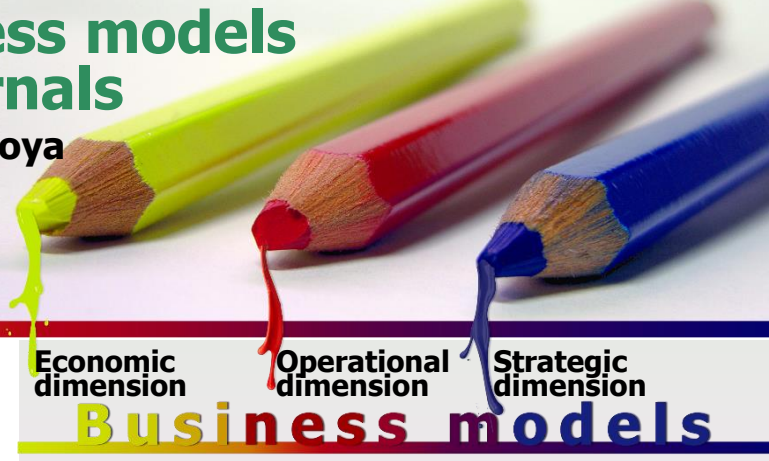
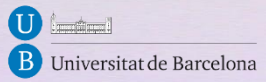


Key factors in the business models of Spanish scientific journals

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Objectives and method

This study aims to identify management-related factors which decisively influence the sustainability of scientific journals. Based on a view of the *business model* concept that includes components of the financial, operational and strategic dimensions of the publishing activity:

- it identifies the main funding sources and the basic organizational structure of Spanish scientific journals;
- it shows how editors assess the strategic dimension of business models;
- it reveals editors' general opinions towards their future publishing projects.

Economic dimension **Operational dimension** **Strategic dimension**
Business models

This study is based on a view of the *business model* concept that extends the limited conceptual framework focused on the financial perspective into other economic and financial components and into operational and strategic dimensions of the publishing process.

Results were obtained from a survey conducted among 1,280 editors of Spanish scientific journals included in the Dulcinea database, with a response rate of 43%.

Economic and financial dimension

Journals that receive income from any of the following categories. Response rate: 92.3% (n=518)	n	%
• Government offices and other entities supporting scientific production.	391	69.7%
• Direct transactions with customers or users (readers, institutional clients or authors).	280	49.9%
• Other business transactions not included in the main activity.	119	21.2%

Distribution of the main costs

- Results show that the largest part of the total cost of the editorial process corresponds to production costs, with a median value of nearly 80%.
- The other three types of cost have a median value ranging between 13 and 25%.

Distribution of the main indirect expenses. Response rate: 65.2% (n=366)	n	%
• External services	235	64.2%
• Staff	202	55.2%
• Current assets	186	50.8%
• Capital assets	103	28.1%
• Payments to external reviewers	34	9.3%



➢ Many journals report expenditure on external services (64.2%; n=235). This is also the item that represents the highest percentage of their total expenditure, with a median value of nearly 80%.

Operational dimension

Journals by type of human resources and full-time equivalent- FTE	Volunteers	Internal staff	External staff	Fellows
Response rate: 91% n=511				
n=	395	220	143	94
% of response rate; n=511	77.3%	43.1%	28.0%	18.4%
FTE Median =	1.25	0.75	.50	.50

- Volunteers are also the human resources with the longest working schedules, as shown by these median full-time equivalents.
- Whatever the contractual relationship, the majority of staff are part-timers (dedication equivalent to 10 hours or less per week). Regardless of the type of contractual relationship with the journal, fewer than 10% report being full-time workers.

Strategic dimension

Greatest opportunities → ICTs  **Open access** 
 ➢ 75% of those who expressed views regarding opportunities and threats believe that ICTs represent a great opportunity, and 47% believe that open access also represents a real opportunity for their journals.

Greatest threat → Multinational publishers
 ➢ A total of 357 (63.6%) respondents assessed the impact of multinationals in the sector; 54.3% considered multinationals as a threat.

The three most important competitive advantages

	Very important	Important	Moderately Important	Of little importance	Unimportant
Skills and competencies of the journals' managers Response rate: 88.8% n=498	66.5%	27.9%	4.8%	0.6%	0.2%
Editorial board's prestige Response rate: 91.1% n=511	63.2%	24.7%	10.6%	1.0%	0.6%
Impact factor Response rate: 90% n=505	62.2%	22.2%	10.5%	3.4%	1.8%
	331	139	24	3	1
	323	126	54	5	3
	314	112	53	17	9

Future prospects

Editors' general opinion of the future of their publishing projects

Competitive advantages	1= Easy to maintain	2	3	4	5= Very difficult
	Difficult to maintain				
➢ More than 40% of those who expressed their views on the IF or number of citations considered that these competitive advantages are difficult or very difficult to sustain...					
Impact factor of our journal Response rate: 77.2% n=433	13.9%	16.4%	28.6%	21.7%	19.4%
	60	71	124	94	84
Number of citations Response rate: 70.2% n=394	11.4%	16.8%	29.7%	26.4%	15.7%
	45	66	117	104	62
Low production costs Response rate: 71.5% n=401	24.9%	21.4%	22.7%	15.2%	15.7%
	100	86	91	61	63
	Easy to maintain				
➢ The relationship with suppliers, skills and competencies of managers and the periodicity of the journals, are among the competitive advantages that are easiest to maintain.					
Periodicity of the journal Response rate: 91.1% n=416	39.2%	22.6%	19%	8.9%	10.3%
	163	94	79	37	43
Promptness in the review process Response rate: 90% n=404	17.8%	26.5%	29%	17.6%	9.2%
	72	107	117	71	37