical trials



European Network for Business
and Industrial Statistics

- **The George Box Award**

2003 G. Box

2004 S. Bisgaard

2005 D. Cox

2006 G. Hahn

2007 P. Thyregod

2008 D. Montgomery

2009 T. Greenfield

2010 D. Stewardson

- **The Best Manager Award**

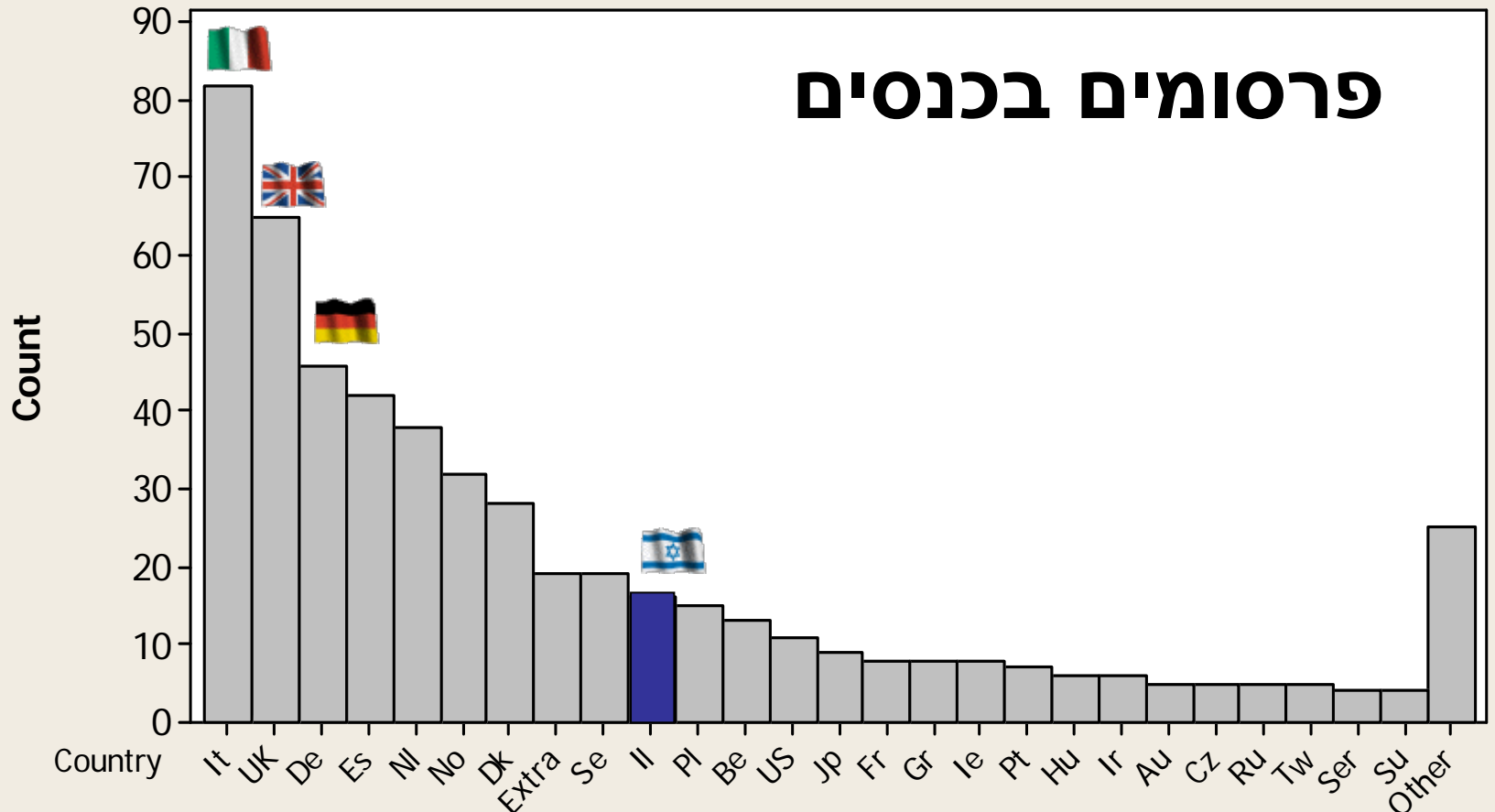
2009 R. Lurie

- **The Young Statistician Award**



Pareto Chart of Abstracts per Country

פרסומים בכנסים



Count	82	65	46	42	38	32	28	19	19	16	15	13	11	9	8	8	8	7	6	6	5	5	5	5	4	4	25
Percent	15	12	9	8	7	6	5	4	4	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	5
Cum %	15	28	36	44	51	57	63	66	70	73	76	78	80	82	83	85	86	88	89	90	91	92	93	94	95	95	100

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Volume 7, Number 1 March 2010

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Guest Editors: Roberto Corradetti, Roberto Furlan and Silvia Salini

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Ron S. Kenett

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Roberto Corradetti, Roberto Furlan and Silvia Salini

[Fulltext \(pp. iii-v\)](#)

[An Alternative Approach to Analyze Customer or Employee Satisfaction Data Based on Kano Model](#)

Roberto Furlan and Roberto Corradetti

[Fulltext \(pp. 1-13\)](#)

[The Rasch Model in Customer Satisfaction Survey Data](#)

Francesca De Battisti, Giovanna Nicolini and Silvia Salini

[Fulltext \(pp. 15-34\)](#)

[Improving the Business Plan Evaluation Process: the Role of Intangibles](#)

Franco Turini, Miriam Baglioni, Andrea Bellandi, Barbara Furletti and Chiara Pratesi

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[Experiential Goods and Customer Satisfaction: An Application to Films](#)

Francesca Bassi

[Fulltext \(pp. 51-67\)](#)

[Statistical Local Models for Customer Satisfaction Data](#)



Modern Analysis of Customer Satisfaction Surveys

R. Kenett and S. Salini (Editors), John Wiley and Sons, 2011

Part I: Basic Aspects of Customer Satisfaction Surveys Data Analysis

- Chapter 1. Classical Techniques (Kenett, Salini)
- Chapter 2. The ABC Annual Customer Satisfaction Survey (Kenett, Salini)
- Chapter 3. Sampling, Surveys and Census (Nicolini)
- Chapter 4. Measurement Scales (Bonanomi, Cantaluppi)
- Chapter 5. Integrated Analysis (Biffignandi)
- Chapter 6. Web Surveys (Furlan)
- Chapter 7. Customer Satisfaction and Customer Loyalty (Ograjensek, Gal)
- Chapter 8. Missing Data and Imputation Methods (Mealli, Rubin, Mattei)
- Chapter 9. Outliers and Robustness for Ordinal Data (Riani, Zani)

Part II: Modern Techniques in Customer Satisfaction Surveys Data Analysis

- Chapter 10. Causality Models (Meali, Rubin, Pacini)
- Chapter 11. Bayesian Networks (Kenett, Salini)
- Chapter 12. Log Linear Models (Fienberg, Mandrique)
- Chapter 13. CUB Models (Piccolo, Iannario)
- Chapter 14. Rasch models (De Battisti, Nicolini, Salini)
- Chapter 15. Decision Trees (Soffritti, Galimberti)
- Chapter 16. PLS Models (Boari, Cantaluppi)
- Chapter 17. Non Linear PCA (Ferrari, Barbero)
- Chapter 18. Multidimensional Scaling (Solaro)
- Chapter 19. Multilevel models for ordinal data (Rampichini, Grilli)
- Chapter 20. Control Charts applied to customer surveys (Kenett, Deldossi, Zappa)
- Chapter 21. Fuzzy Methods (Zani, Morlini, Milioli)

Appendix: R scripts for customer satisfaction survey data analysis (Iacus)

Quality and Reliability Engineering International

The ENBIS 10th Anniversary Special Issue

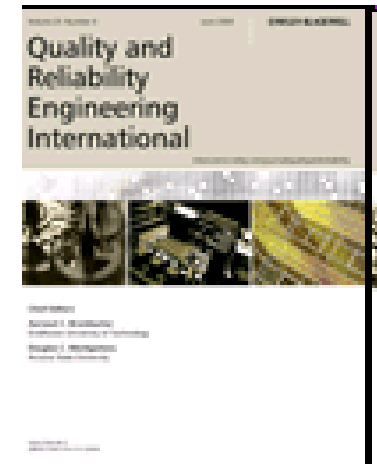
*State of the Art Developments in Business and Industrial Statistics:
Combining Applications with Theory*

Guest Editor

Ron S. Kenett

KPA Ltd., Israel and University of Turin, Italy

e-mail: ron@kpa.co.il



Call for Papers

Quality and Reliability Engineering International (QREI) invites members of the European Network for Business and Industrial Statistics (ENBIS) to submit papers for the ENBIS 10th Anniversary special issue. The theme of the special issues is *State of the Art Developments in Business and Industrial Statistics: Combining Applications with Theory*.

The special issue will feature papers presented at the 10th Anniversary Annual ENBIS conference but it is also open to ENBIS members for other contributions on the development and practical aspects of quality, reliability, engineering, and management. Submissions will be refereed and the editor reserves the right regarding final acceptance (or not) decision of papers.



ENBIS Registration

<http://www.enbis.org/register>

ENBIS LinkedIn Group

<http://www.linkedin.com/groups?mostPopular=&gid=3451893>

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