

Discovery Tools: Implementation in the Spanish University Libraries

Fran Cortés

Universidad Loyola Andalucía

[slide 1]

Presentation

Good morning, my name is Fran Cortés and I'm going to present you a study, based on my personal Final Degree Project Work at the Universidad de Extremadura, that was defended last July and which is named "Discovery tools: implantation in Spanish university libraries".

[slide 2]

Presentation script: Throughout this exhibition I am going to talk about:

- Introduction
- The reasons that led me to choose this topic.
- The objectives of the work
- The methodology we have used
- A brief theoretical introduction about discoveries
- Then, I will talk about the phase of Collection data
- After, we will pass to expose the most important part of the work: the analysis of results
- Finally, we will present you the main conclusions we have reached

[slide 3]

Introduction

With this work I have tried to know the current situation of the degree of implantation of the discoveries in the Spanish university libraries, as well as the degree of satisfaction of them.

Motivation

The reasons that led me to choose this topic for the study were several:

- Professional interest in discoveries. The Universidad Loyola Andalucía Library was in the group of the first Spanish university libraries to install and configure a discovery.
- In less than 10 years the vast majority of university libraries have been equipped with a discovery, to use it as a centralized access point to academic information. In a world in which the population (and the users of the libraries included) look for information in Google, or at most in Google Scholar, discoveries have been an opportunity to make accessible, the increasingly large, digital collections of information scientific.
- Finally, and also at a personal / professional level, I was interested in knowing the situation in the rest of Spanish university libraries, as well as the opinion of my colleagues about the commercial solutions chosen for their discoveries.

[slide 4]

Objectives

The objectives for this study are:

- To know the degree of implementation of the discoveries in the Spanish university libraries.
- To analyze the different facilities and try to extract some pattern: differences by Autonomous Community, by size of the university, by belonging to a consortium ...
- To study the presence of discovery tools on the web pages of university libraries.
- To know the degree of satisfaction of the libraries with the commercial solutions hired for the discovery.
- To compare results with previous ones at national and international level.

[slide 5]

Methodology

Regarding the methodological aspects, there are three phases to be highlighted:

1. Bibliographic review

A review of the current scientific literature on discovery tools has been carried out both in the Web of Science and in Google Scholar (because GS represents better the scientific production in social sciences in general and spanish in particular).

After this phase, we noticed that at the international level there were few studies with studies of the situation of the discoveries at a regional or national level, and many at the level of universities or consortiums, just a Final Master Project about discoveries in Spain at 2013.

2. Data collect

The collection of data is done in two ways according to its nature: quantitative and qualitative data. For the quantitative data an analysis of the web pages of the Spanish university libraries was done to know if they had discovery, the commercial discovery tool used, if the search box was on the main page and even if the search engine had been given a name. The survey, sent to the directors of the university libraries, allowed obtaining both quantitative and qualitative data.

It is necessary to indicate that a high percentage of responses was obtained from the survey, this figure, as well as the people responsible for completing it (the library directors themselves or those responsible for Digital Resources of each library), so we think that they validate the results obtained.

3. Data analysis

In this phase we proceeded to process the data obtained in a spreadsheet, to later analyze the results and draw conclusions. This phase will be seen in more detail later in our exhibition.

[slide 6]

Theoretical introduction

For centuries the function of the library did not change significantly: guard and transmit knowledge regardless of format.

The revolution in Information and Communication Technologies, fundamentally the emergence of the Internet at the end of the 20th century, meant a paradigm shift in libraries. Already at the beginning of the millennium there were studies that reflected the irrelevant role played by libraries and the loss of centrality in the search for information before the facilities and results offered by the Internet in general and Google in particular.

In the case of university institutions, their users (students, researchers and professors) as the first option when searching for scientific information use Google or Google Scholar in a percentage that ranges from 75% to 92% depending on the study being consulted.

From the catalog to the discovery: different tools were used by librarians in their work of intermediation to connect users with information: the traditional catalog of cards, the OPACs (Online Public Access Catalog), the "Extended OPACs", or the metasearch engines (such as Aquabrowser, Encore or Vufind).

After the launch of Google Scholar in 2004, Marshall Breeding warned that meta-searchers used up to now in libraries couldn't compete with Google's new product and that libraries should be equipped with a similar tool. The main feature that should have, besides its simplicity, was the basis of Google's success, the collection and indexing of the metadata of information sources in a central index prior to any search.

[slide 7]

Discovery or discovery tool: it is one of the fields, together with the metrics, in which the university libraries have focused their innovation in recent years, but what is a discovery? There are many definitions, but one that we like is that of HOEPPNER: "the set formed by a central index with pre-collected content and a rich interface in

benefits, which works on this index and which allows retrieving information from the local collection of the library, of the contents subscribed by it and Open Access sources."

There are many ways in which they are called in English: discovery tools, discovery services, web-scale discovery services, web-based discovery services, index-based discovery services. The latter seems the most accurate definition. In Spanish, a discovery tool is used, something less, "discoverer" and above all, the term in English, Discovery.

Characteristics of a discovery: central index, search interface with customization options, filters or facets, link resolver, integration with other systems (especially catalogs and local repositories), API access to external sources to collect information and added services (save , send, favorites, appointments, permanent links, save bibliographical references, alternative metrics ...).

[slide 8]

The use of a discovery and some library services: the scientific literature has studied different cases in which a discovery has affected the use of different services:

- Printed collection: the discovery not only could not increase the use of books and magazines on paper but they did not contribute to reduce their descent.
- Digital collection: different studies showed an increase in the use of, especially electronic journals, which grew around 15%
- SOD: the discovery did not increase the requests for articles and interlibrary loans either.

Discovery tools in the market: basically, and although there is some other actor in the US, worldwide the main products are Ebsco Discovery Service (EDS), from Ebsco, Summon and Primo, from Proquest and WorldCat Discovery Service, from OCLC.

[slide 9]

Graph: Figures for new and total installations per year:

[In the tables you can see how EDS is the most installed in the world, the decrease in the facilities of Summon, the growth of Primo (partly at the expense of Summon, which belongs to the same company) and also that of the discoverer of OCLC. Surely to this day Primo facilities will be much higher as it is the discovery that comes defect in the fashion library management platform, Alma and might be guilty of the decline in 2017 of the EDS.]

Then we will see if the situation at Spain corresponds to the one of facilities in the world.

[slide 10]

Analysis and results

Of the 78 Spanish university libraries, excluding those universities that do not have a library (at least on their websites), the answers represented a percentage of 81%, which gives consistency to the results obtained.

[Graph: libraries with / without discovery]

Of the libraries that do not have a discovery, half they were from very small private universities, but it is striking that the other half belonged to public universities, some of them between 20,000 and 30,000 students, not a small university.

[slide 11]

[Graph: Libraries without discovery]

About this question the most important issue is that eight of the twelve universities was in the phase of implantation of a discovery

[slide 12]

[Graph: Discovery tools in Spain] In Spain there is no repetition of the overwhelming dominance we have seen internationally, and if the comparison is made at the level of companies, there is a tie between the discoveries of Proquest and Ebsco.

[slide 13]

Update august 2018:

The original data were collected in may 2017. Now have been reviewed in august 2018 with the next facts:

-Installed discoveries: 3 new installations

-Libraries without discovery: 9 -- 12

-Installations by product:

>EDS: the only that increases because some ways (from no installations and Summon/Primo –in case of catalan Consortium)

>Summon: the only one who loses installations

>Primo: only increases from Summon but maintains its number total of installations

>WorldCat: only 2 new installations (from Summon)

[slide 14]

[Graph: increase in the use of services] In line with other studies at an international level, there is an increase in the use of articles in electronic format and ebooks. Regarding the use of SOD (Document Delivery Service in english), which would include interlibrary / intercampus loan requests, as well as requests for copies of articles or chapters, unlike the results of other studies, the Spanish libraries surveyed did appreciate an increase in this service. Also in line with international studies it is reflected that the use of a discovery at least does not stop the fall of the printed collection. Regarding the increase or not of training requests, the results of the present study are not conclusive.

[slide 15]

[Graph: global satisfaction after implantation] the results for each criterion are quite homogeneous, perhaps we can emphasize that the most valued criteria are Content and Coverage and Integration with other Systems.

[slide 16]

[Graph: global valuation (satisfaction vs. used resources)] We can see that most of the libraries are satisfied with the implementation of the discovery in relation to the resources used.

[slide 17]

[Graph: change of discovery tool] The degree of satisfaction shown in the survey seems not to match the number of libraries that express their desire to change discovery tool, whose number doubles those that would not change, although the high number of libraries that stopped answering this question makes difficult to draw conclusions.

[slide 18]

[Graph: choice of discovery according to size of the University] It can be seen that in the smaller universities (with fewer students), the EDS installation predominates, and as the size of the university increases, this tool loses its presence in favor of Summon.

[slide 19]

[Graph: degree of satisfaction with discovery and criteria] No striking conclusion emerges from the analysis, except that Primo's averages for each criterion are slightly higher in 6 of the 9 criteria analyzed, than in the other tools, despite being one of the two tools (together with WorldCat) with fewer facilities. As regards the tools with more facilities (EDS and Summon), the higher means correspond to the integration with other systems (EDS) and to the content and coverage (Summon).

[slide 20]

[Graph: Ranking of discoveries by degree of satisfaction] The results of the survey indicate that the best valued discovery is Primo, precisely one of the least installed in Spain in 2017, Summon and WorldCat get similar valuations and on the contrary, the most implemented discovery tool in Spain receives the worst valuation.

[slide 21]

Conclusions

1. Implantation

- Percentage: the majority of Spanish university libraries (76,5%) has a discovery tool. Of those that did not yet have one at the date of information collection, half were small private universities (in number of students) and the other half public (some of medium size).

Of the 12 libraries that did not have discovery, 8 were in the study phase for their implementation, which shows that nowadays practically all Spanish university libraries have a discovery as a search tool installed.

- Tools: the discovery tools currently implemented in Spain are, ordered by percentage: EDS (47%), Summon (39%), Primo (8%) and WorldCat (6%), with two large companies controlling the Spanish market: Ebsco, with its EDS (47%) and Proquest, with 47%, the result of the sum of its Summon and Primo products. This situation, however, does not correspond to the international domain of the discoverer of Ebsco.

[slide 22]

2. Differential analysis according to universities

- Size: from the analysis of facilities, there seems to be a correlation between the size of the university, measured in students, and the selected tool. In this case EDS stands out among the smaller universities and Summon among the largest.

- Public / Private: the analysis of the websites allowed us to know that 88% of the libraries of public universities had a discovery by 73% of the private ones.

- Autonomous regions or Consortia: It has not been possible to establish any parallelism between the installed commercial solutions and the Autonomous Community belonging to the university or whether it was part of a Consortium or not.

[slide 23]

3. Websites analysis

- Name: 68% of libraries with a discovery installed had assigned a name.

- Search box: Regarding the role that was assigned to the discovery on the **main page** of the library's website, we noticed that only the discovery search box appeared on 41 websites, only the search box for the catalog on 29 websites and on 5 pages of libraries showed a mixed solution.

[slide 24]

4. Level of satisfaction according...

- Criteria: according to the data extracted from the statistics, the satisfaction after the installation and use of a discovery is similar among all the variables studied. Among the most valued aspects would be variables such as Content and coverage, Usability of the interface and System integration and among the worst rated we find the variables Personalization, Statistics and Relevance ranking.
- Comparative satisfaction – used resources: In a balance between the satisfaction of using a discovery and the human, technological and economic resources used by each library, the result indicates that 76.5% of the university libraries valued it positively. This figure does not seem to be in line with the results of relevance and satisfaction.
- Change of discovery tool: although there were many libraries that did not answer this question, It is surprising the high number of libraries that declare themselves

willing to change their discovery, taking into account the short space of time since their implementation for most of them.

- Satisfaction for discovery and criteria: Regarding the satisfaction for each discovery and by variable, the libraries that have Summon and WorldCat value the content and coverage, usability of the interface and quality of the metadata with the highest score, while the libraries that have EDS and Primo value as the most satisfactory aspect its integration with other systems.

And with regard to the worst-rated variables, in Summon and WorldCat are the statistics that are extracted from the discovery, in EDS the customization options of the interface, and in Primo, the quality of the metadata and the ranking of relevance.

- Ranking de discoveries por satisfacción To conclude our study and regarding the overall satisfaction of each library with its discovery, the result obtained shows us that the Primo user libraries are the most satisfied with the installed tool (4.25 out of 5) and follow them in decreasing order of satisfaction. those that use Summon (3.85), WorldCat (3.84) and EDS (3.51).

[slide 25]

5. Results comparison 2013 - 2017

- Installations: while in 2013 50% of Spanish university libraries had a discovery in 2017, the figure rose to 76.5%
- Satisfaction: it has not been possible to draw a comparison as to the degree of satisfaction after the use of the discoveries since in 2013 that question was not posed, due to the short time that they had been implanted in the libraries.
- Tools: in terms of commercial solutions, while in 2013 Summon almost doubled to the next, EDS, as the most used discovery, the data from 2017 show us that two companies share practically the cake of the facilities in Spain with 47% each of them, Ebsco with their EDS and Proquest with Summon and Primo.

[slide 26]

6. Repercussions of use in some library services

Although a priori it was not an objective of the work, another conclusion that we can extract refers to the way in which the use of a discoverer has impacted in the use of some of the services of the Library:

- Digital collection: the use of the digital collection grew, especially that of articles in electronic journals and something less than that of electronic books.

- SOD: the use of SOD (requests for interlibrary loans / intercampus and requests for copies of articles or chapters) also increased, unlike the results of other international studies.

- Printed collection: what results coincide with other studies at the international level is that the installation of a discovery does not increase the use of the printed collection, or at least it did not reduce the gradual descent of books consulted in the room or borrowed.