



## Data Article

# Drivers of business model innovation in family firms: A dataset analysis



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## ABSTRACT

In recent years, both in the world of research and consulting, the concept of innovation in the business model has been gaining a lot of interest. As a result, an incipient number of scientific and popular publications are being generated, which try to delimit and explain this term, as well as work methodologies for its application in the business world. The family business field can benefit from the application of this approach. But, at the same time, it can also serve as an object of study since its special idiosyncrasy will allow to deepen the analysis of successful business models. To illustrate innovation in business models, data from 112 family firms representative of the regional economy are presented. The companies are also associated with the Murcian Association of Family Businesses (Amefmur). The collaboration with this organization has made it possible to obtain very valuable and representative information thanks to the support provided. The collection of information was carried out through an electronic survey. These data could be especially useful for establishing business recommendations for this type of companies and for analyzing other possible interrelationships of the variables available in the database.

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## Specifications Table

|                          |  |
|--------------------------|--|
| Subject                  | Business Model, Strategy and Innovation Management   |
| Specific subject area    | Business model innovation is primarily about learning how to configure a firm. Specifically, this data focuses on family firms' competitiveness  |
| Type of data             | Table, Figure.   |
| Data collection          | Raw, Analyzed, Filtered, Processed.<br>Data from 112 family firms representative of the regional economy are presented. The companies are also associated with the Region of Murcia Association of Family Businesses (Amefimur). The collaboration with this organization has made it possible to obtain very valuable and representative information thanks to the support provided. The collection of information was carried out through an electronic survey. These data could be especially useful for establishing business recommendations for this type of companies and analyzing other possible interrelationships of the variables available in the database. Data were analyzed to validate the measures as well as to provide a preliminary approach of dataset potential for future studies. |
| Data source location     | City/Town/Region: Murcia<br>Country: Spain   |
| Data accessibility       | Repository name: Mendeley<br>Data identification number: Merono-Cerdan, Angel L; López-Nicolás, Carolina; Molina-Castillo, Francisco-Jose (2024), "Business model innovation in family firms", Mendeley Data, V1, doi: <a href="https://doi.org/10.17632/7h6p2hf65f.1">10.17632/7h6p2hf65f.1</a><br>Direct URL to data: <a href="https://data.mendeley.com/preview/7h6p2hf65f">https://data.mendeley.com/preview/7h6p2hf65f</a>  |
| Related research article | Non-related research article   |

## 1. Value of the Data

- Globalization has changed the traditional balance between customer and supplier. Technological development provides more possibilities for customers. More than ever, companies must focus on their customers and re-evaluate their value propositions. To succeed, it is no longer enough to launch new products or adopt new processes; successful companies break into their sectors with new business models. Without an adequate business model, innovators will fail to distribute or capture value from their innovations.
- The study of the business model of family firms can contribute to advancing the field of business models. This dataset connects business models with the family business and, at the same time, evaluates concepts of business competitiveness.
- Family firms are a special type of business with special resources and capabilities. Although in the past family businesses were seen as a kind of sub-company compared to listed companies, today there are a large number of researchers analyzing the circumstances and reasons for the success of this type of companies.
- The main reasons for changing the business model are to make organizational changes and to meet the demands arising from access to new markets. These changes, in turn, contribute to the achievement of the company's objectives (profitability, growth and reputation) and to deal with competitiveness in the market.
- Although the business model concept is closely linked to the concept of strategy, they are not the same. The business model focuses on value creation and shows how the company captures that value. Strategy goes one step further, addressing how to make this competitive advantage sustainable. Business model innovation assumes that business models are not static, but dynamic. In many cases, these models change in an emergent way, not as a consequence of a premeditated strategy.
- This dataset could be very useful to explore the implications of business model innovation in family firms. So far, this area of research has received scarce attention from academics. However, family firms are crucial for any economy, and based on their peculiarities, they must transform their business model to compete with other firms in the market. Therefore, this data will be very helpful to other researchers who want to know more about business model innovation and competition.

## 2. Background

Companies that have been successful for some time run the risk of failure if they continue to do what used to be good without adapting their business model to changes in the competitive situation [1]. Authors such as Hamel and Välikangas [2] argue that the speed of strategy decay is accelerating everywhere. Innovation in business models makes it possible to redefine competition by creating differentiated spaces where competition is lower [3]. This paper analyzes the relationship between family business and business model. The family business is the most widespread type of organization in our economy, due to its characteristics: long-term vision, limitations to growth and presence in traditional sectors [4]. This makes managing its business model essential for the continuity of its business project [5]. The analysis of the business model in this type of companies and the innovation of this business model can be essential to know who are the main consumers [6], what is the value proposition of the organization, and what are the capabilities the organization needs to master to produce that value, either internally or through partnerships with other firms [7].

## 3. Data Description

Data for this study is part of the Observatory of Family Firm of the Chair of Family Business Mare Nostrum (University of Murcia and Polytechnic University of Cartagena). A panel of two hundred family firms collaborate annually, providing information about their situation and expectations. The survey has two parts, one of which is fixed and involves questions about the economic and business situation, and another part that is variable and collects data on a monographic topic of interest. Data were collected through an online survey with all the items to measure the variables and an ethics and confidentiality statement for data treatment. The questionnaire items are listed below according to the measures previously obtained in the literature review. Specifically, strategic factors' scale is borrowed from [8], business objectives are measured in the same way as [9], and business model components are the nine items proposed by [10]. The respondents are asked about the changes made in their business model in the last 5 years, but also what modifications they foresee for the future.

Q1. In the LAST SIX MONTHS, what factors have been fundamental in the design of the company's strategy? (please tick as many options as you think fit)

- a. The quality (1-0)
- b. Access to new markets (1-0)
- c. Launch of new products (1-0)
- d. Organisational changes (1-0)
- e. Customer service (1-0)
- f. Marketing activities (1-0)
- g. Cost control (1-0)

Q2. Please rate the importance of the following objectives in your company

|                                      | Very low | Low | Average | High | Very high |
|--------------------------------------|----------|-----|---------|------|-----------|
| a. Financial independence            | 1        | 2   | 3       | 4    | 5         |
| b. Profitability                     | 1        | 2   | 3       | 4    | 5         |
| c. Growth or survival of the company | 1        | 2   | 3       | 4    | 5         |
| d. Company reputation                | 1        | 2   | 3       | 4    | 5         |

Q3. To what extent have the following aspects of your business model been redefined in the last 5 years?

|   | Unchanged | Slight changes | Profound changes |
|---|-----------|----------------|------------------|
| a. Market/customer segments                   | 1         | 2              | 3                |
| b. Products                                   | 1         | 2              | 3                |
| c. Distribution and communication channels    | 1         | 2              | 3                |
| d. Customer relationship and customer service | 1         | 2              | 3                |
| e. Revenue sources and pricing systems        | 1         | 2              | 3                |
| f. Resourcing                                 | 1         | 2              | 3                |
| g. Key processes and activities               | 1         | 2              | 3                |
| h. Network of alliances                       | 1         | 2              | 3                |
| i. Cost structure                             | 1         | 2              | 3                |

Q4. What situation do you foresee for these aspects in the next 5 years?

|   | Will not change | Will slightly change | Will profoundly change |
|---|-----------------|----------------------|------------------------|
| a. Market/customer segments                   | 1               | 2                    | 3                      |
| b. Products                                   | 1               | 2                    | 3                      |
| c. Distribution and communication channels    | 1               | 2                    | 3                      |
| d. Customer relationship and customer service | 1               | 2                    | 3                      |
| e. Revenue sources and pricing systems        | 1               | 2                    | 3                      |
| f. Resourcing                                 | 1               | 2                    | 3                      |
| g. Key processes and activities               | 1               | 2                    | 3                      |
| h. Network of alliances                       | 1               | 2                    | 3                      |
| i. Cost structure                             | 1               | 2                    | 3                      |

Additionally, information about the year of foundation, annual income, assets, and number of employees has been collected.

#### 4. Experimental Design, Materials and Methods

The data from 112 family firms representative of the regional economy are presented. The companies are also associated with the Region of Murcia Association of Family Businesses (Amefmur). The collaboration with this organization has made it possible to obtain very valuable and representative information thanks to the support provided. Family business is defined in terms of family involvement in ownership and management. In these businesses, besides the economic dimension there is a family dimension that mediates decision making. Firms in the sample perceive themselves as family business in that they are members of an association of this particular type of firms. In line with [11] and [12] family businesses in this study are defined as such according to self-identification. The collection of information was carried out through an electronic survey. These data could be especially useful for establishing business recommendations for this type of companies and analyzing other possible interrelationships of the variables available in the database. The non-response test was conducted following the reasoning that last responders are more similar to non-responders than first responders. No significant differences were found between first and last responders suggesting that sample selection bias is not a problem in this study.

*Next, sample descriptive information is shown.*

**Table 1**

Sample description: sector.

| Sector        | n  | %      |
|---------------|----|--------|
| Manufacturing | 35 | 33.7 % |
| Building      | 9  | 8.7 %  |
| Services      | 60 | 57.7 % |

**Table 2**

Sample description: age, income, assets and employees.

|              | Year of foundation | Income 2013 | Assets 2013 | Employees |
|--------------|--------------------|-------------|-------------|-----------|
| n            | 105                | 93          | 93          | 85        |
| Average      | 1991               | 12341.88    | 9191.79     | 67.82     |
| Median       | 1993               | 908.74      | 1130.66     | 8.00      |
| s.d.         | 9.094              | 90945.061   | 59297.029   | 384.084   |
| Percentil 33 | 1990.33            | 393.82      | 850.30      | 4.00      |
| Percentil 66 | 1995.00            | 1918.37     | 1956.93     | 15.00     |

Respondents were asked about the level of change in each of their business model components over the last five years, with the following results:

**Table 3**

Changes in business model in the last 5 years.

|  | Changes |        |        |
|--|---------|--------|--------|
|  | No      | Minor  | Major  |
| Market/customer segments                   | 17.6 %  | 57.4 % | 25.0 % |
| Products in terms of customer needs        | 14.8 %  | 54.6 % | 30.6 % |
| Distribution and communication channels    | 17.6 %  | 52.8 % | 29.6 % |
| Customer relationship and customer service | 13.2 %  | 50.0 % | 36.8 % |
| Revenue sources or pricing systems         | 21.9 %  | 53.3 % | 24.8 % |
| Resource endowment                         | 23.1 %  | 48.1 % | 28.8 % |
| Key processes and activities               | 27.2 %  | 48.5 % | 24.3 % |
| Network of alliances                       | 30.8 %  | 46.7 % | 22.4 % |
| Cost structure                             | 14.2 %  | 45.3 % | 40.6 % |

In the last 5 years, the greatest changes in the business model of family businesses have been experienced in the cost structure and in customer relationship and customer service. In the former, 40.6 % of the companies have made profound changes, 36.8 % in the latter. On a second level is the redefinition of products in terms of customer needs and changes in distribution and communication channels. The aspects that have changed the least are the alliance network and key processes and activities.

The following question analyzed a block of questions that seeks to understand the fundamental factors in the design of the company's strategy. Those factors are diverse. Based on literature review, we chose most common strategic factors, and their measuring is inspired by [8]. Specifically, the variables used are binary (1 yes, 0 no). Table 4 shows descriptive results of the items.

**Table 4**

Strategic factors.

|                        | Mean | Standard deviation |
|------------------------|------|--------------------|
| Quality                | 57 % | .497               |
| Access to new markets  | 29 % | .458               |
| Launch of new products | 24 % | .430               |
| Organizational changes | 24 % | .430               |
| Customer service       | 40 % | .492               |
| Marketing activities   | 34 % | .476               |
| Cost control           | 67 % | .472               |

The companies were then requested for a list of objectives on which they were asked to rate their importance on a 5-point Likert scale. As can be seen in Table 5, the main objective pursued by family businesses is to improve their reputation, followed by efforts to grow/survive, financial independence and, lastly, profitability.

**Table 5**

Importance of business objectives.

|                          | Mean | Standard deviation |
|--------------------------|------|--------------------|
| Financial independence   | 3.67 | 1.134              |
| Profitability            | 3.61 | .955               |
| Business growth/survival | 3.82 | 1.132              |
| Company reputation       | 4.13 | .847               |

In order to analyze the factors that cause changes in the business model, a cluster analysis was performed. All the components of the business model (Table 3) were found to be significant ( $p < 0.000$ ), forming two groups: companies with few changes in the business model ( $n = 53$ ) and companies with profound changes ( $n = 46$ ). A logistic model was used to determine the variables (strategic factors and business objectives) that are significantly related to belonging to the group of companies that have made profound changes in their business model. Significant coefficients in Table 6 imply predictors of the dependent variable. It should be noted that like any nonlinear regression model, the parameters of the logistic model are not necessarily the marginal effects we are used to analyzing, or this reason, we also show Odds-ratio information ( $\text{Exp}(\beta)$ ) indicating how the probability of the company belonging to the cluster of profound changes in its business model increases with the variable in question assuming all other factors constant.

Table 6 shows a summary of the standardized coefficients ( $\beta$ ) for each independent variable along with the aforementioned Odds-ratios, as well as the main indicators of goodness-of-fit. The significance of the likelihood test reveals a strong relationship between the dependent variables and the corresponding regressors in all three regressions. Also the Hosmer-Lemeshow test indicates that the proposed models are not significantly different from a perfect one that can correctly classify the observations into their respective groups [13]. The functions show quite high percentages of cases correctly classified by the models, therefore, the models have a high discriminatory power. The Nagelkerke pseudo R-squared is 35.1 %, so the model explains a considerable percentage of the variation in the data.

**Table 6**

Logistic regression results.

|                        | $\beta$ | $\text{Exp}(\beta)$ |     |
|------------------------|---------|---------------------|-----|
| Access to new markets  | 0.947   | 0.388               | *   |
| Organizational changes | 1.729   | 0.177               | *** |
| Financial independence | -0.103  | 0.902               |     |
| Profitability          | 0.554   | 1.740               | *   |
| Growth/survival        | 0.464   | 1.591               | *   |
| Reputation             | 0.540   | 1.717               | *   |
| Constant               | -3.951  | 0.019               | **  |
| Chi-square             | 28.282  | ***                 |     |
| -2 log plausibility    | 99.771  |                     |     |
| Hosmer-Lemeshow        | 7.820   |                     |     |
| R square Nagelkerke    | 35.1 %  |                     |     |
| % correct by model     | 75.3 %  |                     |     |

$p < 0.1$ \*;  $p < 0.05$  \*\*,  $p < 0.01$ \*\*\*.

A more detailed analysis of the results confirms that only two strategic factors are significantly related to business model innovation. Organizational change is the most important, fol-

lowed by access to new markets. As for the objectives, all are significant except the pursuit of financial independence. It can therefore be stated that companies that have changed their business model seek to improve their reputation, their profitability and to grow/survive (Tables 1 and 2).

## Limitations

The dataset consists of variables connecting business models, strategic factors and business objectives in 112 family businesses. There are theoretical reasons to consider family firms as a special type of firm with special resource endowments and capabilities. For this reason, the dataset can contribute to the advancement of the field of business models in family firms. However, the variables contained in the dataset are limited and other constructs not considered here may be relevant to analyze the circumstances and reasons for the success of this special type of firms. As the 112 companies in the dataset are, all of them, family firms, no statistical comparison can be calculated between family and nonfamily firms from these data.

## Ethics Statement

All authors comply with the ethics procedure of the University of Murcia. All respondents were thoroughly informed about the content and the scope of the study before participation. Participation was completely voluntary and participants cannot be identified. An ethics approval from an IRB was not required.

## Data Availability

[Business model innovation in family firms \(Original data\)](#) (Mendeley Data).

## CRediT Author Statement

**Angel-Luis Meroño-Cerdan:** Conceptualization, Methodology, Data curation, Formal analysis, Writing – original draft; **Carolina Lopez-Nicolas:** Writing – review & editing; **Francisco-Jose Molina-Castillo:** Software, Data curation, Writing – original draft, Supervision.

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## Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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