



## Is geomarketing addressed in the syllabus of public higher education in Portugal?

### Pedro Miguel da Silva Fernandes<sup>1</sup>.

#### **ABSTRACT**

Geomarketing is an increasingly common tool in the lives of organizations. In order for its application in practice to be effective, it is essential to equip the professionals involved in the process with adequate theoretical and practical knowledge, which can be obtained by attending various courses. The aim of this article is to answer the following question: Is geomarketing addressed in the syllabus of public higher education in Portugal? For this purpose, an exploratory documentary research was used, taking into account the 1st, 2nd and 3rd cycles of courses related to Business Management, Marketing, Geography and Information Systems, within the scope of public university higher education and polytechnic public higher education. We conclude that the answer to the initial question is positive, although the references to geomarketing as a curricular unit are still not very visible in the national territory. In terms of degree, the Master's Degree was the one that gathered the highest number of results.

**Keywords:** Geomarketing, Public university higher education, Polytechnic public higher education, Curricular units, Syllabus.

#### INTRODUCTION

Geomarketing is currently a widely discussed concept in the scientific literature. References to its application can be found in studies of various natures and in various contexts: Retail (PEREIRA, 2022), Public Transport (MANGINI, 2014), E-Commerce (ALBUQUERQUE, 2019), Coastal Tourism (ZARAGOZA *et al.*, 2019), Sports (RAVENEL, 2011), Hospitality (DE ALMEIDA GOMES, 2019), School context (CAETANO, 2023), Social context (ALBORNOZ DEL VALLE *et al.*, 2020), etc.

It is usually defined as the product of the connection between Geography and Marketing, several authors suggest it, of which we can highlight: YRIGOYEN (2003, p. 7), BOCALANDRO *et al.* (2007, p. 14), RODESKI (2010, p. 5), CARDOSO (2011, p. 9), FERNANDES (2023, p. 16307), among others.

In this regard, as we had pointed out in FERNANDES (2023, p. 16307), "In the essence of the term geomarketing, two areas are associated with each other, Geography and Marketing, that is, in general, it can be said that Marketing needs the geographic information provided by Geography. Geographic information is now essential in the life of organizations, enabling more credible and well-founded decision-making."

<sup>&</sup>lt;sup>1</sup> Doctoral student in Geography at the Faculty of Arts and Humanities of the University of Coimbra and collaborating researcher at CEGOT - Centre for Studies in Geography and Spatial Planning



The process of implementing a geomarketing system includes several stages, depending on the sector of activity and the purpose for which it is intended. Of course, the different stages must be supported by properly qualified human resources.

In this context, it is necessary, among other tasks, to handle sophisticated software, manage information obtained from various sources, prepare complex maps, integrate GIS (Geographic Information Systems), outline customer personalization strategies, manage Data-Base Marketing systems, deal with systems that store and cross-reference large amounts of data (Big-Data), implement various types/solutions of geomarketing (geofencing, geofilters, geotagging, etc.).

The qualification of human resources with theoretical and practical knowledge in a given area of knowledge can be achieved through the attendance of courses of different nature and duration.

Through this research, we seek to understand if in our public higher education system it is possible to have some training at this level, that is, whether or not geomarketing is covered in courses and syllabus.

In terms of framework, it is important to note that the public higher education system in Portugal has evolved significantly over the last few decades. The number of students enrolled in the most varied courses grew, which implied "(...) large investments in education, whether in the construction of infrastructure or in the training of teachers. Meeting this educational demand required new establishments, libraries, laboratories and, necessarily, more qualified teachers." (CERDEIRA & CABRITO, 2020, p. 8).

It currently consists of Public University Higher Education, Polytechnic Public Higher Education, Military and Police Public Higher Education, Private University Higher Education and Polytechnic Private Higher Education (DGES, 2024). These teaching strands offer a wide variety of courses tailored to the needs of demand. It is important to regularly adjust the syllabus in line with technological developments.

#### **OBJECTIVE**

The aim of this study is to investigate whether or not geomarketing is addressed at the level of public university higher education and polytechnic public higher education. It is important to point out that geomarketing is highly multifaceted and can receive input from various areas of study. In this specific article, we only limit ourselves to the analysis of courses and curricular units entitled "Geomarketing", or that include references to the subject in their study plans.



#### **METHODOLOGY**

From the methodological point of view, an exploratory documentary research was used (MARKONI & LAKATOS, 2003). Information was collected on the website of DGES - Directorate General for Higher Education and on the websites of each of the educational institutions potentially important for the fulfillment of our objective.

A list with detailed information on private university higher education institutions and polytechnic private higher education institutions was first collected from DGES (2024).

As mentioned in the introduction, geomarketing is understood as a concept that results from the fusion of Geography with Marketing, being applied in companies of the most diverse activities. Based on this assumption, for the list obtained, we chose courses related to Business Management, Marketing, Geographic Information Systems (GIS), Geography and other related courses, within the scope of the Bachelor's (1st cycle), Master's (2nd cycle) and Doctorate (3rd cycle) degrees. These are the courses that, by their nature, have proven to be the most conducive to eventually addressing the theme of geomarketing within the scope of their curricular units. All those courses that were not shown to be in the least related to geomarketing were excluded from the list.

Then, for each of the selected courses, a detailed analysis of the study plan/syllabus of the curricular units of the three cycles was carried out, based on the information available in open access on the website of the corresponding educational institution

#### **DISCUSSION OF RESULTS**

The results obtained, Chart 1, lead to the conclusion that the theme of geomarketing is present in four institutions, two of university education and two of polytechnic education.

In two of these cases, geomarketing gives title to curricular units included in Master's courses related to land management (IGOT and FCSH). In another case, it appears as a curricular unit of a Master's Degree in the area of commercial management (ESTGA). On the other hand, only one reference was found to the Bachelor's degree, with geomarketing being included as one of the topics of the syllabus of a curricular unit in the field of marketing (ISCAL).

It should also be noted that all four references found in the scope of this research refer to optional curricular units, it was not possible to find any mandatory curricular unit that included references to geomarketing.

In geographical terms, the educational institutions that allude to geomarketing are distributed as follows: AML - Área Metropolitana de Lisboa (3), Região de Aveiro (1).

Frame 1 – Results obtained

<b>Educational Institution</b>	Unit	Course	References to geomarketing
University Higher Education			
University of Lisbon	IGOT – Institute of Geography and Spatial Planning	Master's Degree in GIS and Territorial Modelling applied to Planning	Optional course "Geomarketing"
New University of Lisbon	FCSH - Faculty of Social Sciences and Humanities	Master's Degree in Territory Management	Optional course "Geomarketing"
Polytechnic Higher Education			
Polytechnic Institute of Lisbon	ISCAL – Higher Institute of Accounting and Administration of Lisbon	BSc in Management	Included in the syllabus of the optional course "Advanced Marketing" (3rd year/2nd semester)
Polytechnic School of the University of Aveiro	School of Technology and Management of Águeda	MSc in Commercial Management	Optional course "Geomarketing"

Source: Author based on information collected

From the point of view of content, in relation to the Master's Degree in GIS and Territorial Modelling Applied to Planning, at IGOT, the optional curricular unit "Geomarketing", of the second academic semester of the first year, aims to improve students' knowledge in relation to topics such as location, geomarketing projects and GIS from the perspective of geomarketing (IGOT, 2024). As can be seen on the website, it includes various subjects: Cartography, Censuses, Databases, Areas of influence, Market Analysis, etc. (IGOT, 2024).

The Master's Degree in Territory Management, from FCSH - Faculty of Social Sciences and Humanities, also includes in its scope an optional curricular unit called "Geomarketing". This unit, framed in the second semester, aims to expand knowledge on aspects such as spatial location, geomarketing planning, GIS and the definition of territorial strategies in various organizations (FCSH, 2024). The program consists of four major sets of subjects: GIS, Technology, Geomarketing, and Geomarketing Project (FCSH, 2024).

Entering now into the universe of polytechnic education, ISCAL – Higher Institute of Accounting and Administration of Lisbon is the only one of the four results obtained that does not have any unit with the designation "Geomarketing", but alludes to the concept within the scope of the curricular unit "Advanced Marketing", of the Degree in Management (ISCAL, 2024).

In title 5 of the unit's syllabus, "New Forms of Relationship in Marketing", some of the most recent trends in Marketing are presented, namely digital, viral, neuromarketing, etc. It is in this set, point 5.6, that geomarketing appears.



Finally, ESTGA - School of Technology and Management of Águeda, includes an optional curricular unit in its Master's Degree in Commercial Management. The course "Geomarketing" seeks to provide the student with knowledge of location and GIS in the field of retail (ESTGA, 2024). The curriculum includes four main topics: Spatial Marketing, Consumer Behavior and Spatial Information, Commercial Location and Geographic Information, and Marketing Management and Geographic Information (ESTGA, 2024).

The analysis of the various previous contents leads us to conclude that those who decide to attend these curricular units (which focus on GIS, location, geomarketing planning, etc.) are in a position to assimilate important knowledge, which can become essential to better understand geomarketing tools, as well as to support the process of implementing a system of this nature.

#### FINAL THOUGHTS

This article sought to analyze the presence of the theme of geomarketing in the study plans of the curricular units of public university higher education and polytechnic public higher education. The 1st, 2nd and 3rd cycles, respectively Bachelor's, Master's and PhD were taken into account.

The question posed at the beginning of this research was answered positively, although there are still few institutions that include geomarketing in their content.

Geomarketing is included in two public university higher education institutions and two polytechnic public higher education institutions. We are in the presence of optional curricular units, but which address the subject in depth, focusing particularly on GIS and the importance of localization, providing students with useful tools to deal with various geomarketing approaches.

For future studies, studies can be suggested that seek to evaluate the presence of the concept in graduate programs and even in shorter courses that do not lead to an academic degree, so that comparisons can be made with the panorama found in the results of this article.

# 7

#### REFERENCES

- Albornoz del Valle, E. A., Núñez Cerda, F. J., & Mena Frau, C. (2020). Geomarketing: Desde una visión comercial a una aplicación social, en contextos metropolitanos. Revista de Geografía Norte Grande, (76), 143-167. Available at: https://www.scielo.cl/scielo.php?pid=S0718-34022020000200143&script=sci\_arttext&tlng=en. Accessed on February 15, 2024.
- Albuquerque, R. N. S. D. (2019). Geomarketing e sua aplicação em estratégias de e-commerce: Um estudo de caso em campanhas publicitárias (Bachelor's thesis). Universidade Federal do Rio Grande do Norte. Available at: https://repositorio.ufrn.br/handle/123456789/34477. Accessed on February 15, 2024.
- Bocalandro, N., Krauthamer, D., & Bocalandro, N. L. E. (2007, November 14-16). Geomarketing: Aplicaciones de sistemas de información geográficos e inteligencia de negocios. In 2º Congreso Metropolitano de Ciencias Económicas. Buenos Aires. Available at: https://www.academia.edu/15554451/GEOMARKETING\_APLICACIONES\_DE\_SISTEMAS\_D E\_INFORMACION\_GEOGRAFICOS\_E\_INTELIGENCIA\_DE\_NEGOCIOS. Accessed on February 17, 2024.
- Caetano, J. E. V. (2023). Geomarketing escolar de bolso: Uma nova visão de mundo. Arco 43.
- Cardoso, C. E. P. (2011). Geomarketing como suporte de decisão em gestão do território (Doctoral dissertation). Faculdade de Ciências Sociais e Humanas, Universidade Nova de Lisboa. Available at:

  https://run.unl.pt/bitstream/10362/7175/1/Geomarketing%20como%20suporte%20de%20decis%c 3%a3o%20em%20Gest%c3%a3o%20do%20Territ%c3%b3rio.pdf. Accessed on February 15, 2024.
- Cerdeira, L., & Cabrito, B. G. (2020). Os professores do ensino superior público em Portugal: Uma carreira em perigo?. Revista Educação, Cultura e Sociedade, 10(1), 6-22. Available at: https://periodicos.unemat.br/index.php/recs/article/view/8548/6844. Accessed on February 19, 2024.
- De Almeida Gomes, T. C. (2019). SIG e Geomarketing no suporte à decisão da hotelaria em Portugal. Available at: https://repositorio-aberto.up.pt/bitstream/10216/125373/2/375306.pdf. Accessed on February 15, 2024.
- DGES Direção Geral do Ensino Superior. (2024). Available at: https://www.dges.gov.pt/guias/indest.asp. Accessed on February 19, 2024.
- ESTGA Escola Superior de Tecnologia e Gestão de Águeda. (2024). Available at: https://www.ua.pt/pt/uc/11667. Accessed on February 24, 2024.
- Fernandes, P. M. (2023). Aplicações do Geomarketing numa Perspetiva Social-Alguns Estudos de Caso. Revista Contemporânea, 3(9), 16304-16323. Available at: https://ojs.revistacontemporanea.com/ojs/index.php/home/article/view/1505/1228. Accessed on February 17, 2024.



- FCSH Faculdade de Ciências Sociais e Humanas. (2024). Mestrado em Gestão do Território. Available at: https://guia.unl.pt/pt/2019/fcsh/program/4231/course/722041082#programs. Accessed on February 24, 2024.
- IGOT Instituto de Geografia e Ordenamento do Território. (2024). Mestrado em Sistemas de Informação Geográfica e Modelação Territorial aplicada ao Território Plano de Estudos. Available at: https://www.igot.ulisboa.pt/mestrado-em-sistemas-de-informacao-geografica-e-modelacao-territorial-aplicados-ao-ordenamento/info?tipo=Plano. Accessed on February 24, 2024.
- ISCAL Instituto Superior de Contabilidade e Administração de Lisboa. (2024). Licenciatura em Gestão Plano de Estudos. Available at: https://www.iscal.ipl.pt/sites/default/files/2022-08/Marketing Avanc%CC%A7ado.pdf. Accessed on February 24, 2024.
- Mangini, E. R., Da Luz, L. F., & Conejero, M. A. (2014, October 22-24). Modelo de Análise de Localização e Aplicações de Geomarketing em Transporte Público de Alta Capacidade: o Caso da Companhia Paulista de Trens Metropolitanos. In XVI Simpósio de Excelência em Gestão e Tecnologia. Available at: https://www.aedb.br/seget/arquivos/artigos14/6120100.pdf. Accessed on February 15, 2024.
- Markoni, M., & Lakatos, E. (2003). Fundamentos de Metodologia da Investigação.
- Pereira, G. M. (2022). O Geomarketing como ferramenta de apoio à decisão numa empresa de retalho (Doctoral dissertation). Available at: https://run.unl.pt/bitstream/10362/148777/1/RelatorioEstagio\_a2020115328.pdf. Accessed on February 15, 2024.
- Ravenel, L. (2011). Uma abordagem de geomarketing do esporte. Confins: Revue franco-brésilienne de géographie/Revista franco-brasilera de geografia, (12). Available at: https://journals.openedition.org/confins/7099. Accessed on February 15, 2024.
- Rodeski, W. (2010). Geomarketing: O uso da regressão logística múltipla no mapeamento de regiões geográficas de alto potencial mercadológico. Available at: https://lume.ufrgs.br/bitstream/handle/10183/29109/000775680.pdf. Accessed on February 17, 2024.
- Yrigoyen, C. C. (2003). El geomarketing y la distribución comercial. Investigación y Marketing, 79, 6-14. Available at: https://www.efectus.cl/upload\_files/documentos/26062009124606-961978.pdf. Accessed on February 17, 2024.
- Zaragoza, M. P. P., Cruz, M. R. S., & Martín, G. F. (2019). An application of geomarketing to coastal tourism areas. Tourism & Management Studies, 15(4), 7-16. Available at: https://dialnet.unirioja.es/servlet/articulo?codigo=9236021. Accessed on February 15, 2024.