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Knowledge transfer mechanisms and the performance of franchise systems: An empirical study

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In this study the influence of the mechanism used to transfer knowledge (operating manuals, training, support services provided) on the performance of franchise systems is analysed. For this purpose a multiple linear regression analysis has been carried out on a sample of franchised establishments from different franchise chains and a variety of business sectors, all operating within Spain. The study uses a subjective measurement of performance. The results of the regressions seem to indicate that the factor with the greatest impact on the performance of franchise systems is on-going support services that the franchiser provides to the franchisee.

Key words: Knowledge transfer, franchise systems, franchised establishments, performance.

INTRODUCTION

These days nobody questions the fact that knowledge has become one of the most important strategic resources for any organisation. Given that, to a large degree, the operation and competitiveness of an organisation depends on knowledge, it can and must be managed (Kogut and Zander, 1992; Quinn, 1992; Spender, 1994; Hunt and Morgan, 1995; Grant, 1996; Morgan and Hunt, 1997; Teece, 1998; Cross et al., 2001; McCann III and Buckner, 2004; Paswan and Wittman, 2009). Knowledge determines how things are done and how they can be improved, which means that only those companies capable of efficiently managing knowledge will achieve higher performance levels (Prahalad and Hamel, 1990; Kogut and Zander, 1992; Morgan and Hunt, 1997; Nahapiet and Ghoshal, 1998; Teece, 1998; Coff, 2003).

Maintaining a competitive advantage over time depends on the ability to create, transfer, use and protect knowledge assets that are difficult to imitate (Liebeskind, 1996; Nonaka and Takeuchi, 1999; Teece, 2000).

Therefore, investing in knowledge can allow organisations to maintain competitive advantages over the long-term (Bhatt, 2001). Both the creation and transfer of knowledge are considered to be key elements in knowledge management (Hendriks, 1999; Bhatt, 2001; Goh, 2002; Albino, Garavelli and Gorgoglione, 2004; English and Baker, 2006) because they sustain competitive advantages (Argote et al., 2000) and determine the competitiveness and success of the organisation (Syed-Ikhsan and Rowland, 2004). However, simply owning knowledge assets that are of value to one part of the organisation does not necessarily imply that other parts of the organisation will benefit from them (Szulanski, 2000; Trevilla Cantero et al., 2007) or that they will lead to success. For this to be true the knowledge assets must allow the creation of new knowledge, distribute it throughout the entire organisation and to be incorporated into new technologies, products and services (Nonaka and Takeuchi, 1999). Under these conditions the transfer of knowledge will influence productivity, efficiency and the creation of competitive advantages (Argote et al., 2000; Goh, 2002; Syed-Ikhsan and Rowland, 2004; Bou-Lluser and Segarra, 2006; Trevilla Cantero et al., 2007).

Given the importance of this process to the generation of sustainable competitive advantages, the focus of this

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study is on knowledge transfer and its application to franchise systems. For this type of cooperation agreement, which has grown in importance in Spain over recent years, the knowledge transfer process is fundamental in the sense that any difficulty arising in this transfer process will have a negative impact on the performance of the franchise chain.

The study has been structured in the following way. The next section outlines the theoretical basis of the study. After that, the methodology used is presented. This is followed by the presentation of the empirical study and the results. Finally, the conclusions are set out along with the main limitations of the study.

THEORETICAL BASIS

A franchise is a contractual cooperation agreement between two companies, a hybrid form of organisation between market and hierarchy. On the one hand, the franchisor develops a business system, tests its profitability and acceptance by the market and is responsible for the expansion process and any on-going adjustments made in response to changing consumer tastes. On the other hand, the franchisee, in exchange for making financial contribution (generally an up-front entry fee and royalties), operates this business system in a specific geographic area in accordance with the rules established by the franchiser (Grant, 1985; Elango and Fried, 1997; Fernández Aguado, 1997; López Fernández, 1997; Barbadillo de María, 1999; López Fernández et al., 2000; Fernández Aguado et al., 2001; Bermúdez González, 2002; Altinay and Miles, 2006; Hoy, 2008; Vazquez, 2008a; Wang and Altinay, 2008; Paswan and Wittmann, 2009). On occasions, franchised establishments can be used to experiment with new products (Hoy, 2008).

The literature contains many studies of franchise systems based on a variety of conceptual frameworks such as transaction cost theory, agency theory and the resource-based theory (Eisenhardt, 1989; Lafontaine, 1992; Dewhurst and Burns, 1993; Elango and Fried, 1997; Fulop and Forward, 1997; Shane, 1998; Altinay and Miles, 2006; Vazquez 2007, 2008a; Paswan and Wittmann, 2009).

Cooperation between the franchiser and the franchisee, as established through the franchise agreement, requires the organisation of the business activity into two different organisational types: the franchise centre and the franchised operating units. So with the help of the franchiser the franchisee operates its own business and, as a result, this method of organising business activity favours the creation of new businesses.

According to the European Code of Ethics for Franchising, the basic components of the franchise concept are the brand, the product and the know-how (Alonso Prieto, 2003). The franchiser provides the brand image, is in charge of maintaining and increasing its value over time (Perales and Vázquez, 2003), updates

the knowledge needed to manage the business (López and Ventura, 2002) and is responsible for the design of the commercial policies relating to goods and services, training, and initial and on-going assistance to the franchisees with the aim of maintaining uniformity throughout the franchise chain. In return, the franchiser normally demands an up-front entry fee, as payment for use of its reputation, know-how, brand image and the services provided by the franchiser (Windsperger, 2001; Díez de Castro et al., 2005).

The key element in the success of a franchise is know-how (Martínez, 1988; Ussía, 1988; Bescós Torres, 1990; Darr et al., 1995; Flechoso Sierra, 1997; Miquel Peris et al., 1997; Pablos, 1998; Alonso Prieto, 2003; Paswan and Wittmann, 2009)¹ although the true value of that know-how depends on the transfer capacity of the franchiser (Kahn, 1988) and the ability of the franchisees to correctly apply it (Pablos, 1998). In other words, it depends on the transfer process.

In effect, know-how has to be perfectly transmissible (Felipe Gallego, 1987; Rocha Bravo, 1987; Kahn, 1988; Martínez, 1988; Rovira and Ordiñaga, 1988; Ussía, 1988; Blesa Pérez, 1997; Flechoso Sierra, 1997; Pablos, 1998; Barbadillo de María, 1999; Tormo, 2002). If know-how were not transmissible, the success achieved by the franchiser could not be reproduced (Kahn, 1988) and it is precisely this reproduction by the franchisee of the success of the franchiser which lies at the heart of the franchise business model (Grant, 1985; Kahn, 1988; Stanworth et al., 1996; Pablos, 1998; Barbadillo de María, 1999; Tormo, 2002; Alonso Prieto, 2003; Altinay and Miles, 2006; Vazquez, 2008b).

The franchiser should transfer to the franchisee all of the information needed to create the business, the objectives and instructions for the correct running of the business, and it should provide technical and/or commercial assistance and advice to the franchisee throughout the operation of the franchise system (Grant, 1985; Bordonaba Juste and Polo Redondo, 2006; Altinay and Miles, 2006; Vazquez, 2008a; Paswan and Wittmann, 2009). Both during the start-up phase of the franchised business and once it is operational, this knowledge transfer is carried out through three complementary mechanisms (Alonso Prieto, 2003): the operating manual, training, and the support services that the franchiser provides to the franchisee.

The operating manual is a collection of documents which includes the guidelines and recommendations that must be followed by all the franchisee operating units (Flechoso Sierra, 1997). As a general rule, these manuals, which contain the know-how of the franchiser,

¹In this context, know-how refers to the coordinated and structured totality of the knowledge and experience, which can be technical, commercial, logistical, administrative, accounting, financial, tax or management related (Martínez, 1988; Ussía, 1988; Bescós Torres, 1990; Blesa Pérez, 1997; Miquel Peris et al., 1997; Llorens, 1998; Pablos, 1998; Tormo, 2002; Alonso Prieto, 2003), of the franchiser obtained from its business experience (Kahn, 1988; Bescós Torres, 1990).

can be grouped into two categories: corporate image manuals and operating manuals (Tormo, 2002; Alonso Prieto, 2003). These provide the franchisees with a reference which they can consult at any time to clear up their doubts (Barbadillo de María, 1999; Tormo, 2002; Alonso Prieto, 2003).

In addition to the manuals, the franchiser must provide the franchisees with the training that they need (Flechoso Sierra, 1997; Barbadillo de María, 1999; Tormo, 2002; Alonso Prieto, 2003; Saylor, 2003; Choo and Bowley, 2007; Ribeiro Castro and Rialp Criado, 2007).

While the franchise system is being set up the training will be essentially theoretical in nature and will consist of explaining the contents of the operating manual. In this way the franchisee is informed about the business model, the current and forecast outlook for the sector, supply, the production processes, provisioning and inventories, the presentation of products and services, commercial approaches, personnel policy, the IT management system, the corporate image, the franchise relationship, the financial plans and management control, among many other aspects (Flechoso Sierra, 1997; Tormo, 2002; Alonso Prieto, 2003; Ribeiro Castro and Rialp Criado, 2007; Paswan and Wittmann, 2009).

In addition to this theoretical training, the knowledge acquired can be put into practice in a pilot centre. After the launch of the business and for the first few weeks of operation, qualified personnel from the franchiser are on-hand in the new operating unit to deal with any doubts that the franchisee may have during the course of the normal working day (Barbadillo de María, 1999; Tormo, 2002; Alonso Prieto, 2003).

However, the process of training the franchisee does not end with the opening and launch of the establishment. Modifications to the contents of the operating manual are common and these require training to take place throughout the entire contractual period (Flechoso Sierra, 1997; Pablos, 1998; Barbadillo de María, 1999; Tormo, 2002; Alonso Prieto, 2003).

Although the specific on-going training needs will depend on the type of franchise and the circumstances that arise as business is carried out, the most commonly used methods are periodic training seminars, refresher training seminars, franchisee conventions and the on-going provision of useful information for the network (Barbadillo de María, 1999; Tormo, 2002; Alonso Prieto, 2003; Ribeiro Castro and Rialp Criado, 2007).

Likewise, the franchiser must provide *support services* for the creation and correct operation of the franchised establishments, although the type and number of services provided can vary from one chain to another (Alonso Prieto, 2003).

Some of the most common support services in the early stages of a franchisee business are those relating to the joint planning of the launch process, market analysis, the search for appropriate premises, the establishment of an exclusive commercial area, the

creation of the project to adapt, equip and decorate the premises and the supervision of its fitting out, the estimation of the start-up investment needed and the search for finance, help with the selection of personnel, determining initial opening stock needs, initial training of the franchisee and personnel, the provision of operating and image manuals, the planning of the launch campaign in the exclusive territory, the creation of forecast operating reports and technical and commercial assistance from the date activity begins (Alonso Prieto, 2003).

In contrast, on-going support services are normally focussed on the following areas: on-going training of the franchisee and personnel, market research, purchasing and negotiations with authorised suppliers, IT management systems, the coordination of national publicity promotions and campaigns, the monitoring of local publicity campaigns and the determination of the publicity budget (Alonso Prieto, 2003).

To summarise, knowledge must be perfectly transmissible within the franchise system to allow the franchisee to reproduce the business model developed by the franchiser. If this is not the case, problems in either the franchiser transferring knowledge or the franchisee absorbing this knowledge will create difficulties for the efficient use of the knowledge and as a result will negatively impact on the performance of the system. The following hypothesis is therefore proposed:

Hypothesis: the greater the transfer of knowledge in a franchise system the better the performance of the franchised units.

RESEARCH DESIGN

To analyse the above relationship a questionnaire was designed (on the basis of a review of the theoretical and empirical literature) with groups of questions referring to each of the variables included in the study. This questionnaire was sent to the target group which consisted of 267 franchised establishments located in Spain which operate in different sectors and are members of the Spanish Association for the Development and Defence of Franchised Operators (AEDEF).

The decision was taken to use the perspective of the franchisee for two reasons: 1) because the majority of the studies relating to franchising use information provided by the franchisers and, 2) because we believe that it is more interesting and objective to obtain information from those who have to apply the knowledge developed by the franchiser. The following explains the construction of the indicators representing the variables included in the study.

Given that the knowledge transfer process is carried out through an operating manual, training and support services that the franchiser provides to the franchisee, the transfer of knowledge is measured using indicators

representing these variables.

To measure the degree to which knowledge is described in the operating manuals an indicator (MANLS) has been constructed from the sum of two items measured using the 7 point Likert scale (1: strongly disagree; 7: strongly agree). The intention is to evaluate whether, on the one hand, the knowledge transferred by the franchiser to the franchisee is sufficiently well described in the documents and, on the other hand, if it can be absorbed by studying the operating manuals (Zander and Kogut, 1995; Minguela-Rata et al., 2008; Rodríguez-Benavides et al., 2008).

The training variable has been broken down into two indicators: one refers to initial training (FORMINC) and the other to on- going training (FORMCNT). Two items have been used for this variable, both measured using the 7 point Likert scale (1: strongly disagree; 7: strongly agree) . The intention is to evaluate whether the training (initial and continuous) provided by the franchiser to the franchisees is quick and simple (Zander and Kogut, 1995; Bresman, Birkinshaw and Nobel, 1999; Minguela-Rata et al., 2008; Rodríguez-Benavides et al., 2008).

The third independent variable is support services and this has also been broken down into two indicators: one relating to the initial support services provided by the franchiser to the franchisee when the establishment is being set-up (SSAPYINC) and the other relating to on-going support services (SSAPYCNT) which the franchiser provides to ensure the correct operation of the franchised establishment. Using the approach taken by Shane (1998) and the 2005 Franchise and Business Directory questionnaire created by the consultants Mundofranquicia, the franchisees should respond YES, they do receive, or NO, they do not receive, a series of support services that we propose in the questionnaire (with initial services differentiated from on-going services). The affirmative responses (YES) are given the value 1, and the negative responses (NO) are given the value 0. The measure used for each of the indicator is the sum of all the items (Minguela-Rata et al., 2009).

In relation to the dependent variable, there is no consensus in the literature about the most appropriate way to measure the performance of franchise systems. Various information sources can be used, one or more indicators can be used, whose criteria may or may not be economics or finance based. In addition, the measurement can be undertaken under an objective or a subjective basis (Carman and Klein, 1986; Elango and Fried, 1997; Minguela-Rata et al., 2009).

In this study, when deciding how to measure the performance of franchise systems we have taken account of the recommendation contained in Elango and Fried (1997) about the use of multiple indicators and as a result we have used four subjective measures. We are aware that objective measures have greater validity, but the literature has demonstrated that there is a strong correlation between objective and subjective performance

measures and as a result both are valid when analysing performance (Hart and Banbury, 1984).

Specifically, we request that the respondents evaluate, using the 7 point Likert scale, the importance (1: unimportant; 7: Extremely important) of a series of indicators and the degree of satisfaction (1: completely dissatisfied; 7: completely satisfied) obtained during 2005.

The franchisee evaluates a total of 4 items relating to 1) the time taken to recover the initial investment (TRCPINV), 2) the development of the franchise business model during 2005 (EVCPCNEG), 3) the productivity of the establishment (PRODCVT), and 4) the competitiveness of the purchasing and provisioning conditions provided by the franchiser in 2005 (CONDCOMPR).

The first item is a financial indicator which is evaluated qualitatively. In terms of the development of the franchise business model during 2005, this is a measure of the sensitivity to change and innovation. Productivity allows the measurement of operating efficiency and the final item, competitiveness of the purchasing and provisioning conditions provided by the franchiser in 2005, is an indicator of transactional efficiency (Minguela-Rata et al., 2009).

We believe that the use of subjective measures is advisable as they value the performance of the system from the point of view of the agents (franchisees in our case), and also because not all respondents would be likely to provide economic and financial data.

Lastly, since the target group consists of establishments that are active in both the service sectors and in the retail, hotel and restaurant sectors we consider it useful to include a dummy variable (TRANSF). The intention is to observe whether those establishments selling and physically transforming products have different performance levels to those establishments which just carry out sales activities. For this purpose, the questionnaire requests that respondents indicate the economic sector in which their brand is present and whether the company carries out any physical transformation activities. On the basis of this information the variable TRANSF takes the value of 1 if the establishment does carry out some form of physical transformation activity and the value of 0 if it is just involved in sales activities.

By way of summary, Table 1 contains a description of the variables considered in this study and their type. Once the variables included in the study have been determined, the four models to be contrasted can be expressed as follows:

$$\text{Model 1: TRCPINV} = \beta_0 + \beta_1 \text{MANLS} + \beta_2 \text{FORMINC} + \beta_3 \text{FORMCNT} + \beta_4 \text{SSAPYINC} + \beta_5 \text{SSAPYCNT} + \beta_6 \text{TRANSF} +$$

$$\text{Model 2: EVCPCNEG} = \beta_0 + \beta_1 \text{MANLS} + \beta_2 \text{FORMINC} + \beta_3 \text{FORMCNT} + \beta_4 \text{SSAPYINC} + \beta_5 \text{SSAPYCNT} + \beta_6 \text{TRANSF} +$$

$$\text{Model 3: PRODCVT} = \beta_0 + \beta_1 \text{MANLS} + \beta_2 \text{FORMINC} +$$

Table 1. Used variables.

Description	Variable	Type	Type
Operating manuals	MANLS	Independent	Continuous (with values between 1 and 7)
Initial training	FORMINC	Independent	Continuous (with values between 1 and 7)
On-going training	FORMCNT	Independent	Continuous (with values between 1 and 7)
Initial support services	SSAPYINC	Independent	Categorical (between 0 and 25) ²
On-going support services	SSAPYCNT	Independent	Categorical (between 0 and 22) ³
Transformation	TRANSF	Control	Dichotomous
Time to recover the initial investment	TRCPINV	Dependent	Continuous (with values between 1 and 7)
Development of the franchise business model	EVCPNG	Dependent	Continuous (with values between 1 and 7)
Productivity of the establishment	PRODCVT	Dependent	Continuous (with values between 1 and 7)
Competitiveness of the purchasing and provisioning conditions	CONDCOMPR	Dependent	Continuous (with values between 1 and 7)

²First, this variable took values between 0 and 25 (maximum number of initial support services provided by the franchiser to the franchisee when the establishment is being set-up). Then, we recoded this variable to convert it into continuous variable (with values between 1 and 7). So, all variables related to knowledge transfer mechanisms take values between 1 and 7.

³First, this variable took values between 0 and 22 (maximum number of on-going support services which the franchiser provides to ensure the correct operation of the franchised establishment). Then, we recoded this variable to convert it into continuous variable (with values between 1 and 7). So, all variables related to knowledge transfer mechanisms take values between 1 and 7.

$${}_3\text{FORMCNT} + {}_4\text{SSAPYINC} + {}_5\text{SSAPYCNT} + {}_6\text{TRANSF}$$

$$+ \text{Model 4: CONDCOMPR} = {}_0 + {}_1\text{MANLS} + {}_2\text{FORMINC} + {}_3\text{FORMCNT} + {}_4\text{SSAPYINC} + {}_5\text{SSAPYCNT} + {}_6\text{TRANSF} +$$

MATERIALS AND METHODS

The field work was carried out between April and September 2006 and by the end of this period we had received a total of 56 valid questionnaires, which is 21% of the total target group. In Table 2 one can observe the distribution of both the target group and sample group by economic sector, the corresponding sub-sectors and, for each of these, a number in brackets which indicates the number of franchised establishments included in that sub-sector. Table 3 shows which sub-sectors require physical transformation activities and which just involve sales activities.

To test how representative the sample was, we calculated and compared the percentage of responses received for each economic sector with the percentage of the target group accounted for by each economic sector (Table 2). Although these are not identical, they are similar and the general proportions are unchanged. As a result, we can accept that the sample is solid in terms of it being representative of the target group, which allows us to use it to carry out the relevant statistical analysis and draw general conclusions. Finally, Tables 4 and 5 contain the descriptive statistics for the independent and dependent variables included in this study and their respective correlations.

RESULTS

Firstly, we evaluated the consistency of the questionnaire and its capacity to measure the concepts being analysed through carrying out a series of tests⁴. We then analysed

⁴In relation to reliability, the MANLS variable was constructed from the sum of two items. The correlation coefficient was 0.817, significant at the level 0.01. This analysis was not carried out on the rest of the variables.

possible non-response bias by comparing the indicated aspects for the establishments which responded to the questionnaire in the first few weeks with those that responded in the last few weeks. No significant differences were found.

To test the proposed hypothesis we used multiple linear regression analysis carried out with the statistical programme SPSS for Windows version 15.0. The results obtained from this analysis for the four models are shown in Table 6.

As test F shows, models 1 (whose dependent variable is the time taken to recover the initial investment), 2 (development of the business model) and 4 (competitiveness of purchasing and provisioning conditions) are significant. In other words, they explain the variations in the subjectively measured performance of the franchise establishments. In addition, the variables included in the models explain 33.9, 22.5 and 47.1% of the variation in the time taken to recover the initial investment, the development of the business model and the competitiveness of purchasing and provisioning respectively.

Examining the parameters associated with each of the independent variables representing the transfer of knowledge leads to the observation that not all of them are significant. In particular, in model 1, where performance is measured through the value that the franchisee places on the time taken to recover the investment, the transfer of knowledge through operating manuals (MANLS), initial training provided by the franchiser (FORMINC) and on-going support services (SSAPYCNT) are all significant. The results appear to indicate that when placing a value on the time taken to recover the investment, franchised establishments consider initial training provided by the franchiser to be more important than the transfer of knowledge through operating manuals.

Table 2. Sectorial distribution of the target and sample population.

Sectors	Population		Sample		Subsectors (n)
	N	%	N	%	
Services	129	48.31	25	44.65	Real estate agencies (3) Beauty consultancies (2) Dental clinics (1) Buying and Selling used articles (1) Education (1) Financial services (2) Dry cleaning and laundry (15)
Retail trade	56	20.98	11	19.64	Dietetics, health food shops, and parapharmacy (1) Photography (1) Toy shops (1) Furniture (2) Fashion (1) Office supplies/ stationery (1) Bakery and confectionery (1) Wine shops (1) Specialist shops (2)
Catering and restaurants	82	30.71	20	35.71	Cafés (1) Fast food (15) Ice cream parlours (1) Italians (1) Tapas bars (1) Theme bars (1)
Total	267	100	56	100	

Table 3. Control variable.

Activity	Subsectors
Transformation and Comercialization	Beauty consultancies, dental clinics, dry-cleaning and laundry, photography, bakery and confectionery, cafés, fast food, ice cream parlours, Italian, <i>tapas</i> bars and theme bars.
Comercialization	Real estate agencies, buying and selling used articles, education, financial services, dietetics, health food shops and parapharmacy, toy shops, furniture, fashion, office supplies/stationery, wine shops, specialist shops.

Table 4. Descriptive statistics.

	Average	Min	Max	Stand. Dev.
MANLS	6.71	2	13	2.977
FORMINC	3.29	1	6	1.626
FORMCNT	3.04	1	6	1.695
SSAPYINC	3.88	1	7	1.294
SSAPYCNT	3.79	1	7	1.806
TRCPINV	21.89	1	49	14.628
EVCPCNEG	17.11	1	49	9.892
PRODCVT	23.80	1	49	12.961
CONDCOMPR	16.68	1	49	12.012

Table 5. Correlations.

	FORM INC	FORM CNT	SSAPY INC	SSAPY CNT	TRCP INV	EVCP NEG	PROD CTV	COND COMPR
MANLS	0.603*	0.647*	0.340	0.462*	-0.022	0.121	-0.002	0.132
FORMINC		0.669*	0.449*	0.603*	0.300	0.207	0.163	0.290
FORMCNT			0.500*	0.614*	0.095	0.220	-0.027	0.411*
SSAPYINC				0.681*	0.193	0.370*	0.233	0.497*
SSAPYCNT					0.426*	0.450*	0.234	0.629*
TRCPINV						0.646*	0.421*	0.431*
EVCPNEG							0.478*	0.559*
PRODCVT								0.204

* p 0.05

For model 2, where performance is measured through the value that the franchisee places on the development of the business model, and for model 4, where performance is measured through the value that the franchisee places on the competitiveness of the purchasing and provisioning conditions, only the transfer of knowledge through on-going support services (SSAPYCNT) is significant.

Analysing the contents of Table 6, there are a number of issues worth highlighting. Firstly, for each of the models that yields significant results, on-going support services (SSAPYCNT) is the factor with the greatest impact on the different measures for the performance of the franchise system. Secondly, for that model where the transfer of knowledge through operating manuals (MANLS) proves significant, the coefficient for this variable is negative. This indicates that the franchisees consider that the greater the description of knowledge in the operating manuals the less the importance of, and satisfaction derived from, the time taken to recover the investment. This is also true for the competitiveness of purchasing and provisioning. Thirdly, given that the variable TRANSF was not significant in any of the models, we cannot conclude that significant differences exist in the performance of the establishments that carry out sales activities and those that carry out both sales and production activities.

The results obtained from the above tests are reliable given that the residuals comply with the null, constant variation and no autocorrelation hypotheses, as well as following a normal distribution.

Conclusion

In this study an attempt has been made to look in more detail at one of the processes that makes up knowledge management: transfer. The franchiser should transmit to the franchisee all of the information needed for the creation of the establishment, not forgetting the objectives and instructions for the correct operation of the

business. In addition, it should provide the advice and assistance needed during the functioning of the franchise system (Grant, 1985; Bordonaba Juste and Polo Redondo, 2006; Altinay and Miles, 2006; Vazquez, 2008a; Paswan and Wittmann, 2009).

Both during the start-up phase for the franchised business and once it is operational, this knowledge transfer is carried out through three complementary mechanisms (Alonso Prieto, 2003): the operating manual, training and the support services that the franchiser provides to the franchisee. The aim of this paper is to study the influence of these mechanisms (both when creating the franchised establishment and during its on-going operations) on the subjectively measured performance of franchise systems.

To obtain information for the study a questionnaire was drawn up and sent to 267 franchised establishments located in Spain and belonging to different chains and economic sectors. Using the 56 questionnaires received, a multiple linear regression was carried out which allowed the proposed hypothesis to be tested.

The results of the regressions seem to indicate that the factor with the greatest impact on the performance of franchise systems is on-going support services provided by the franchiser to the franchisee. This is due to the fact that the more services provided by the franchiser, the easier it is for the franchisee to apply the transmitted knowledge and obtain positive results. In particular, it allows the franchisee to recover the initial investment more quickly, allows for a faster response to market changes, including planned modifications resulting from innovations to improve the system, and it allows the achievement of greater transactional efficiency, which is to say that exchanges within the franchise system are much more efficient. However, we have not found any empirical evidence to confirm a relationship between the on-going support services that the franchiser provides to the franchisee and the productivity of the establishment, its operating efficiency.

In relation to operating manuals, these had a negative influence on the value that the franchisees place on the

Table 6. Linear regression analysis.

	Model 1 (TRCPINV)	Model 2 (EVCPNEG)	Model 3 (PRODTV)	Model 4 (CONDCOMPR)
	<i>t</i> (Standard error)			
CONSTANT	15.360* (6.136)	7.165 (4.344)	15.187* (5.980)	2.738 (4.356)
MANLS	-1.793* (0.835)	-0.226 (0.579)	-0.327 (0.796)	-1.122 (0.580)
FORMINC	3.598* (1.621)	-0.336 (1.137)	1.866 (1.565)	-0.884 (1.140)
FORMCNT	-1.770 (1.734)	-0.157 (1.178)	-2.861* (1.622)	1.489 (1.181)
SSAPYINC	-1.058 (2.063)	1.206 (1.452)	1.663 (1.998)	0.502 (1.456)
SSAPYCNT	4.845** (1.536)	2.417* (1.096)	1.692 (1.509)	4.139* (1.099)
TRANSF	-1.1837 (4.720)	-1.097 (3.351)	0.719 (4.614)	3.137 (3.361)
R ²	0.339	0.225	0.144	0.471
R ² adjusted	0.253	0.130	0.039	0.407
Test F	3.940**	2.368*	1.377	7.284**

** p 0.01; * p 0.05.

time taken to recover the investment. This could be due to 1) the franchisee taking the view that the more the knowledge is written down in the manuals the more certain it is that the initial investment will be recovered and therefore the less risk involved in the franchise or 2) the usefulness of, or value placed on, manuals at the expense of initial training, another of the variables considered in our analysis, is lower.

Indeed, there is a positive relationship between the time taken to recover the initial investment and initial training, but this is negative for operating manuals. This could be due to the franchisees placing a greater value on face-to-face contact and receiving explanations about how to operate their establishment than they do on having to learn through manuals.

Finally, we have not found any empirical evidence of differences in the performance of those establishments that only carry out sales activities and those that carry out both sales and production activities. The activity carried out in the establishment to obtain better results is not important. What matters is that once the establishment is operating the focus is on the franchisor providing more services so that the franchisee finds it easier to apply the

knowledge transmitted.

Hence, independently of the type of activity to be performed in franchised establishments, the mere use of operating manual, transfer of information needed to create the business, the objectives and instructions for the correct running of the business, and self learning for franchisees do not lead to high performance levels unless the on-going support services from the franchisor are provided to the franchisee. Hence, it is highly recommended that franchisees claim franchisors for delivering of these kinds of services on a continuous basis so the whole franchise chain will be benefited. Franchisors should not consider such claim as a source of conflict but as a something will get to the common goals.

This research does not lack its limitations and the results should therefore be used with care. Firstly, the results obtained can only be used to make generalisations about the reference group. Secondly, the sample obtained is small (56 franchised establishments) although the response rate was 21% (which is high if one takes into account the problems involved in using a questionnaire as the method of collecting information).

Lastly, we have used a single source of information given that the questionnaire was only sent to franchisees and these, by definition, are only one part of the dyadic relationship that goes to form a franchise (Omar, 1998). However, we consider it important for the information to be provided by the recipient of the knowledge. In addition, as both the information about the transfer of knowledge and the information about the dependent variables have been supplied by the same people, it is possible that the investigation may present a common variance bias.

The plan for future research is to perfect the indicators used to measure the different variables, use different dependent subjective variables and analyse the transfer of knowledge from the point of view of the franchiser.

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