Statistics for Marketing Research
(SECS-S/01)
Laurea Magistrale (MSc) in Marketing
8 ECTS
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I semester

Description

This course examines the vital role of information and research in global marketing decisions. The key aim of the module is to enable students to understand the value of information, research, and analytics, the processes involved and techniques which can facilitate the collection, analysis and interpretation of marketing data and information. Special emphasis will be put in the challenges that arise when research is conducted across borders as well as specific new trends in data analysis such as dealing with (and benefitting from) "big data" as they apply to a range of institutions with different types and scope of activities, governance structures, and size.

Learning Outcomes

Subject content

- Critical awareness of the importance of information and research in marketing decisions in light of a complex global environment.
- Systematic understanding of marketing research approaches and techniques.
- Critical appreciation of the additional challenges arising when marketing research is conducted across borders, its causes, and potential solutions.
- Critical appreciation of most recent developments in marketing metrics and analytics (incl. "big data").

Academic and graduate skills

- Ability to design a global marketing research plan and conduct marketing research.
- Ability to design research projects and to critically assess the quality and suitability of information sources, marketing research reports and surveys.
- Ability to apply various analysis techniques such as correlations and regressions.
- Ability to assess the suitability of alternative methods of data gathering in light of different geographic, institutional, and cultural contexts as well as on- and offline environments.
- Ability to critically describe, summarise and present marketing research data.

Teaching Materials

Lecture slides, case studies, copies of Powerpoint presentations, and recommended readings (main textbook and other publications). The list of all teaching materials for each session is described below.

The main text book recommended for this course is:

Craig, C.S. and Douglas, S.P. (2005). International Marketing Research. 3rd ed. Chichester: John Wiley & Sons Ltd.

Electronic resources

The course syllabus, lecture notes, and other information relating to the module are available on the e-learning platform.

Useful additional reading is likely to be found in journals such as:

- Journal of Marketing
- European Journal of Marketing
- Harvard Business review
- Industrial Marketing Management
- International Journal of Market Research
- International Journal of Research in Marketing
- International Marketing Review
- Journal of Advertising Research
- Journal of Digital Marketing
- Journal of Interactive Marketing
- Journal of International Marketing
- Journal of Marketing Management
- Journal of Marketing Research
- Journal of Product and Brand Management

Other useful resources for working on the assignments:

Examples of resources which you can access are:

Proquest newspapers	http://www.proquest.com/pqdauto
Academic Journal Articles	LexisNexis Business Source Premier
Fortune Global 500	http://www.pathfinder.com/fortune/global500/
BBC News	http://news.bbc.co.uk/
Country Information	http://www.yahoo.com/regional_information/countries/
Industry Reports	Industry Reports in Business Source Premier
Country Reports	http://www.countryreports.org/
About the European Union	http://www.europa.eu.int/index_en.htm
The Department of Trade and Industry, UK	www.dti.gov.uk/
The United Nations	www.unctad.org
International Forum on Globalization	www.ifg.org
The World Trade Organisation	www.wto.org
The World Bank Group:	www.worldbank.org
International Monetary Fund:	www.imf.org
Academic Journal Articles: Indexes & Abstracts	Ebsco Business Source Premier Web of Science: Social Sciences Citation

	Index JSTOR Science Direct
The Economist	http://www.economist.com

Assessment methods
Class attendance and participation is strongly encouraged and will condition the student's results in terms of grading.

Attending students:
Class Attendance and participation 20%
Project work (Group) 30%
Final Exam 50%

Non-attending students
Final Exam (written and oral) 100%

Final Exam
The final exam will consist in a combination of multiple-choice questions, to evaluate concept retention and open-end questions to evaluate concept management and application. In order to guarantee an objective evaluation, closed rubrics will be applied to open-end questions.
The final exam will last 90 minutes.

Project work
Students will engage in group work on an assigned task and give a presentation of their findings. The work will be evaluated in terms of research proficiency, content, and overall presentation skills. Groups will be composed of 3-4 students.

Timetable – Statistics for Marketing Research (Fall 2018)

Convenor: **Dr. Hector Gonzalez Jimenez**

START OF TERM Session 1	**The role of marketing research: a global perspective + Primary and secondary data** • Introductions and course outline • The research process – Global considerations • Research Objective vs. Marketing Objective Exercise • Primary and secondary data characteristics
Session 2	Lecture: **Primary and secondary data continued** • Interpreting a secondary data market analysis on the UK mobile market (Mintel report) • Scenario exercise: European sandwich company in China • Accessing and interpreting free data (e.g., World Bank data, census data)
Session 3	Lecture: **Secondary data continued (Mintel report) + Quantitative research: Applications and methods** • Main survey methods • Exercise - cross cultural marketing mistakes • Measurement and scaling for questionnaires
Session 4	Lecture: **Sampling and survey design** • Questionnaire design process • Exercise: Question design • Sampling process • Survey design tools (i.e. Google survey) • Exercise: Survey design
Session 5	Lecture: **Data analysis** • Preliminary data analysis (data cleaning, coding, formatting) • Descriptive statistics • Correlational analysis and regressions • ANOVA and MANOVA
Session 6	Lecture: **Qualitative research - Applications and methods** • Overview, pros and cons of qualitative research methods

	• Examples of projective techniques • Mood board creation and presentation
Session 7	Lecture: **Focus groups and in-depth interviews** • Exercise: Two short focus group simulations • Focus group analysis and presentation
Session 8	*Lecture:* **Observation and mystery shopping** • Exercise: Mystery shopping report preparation and actual mystery shopping
Session 9	Lecture: **Mystery Shopping cont.** + **Big data in marketing research** • Presentation mystery shopping findings • Exercise: Big data – How you interact daily with Big Data
Session 10	Lecture: **Reporting marketing research** • Summary of course and open question session
EXAM Due date to be released after start of term	**<u>Final Exam</u>**

Lecture Outline

Session 1 - The role of marketing research: a global perspective

SUMMARY:

This session sets the stage for the whole course. As firms increasingly expand operations in countries beyond their home market, they require marketing research to guide their decision making to serve consumer needs. However, political, cultural, social and economic forces sometimes require researchers to make adjustments to their research approach depending on their target market. Hence, marketing research is more important and challenging now than it ever has been. To be successful, marketing researchers need to understand and select the appropriate research methods (e.g. survey, focus groups) that will satisfy the aims of the research project, while accounting for potential challenges that may arise due to marketplace differences. For instance, research projects might explore whether a company should standardize strategies across countries as opposed to adapting these to local market differences.

LEARNING OBJECTIVES:

- What is marketing research and why do we need it?
- How does the marketing research process look like?
- Which potential research challenges can arise in the global marketplace?
- International marketing blunders due to “bad” research; what to avoid.
- Differentiate between marketing strategy and marketing research objectives.
- Understand the differences between primary and secondary research.

KEY READINGS

Craig, C.S. and Douglas, S.P. (2005). International Marketing Research. 3rd ed. Chichester: John Wiley & Sons Ltd.

ADDITIONAL READINGS

S. P Douglas, and C.S. Craig (2011), ‘Convergence and divergence: developing a semiglobal marketing strategy’, Journal of International Marketing, 19 (1), 82-101.

C. Samuel Craig and Susan P. Douglas (2001), ‘Conducting international marketing research in the twenty-first century’, International Marketing Review, 18 (1), 80 – 90.

Session 2 – Primary and secondary data

SUMMARY:

This session looks at secondary data. A variety of data sources can aid researchers in their decision making. Secondary data is often readily available, but issues of comparability from one country to another, as well as its reliability and appropriateness for the specific research problem need to be considered. The session offers a practical overview on various secondary data sources. Various exercises are used to learn how to find, interpret secondary data and ultimately, how this data can be used to inform decision making.

LEARNING OBJECTIVES:

- Accessing secondary data sources.
- The ability to interpret a market research report (e.g. Mintel).
- Using secondary data to develop a strategy for a new business venture
- What potential challenges can market researchers encounter?
- Where to find solid and free secondary data.

KEY READINGS

Craig, C.S. and Douglas, S.P. (2005). International Marketing Research. 3rd ed. Chichester: John Wiley & Sons Ltd.

ADDITIONAL READINGS

Smith, E. (2008), 'Pitfalls and promises: The use of secondary data analysis in educational Research', British Journal of Educational Studies, 56 (3), 323–339.

Robert L. Harrison and Timothy M. Reilly (2011), 'Mixed methods designs in marketing research', Qualitative Market Research: An International Journal, 14 (1), 7 – 26.

Session 3 - Secondary data continued (Mintel Case) + Quantitative research: Applications and methods

SUMMARY:

This session focuses on quantitative research. Quantitative research uses a sample of the population to test relationships between variables that offer insights on behaviour, motivations, or attitudes. Researchers generally use statistical techniques to analyse quantitative data (e.g. regressions, structural equation modelling, etc.). The session discusses the nature and rationale behind the use of quantitative research. In addition, the session offers a brief outline of the main quantitative research methods used by researchers. Examples of research questions/problems that can be addressed with quantitative research are also offered. Moreover, the session introduces potential challenges of conducting quantitative research in a global setting.

The session also defines the meaning of measurement and scaling and introduces various types of measurement scales. Next, it describes what a construct is and offers examples of scales on how different constructs are measured (e.g. brand attitude, cosmopolitanism). Differences between single and multi-item scales as well as how to assess the reliability and validity of a measurement instrument are discussed.

LEARNING OBJECTIVES:

- What is quantitative research?
- What are the main quantitative research methods and analysis techniques used?
- When is each method appropriate?
- What are some potential challenges of conducting quantitative research in a global setting?
- What is the importance of having adequate measures and scales in marketing research?
- What type of scales can be used to measure a construct?
- How to assess if the measurement instrument is reliable and valid?

- What do researchers have to consider when measuring data in more than one country?

KEY READINGS

Craig, C.S. and Douglas, S.P. (2005). International Marketing Research. 3rd ed. Chichester: John Wiley & Sons Ltd.

ADDITIONAL READINGS

Aric Rindfleisch, Alan J. Malter, Shankar Ganesan, Christine Moorman (2008), 'Cross-Sectional Versus Longitudinal Survey Research: Concepts, Findings, and Guidelines', Journal of Marketing Research: June 2008, 45, (3), 261-279.

Hanson, DJ and Grimmer, MR (2007), 'The mix of qualitative and quantitative research in major marketing journals, 1993-2002', European Journal of Marketing, 41 (1/2), 58-70.

Van de Vijver FJR, Leung K. (2000), 'Methodological issues in psychological research on culture', Journal Cross-Cultural Psychology, 31, 33–51.

Session 4 – Sampling and survey design

SUMMARY:

This session discusses survey research and the design of a questionnaire. Survey research involves typically structured data collection techniques, is based on large sample sizes and uses a questionnaire as research instrument. The design of a questionnaire entails issues such content specification, question formulation and sequencing. In market research it is of particular importance to ensure that the research instrument is adapted to the specific national and cultural environment, hence limiting any potential bias. Bias can occur due to translation or scoring issues, social desirability, as well as inconsistencies in the administration process. Therefore, researchers need to take the necessary precautions when designing and administrating a questionnaire.

Once the questionnaire has been designed, the next step is to develop appropriate sampling and data collection procedure. A variety of random and non-random sampling procedures are available to researchers. The key is to select a systematic sampling procedure to ensure that reliable and comparable data are collected which adequately reflect the sample population and provide valuable insights with regard to the research question.

This session focuses on the questionnaire design process. It discusses different question types and the risks associated with inadequate question formulation (e.g. leading questions). The pros and cons of various methods on how to administer a questionnaire are presented. Next, sources of potential bias during the research process are discussed. The session also addresses the sampling process and provides guidelines on how to select the appropriate sampling approach for a project. Finally, the students design a sample questionnaire with an online survey design tool.

LEARNING OBJECTIVES:

- How to design a questionnaire?
- What type of questions should be used to address a specific research question?
- How to administer the questionnaire?

- Which potential sources of bias exist in global market research?
- What sampling approaches are available to researchers?
- How to use a survey design tool to create a basic questionnaire.

KEY READINGS

Craig, C.S. and Douglas, S.P. (2005). International Marketing Research. 3rd ed. Chichester: John Wiley & Sons Ltd.

ADDITIONAL READINGS

Schwarz, N. (2003), ‘Self-reports in Consumer Research: The Challenge of Comparing Cohorts and

Cultures’, Journal of Consumer Research, 29(4), 588–594.

Lietz, P. (2010), ‘Research into questionnaire design – a summary of the literature’, International Journal of Market Research, 52(2), 249-272.

Deutskens, Elisabeth, de Ruyter, Ko, Wetzels, Martin, and Oosterveld, Paul (2004), ‘Response Rate and Response Quality of Internet-Based Surveys: An Experimental Study’, Marketing Letters 15(1):21-36.

Hans Baumgartner, Jan-Benedict E.M. Steenkamp (2001), ‘Response Styles in Marketing Research: A Cross-National Investigation,’ Journal of Marketing Research, 38, (2), 143-156.

Hester van Herk, Ype H. Poortinga, Theo M.M. Verhallen (2005), ‘Equivalence of survey data: relevance for international marketing", European Journal of Marketing, 39 (3/4), 351 – 364.

Jan-Benedict E.M. Steenkamp, Martijn G. de Jong, Hans Baumgartner (2010), ‘Socially Desirable Response Tendencies in Survey Research’, Journal of Marketing Research, 47 (2), 199-214.

Podsakoff, Philip M.; MacKenzie, Scott B.; Lee, Jeong-Yeon; Podsakoff, Nathan P. (2003), ‘Common method biases in behavioral research: A critical review of the literature and recommended remedies’, Journal of Applied Psychology, 88(5), 879-903.

Shintaro Okazaki, Barbara Mueller (2007), ‘Cross-cultural advertising research: where we have been and where we need to go’, International Marketing Review, 24 (5), 499 – 518.

Session 5 – Data analysis

This session focuses on the process of data analysis. Once quantitative data has been collected, or made available through secondary research, it is time to run a data analysis. Generally, before the data can be analysed, it needs to go through various preliminary procedures such as cleaning, formatting and coding. There are a variety of data analysis methods and tools available to researchers. This session will focus on the arguably more commonly used types of analysis methods applied by researchers in business settings. Specifically, after discussing and practicing the preliminary procedures, students will be able to deal with a sample data set to extract descriptive statistics, as well as running correlation analysis and regressions. Moreover, the session will also cover ANOVA and MANOVA tests. These methods allow researchers to assess, for instance, how individual characteristics are related to specific brand perceptions or which drivers may influence more strongly a consumer’s brand attitude.

LEARNING OBJECTIVES:

- How to prepare data for data analysis.
- How to run descriptive statistics.
- How to conduct and interpret correlational analysis.
- How to run and interpret a regression analysis.
- How to conduct ANOVA and MANOVA tests.

Note: Students will use Excel as the main tool. Depending on time there will also be a sample demonstration of SPSS as an alternative analysis tool.

Readings and supporting materials:

- Craig, C.S. and Douglas, S.P. (2005). International Marketing Research. 3rd ed. Chichester: John Wiley & Sons Ltd.
- Document with links to instructional videos on data analysis
- Field, A. (2013). Discovering Statistics using IBM SPSS Statistics. 4th ed. London: SAGE publications.

Session 6 – Qualitative research: Applications and methods

This session deals with qualitative research. Qualitative research aims to acquire an in-depth understanding of behaviour and its underlying reasons. It allows uncovering and exploring a consumer's subconscious feelings and needs that influence their purchasing decisions. Qualitative research offers researchers a means to answer questions on the 'how' and 'why' of a consumer's decision making. Qualitative research methods include observations, focus groups and in-depth interviews. These methods are used in an exploratory manner and are generally based on smaller samples compared to quantitative research. For instance, qualitative methods are used to formulate and define research questions and hypotheses more clearly. Qualitative research methods are also used to pre-test advertisements, product packaging or to probe and explore deeply consumer attitudes towards a brand.

The session addresses the nature and rationale behind the use of qualitative research. In addition, the session offers a brief outline of the main qualitative research methods used by researchers (full lectures will be dedicated to offer more detail on each of the main qualitative methods). Some examples of when to apply observations, focus groups or in-depth interviews are also provided. Moreover, the session discusses the potential challenges of conducting qualitative research in a global context. In addition, students will be exposed and practice various projective techniques that can be used in qualitative research. This includes the creation of a mood board on a selected brand and subsequent short interpretation and presentation of the mood board.

LEARNING OBJECTIVES:

- What is qualitative research?
- What are the main qualitative research methods?
- When are these methods appropriate?
- What are the challenges of conducting qualitative research across borders?
- The use of projective techniques in qualitative research.

KEY READINGS

Craig, C.S. and Douglas, S.P. (2005). International Marketing Research. 3rd ed. Chichester: John Wiley & Sons Ltd.

ADDITIONAL READINGS

Hanson, DJ and Grimmer, MR (2007), 'The mix of qualitative and quantitative research in major marketing journals, 1993-2002', European Journal of Marketing, 41 (1/2), 58-70.

Birkinshaw, J., Brannen, M. Y., & Tung, R. L. (2011), 'From a distance and generalizable to up close and grounded: Reclaiming a place for qualitative methods in international business research', Journal of International Business Studies, 42(5), 573–581.

Doz, Yves L. (2011), 'Qualitative research for international business', Journal of International Business Studies, Vol. 42 (5), 582–59.

Session 7 – Focus groups and in-depth interviews

SUMMARY:

This session focuses on two important qualitative research methods. Specifically, (1) focus groups and (2) in-depth interviews. First, a focus group is a research method that collects data through group interaction (around 8-10 people) on a specific topic. They can be very structured or unstructured depending on the research purpose and are generally moderated by an experienced researcher. Second, in-depth interviews (IDI's) are in contrast to focus groups based on the interaction of just one individual and the researcher. They are often extensive interviews in which the respondent is encouraged to talk and share his opinion on a specific topic (e.g. consumption of diet products). IDI's can be structured and unstructured and are sometimes used to discuss sensitive topics, which would not be discussed as freely in a group environment.

The session discusses the nature and applicability of each of the two methods. Examples of research questions/problems that can be addressed with each method are also offered. The recruitment process, research process and analysis procedures are also discussed. The session also addresses the pros and cons of each method as well as potential challenges that can arise at a global and local level. The session also uses a practical approach through a focus group simulation, followed by an analysis and presentation of the focus group findings.

LEARNING OBJECTIVES:

- What are focus groups and in-depth interviews?
- When should each method be applied?
- What are the pros and cons of each method and what potential challenges do they entail?
- How to run, analyse and interpret a focus group.

KEY READINGS

Craig, C.S. and Douglas, S.P. (2005). International Marketing Research. 3rd ed. Chichester: John Wiley & Sons Ltd.

ADDITIONAL READINGS

Brecic, R., Filipovic, J., Gorton, M., Galjina, O., Stojanovic, Z., & White, J. (2013), 'A qualitative approach to understanding brand image in an international context', International Marketing Review, 30 (4), 275-96.

Boote, J. and Mathews, A. (1999), 'Saying is one thing; doing is another: the role of observation in marketing research', Qualitative Market Research: An International Journal, 2 (1), 15-21.

Evert Gummesson, (2005), 'Qualitative research in marketing: Road-map for a wilderness of complexity and unpredictability', European Journal of Marketing, 39 (3/4), 309 – 327.

Session 8 – Observation and mystery shopping

SUMMARY:

This session discusses two further qualitative methods; namely, observations and mystery shopping**.** First, with observational methods the researcher relies on what s/he can observe to gather insights rather than communicating with the respondents. Observational methods are applicable when a phenomenon is easily observable (e.g. shopping behaviour), the phenomenon occurs at a subconscious level, and consumers are unable or unwilling to communicate directly with the researcher. Moreover, besides observations, the session also discusses the mystery shopping process. Mystery shopping is commonly applied in the service and retail industry in order to assess, for instance, customer service levels. For instance, a researcher visits disguised as a customer a hotel or supermarket to evaluate the service standards of the venue and its staff and consequently prepares a report for the client. Student's will be asked to engage in mystery shopping at a local business.

LEARNING OBJECTIVES:

- What are observational methods and mystery shopping?
- When should each method be applied?
- What are the pros and cons of each method and what potential challenges do they entail?
- How to run, analyse and interpret a mystery shopping experience.

KEY READINGS

Craig, C.S. and Douglas, S.P. (2005). International Marketing Research. 3rd ed. Chichester: John Wiley & Sons Ltd.

ADDITIONAL READINGS

Finn, Adam, & Kayande, Ujwal. (1999). Unmasking a phantom: A psychometric assessment of mystery shopping. Journal of Retailing, 75(Summer), 195–215.

Hudson, Simon, Tim Snaith, Graham A. Miller, and Paul Hudson (2001). "Distribution Channels in the Travel Industry: Using Mystery Shoppers to Understand the Influence of Travel Agency Recommendations." Journal of Travel Research, 40 (2): 148-154.

Sinha, P.K. and D.P. Uniyal (2005). “Using Observational Research for Behavioural Segmentation of Shoppers,” Journal of Retailing and Consumer Services, 12 35–48.

Session 9 – Mystery Shopping cont. + Big data in marketing research

First, the session starts with the student’s mystery shopping presentations. Subsequently, this session addresses the role of “big data” in market research. The last decade has seen an exponential growth of data streams due to the use of technology across industries and applications. For instance, extensive data sets are generated by consumers using the internet and in particular social media. Moreover, new types of data are also generated through the use of digital sensors in machines, automobiles, or even buildings. These sensors measure and communicate the location, frequency, interactions and behavioural patterns of individuals. The result is a vast stream of data that offers researchers and strategists a new approach to understanding the world and making decisions.

This session focuses on explaining what big data means and its rise in popularity as an information source. The sources of big data and applications for business practitioners as well as academics are presented. Specifically, the session discusses how most of us are involved in generating data through our daily behaviour. How big data is applied, managed and analysed is also addressed. The session also includes a practical exercise where students evaluate and present how Big Data affects their daily life.

LEARNING OBJECTIVES:

- What is big data?
- How is big data being generated?
- Who can benefit from big data?
- What type of information can marketing researchers gather from big data?
- How does big data affect your daily life?

KEY READINGS

Craig, C.S. and Douglas, S.P. (2005). International Marketing Research. 3rd ed. Chichester: John Wiley & Sons Ltd.

ADDITIONAL READINGS

Chen, H., Chiang, R.H.L., and Storey, V.C. (2012), ‘Business intelligence and analytics: from big data to big impact,’ MIS Quarterly, 36 (4), 1165-1188.

Davenport, T, Paul B and Randy B (2012), ‘How 'Big Data' is different,’ MIT Sloan Management Review, 54 (1),

Session 10 – Reporting marketing research and course summary
Adequate reporting is essential to communicate research findings in a clear and effective manner. This session will provide guidelines on how to structure a professional research report. The session will discuss appropriate reporting. Moreover, the session will also focus on how to prepare a clear and concise executive summary of a research report, as this is an essential component of a report especially valued by senior level management. In addition, the content of the final session will be determined based on the needs and interests of the students. For instance, the session could focus on discussing specific analysis tools, a summary of the course, or a revision of specific course materials.

Class Etiquette
Please turn off or silence mobile phones before class. Students involved in ongoing conversations, texting and/or answering cell phones during class time will be asked to leave without warning!

Cheating and Plagiarism
Cheating and plagiarism are serious offenses. Cheating is the attempted or unauthorized use of materials, information, notes, study aids, devices or communication during an academic exercise.
Examples include but are not limited to:

- Copying from another student during an examination or allowing another to copy your work
- Unauthorized collaborating on a take home assignment or examination
- Using unauthorized notes during a closed book examination
- Using unauthorized electronic devices during an examination
- Taking an examination for another student or asking or allowing another student to take an examination for you
- Submitting substantial portions of the same paper to two classes without consulting the second instructor
- Allowing others to research and write assigned papers including the use of commercial term paper services
- Signing for another student on the attendance sheet

Plagiarism is the act of presenting another person's ideas, research or writing as your own:

- Copying another person's actual words without the use of quotation marks and footnotes (a functional limit is four or more words taken from the work of another).
- Presenting another person's ideas or theories in your own words without acknowledging them.
- Using information that is not considered common knowledge without acknowledging the source.
- Failure to acknowledge collaborators on homework and laboratory assignment

My policy is to give a failing grade to any assignment that has been plagiarized or an exam in which you have cheated. If I catch a person cheating on the attendance sheet my policy is to give a zero to the cheating student for his/her attendance grade.