



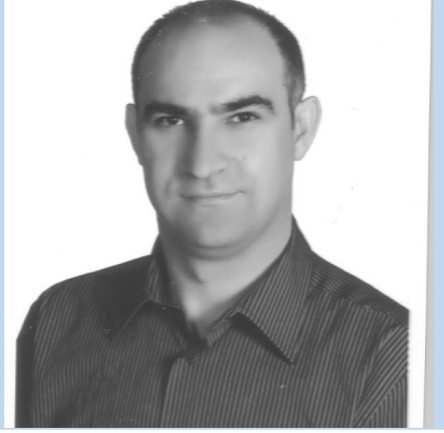
## WHO ARE WE?



Prof. Dr. E. Serra Yurtkoru



Prof. Dr. Beril Durmuş



Prof. Dr. Murat Çinko



Assist. Prof. Dr. Ayşe Çınar



Assist. Prof. Dr. Hüseyin Ekizler

*Businesses are increasingly collecting large amounts of information about their customers and activities.*

*This **big data** is big news with the businesses and governments as they consider how to use this mass of information in a meaningful way.*

*Decision Science major students use their expertise to*

- ✓ *make sense of information,*
- ✓ *interpret it and uncover hidden patterns and important insights,*
- ✓ *enable evidence-based and objective business decisions.*

*Combining theoretical concepts with practical application,  
**DS major** offers a unique mix of quantitative and behavioral skills  
relevant to*

- ✓ data analyses,*
- ✓ effective decision-making,*
- ✓ management*

*Decision Sciences major aims to provide the students an insight into  
**business analytics** and explores how organizations can exploit the  
**big data revolution**.*



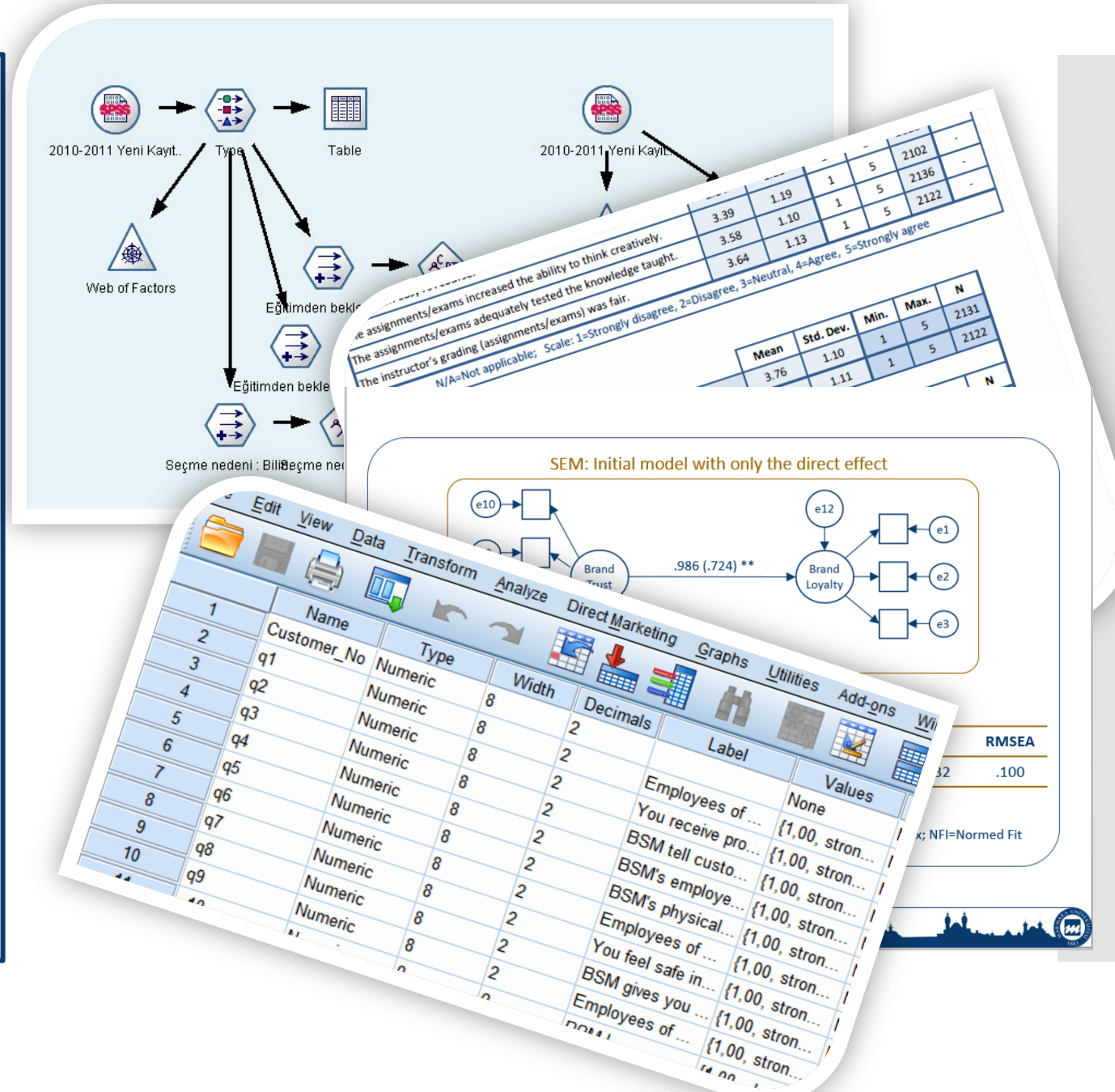


is an interdisciplinary field that draws on business, machine learning, data mining, statistical decision theory, operations research, forecasting, survey methods, and simulation theory.



# LEARNING OBJECTIVES

- ✓ Demonstrating proficiency with statistical data analysis.
- ✓ Developing the ability to build and assess data based models.
- ✓ Demonstrating skill in data management.
- ✓ Applying data science concepts and methods to solve problems in real-world contexts
- ✓ Conducting survey studies and reporting.



# CAREER OPPURTUNITIES in DECISION SCIENCE

- ✓ In addition to career in Finance, Marketing, Human Resources, you can be:
- ✓ - Data Analyst
- ✓ - Data Scientist
- ✓ - Business Analyst
- ✓ - Operations Manager
- ✓ - Researcher



# SKILLS YOU SHOULD / WILL HAVE

1. Curiosity
2. Observer
3. Analytical Thinking
4. Communication Skills
5. Fundamentals of Data Science
  - i. Statistics
  - ii. Data Manipulation and Analysis
  - iii. Data Visualization
  - iv. Model Deployment
6. Machine Learning
7. Big Data
8. Precise Decision Making



## MAJOR COMPULSORY COURSES

### *5<sup>th</sup> Semester*

QTDS3091 –  
**Decision Theory**

QTDS3095 –  
**Quantitative  
Management  
Techniques**

### *6<sup>th</sup> Semester*

QTDS4096 –  
**Game Theory**

QTDS3098 –  
**Simulation  
Theory**

### *7<sup>th</sup> Semester*

STAT 4095 –  
**Data Mining**

### *8<sup>th</sup> Semester*

QTDS 4096 –  
**Applications in  
Data Mining**





## MAJOR ELECTIVE COURSES

### *7<sup>th</sup> Semester*

**BUS4091 – Electronic  
Business**

**STAT4093 – Forecasting**

### *8<sup>th</sup> Semester*

**STAT4094 – Statistical  
Process Control**

**QTDS4094 – Computer  
Applications in Operations  
Research**

**Any  
Questions?**

