THE EFFECT OF LOGISTICS PACKAGING FUNCTIONS ON SHOPPER SATISFACTION AND LOYALTY: AN EMPIRICAL STUDY IN FRANCE

Bernd Philipp[1] and David B. Grant[2]
[1]Ecole Supérieure du Commerce Extérieur, Paris and CRET-LOG, Aix en Provence,
[2]Hull University Business School and Hanken School of Economics
Emails: bernd.philipp@esce.fr, d.grant@hull.ac.uk

Introduction

This paper reports on an in-progress empirical research study investigating packaging functions and their fulfilment attributes for consumers as shoppers from a logistics perspective. Packaging is a multidisciplinary concept and may be defined as a coordinated system of preparing goods for safe, secure, efficient and effective handling, transport, distribution, storage, retailing, consumption and recovery, reuse or disposal combined with maximizing consumer value, sales and hence profit (Saghir, 2004). This definition emphasizes "the main packaging functions, namely logistics, marketing, the environment and fulfilment of needs along a product life cycle, from the very first point of packaging use until the product is consumed and the packaging material is disposed of" (Hellström & Saghir, 2007: 199). But despite extant research on the logistics function of packaging, it is surprising that only few of them have included them into a logistics service quality (LSQ) concept and potentially impacting shopper satisfaction and loyalty; even less research explicitly targets the consumer as shopper in B2C contexts. Neglecting this downstream aspect of LSQ for the benefit of exclusive B2B contexts is difficult to understand, which is important at two different levels.

Firstly, the shopper represents a productive resource as an important downstream supply chain member or logistician, carrying out logistics activities and tasks, weighing up LSQ with economic and non–economic costs (burden, endeavours, inconvenience), confronted with typical supply chain decisions such as outsourcing logistics tasks - via home delivery and electronic shopping - or internalising them via store-based, traditional shopping (Teller et al., 2012). In other words, the consumer represents the final link in the point-of-origin to point-of-consumption definition of logistics (Grant, 2012). Secondly, LSQ activities directed towards the shopper also act along a marketing axis, i.e. satisfaction and loyalty both on transaction-specific and on cumulative levels, and are not only influenced by product quality elements but also by service-related dimensions building up the overall shopping experience. LSQ is an important element in this context, influencing shopper satisfaction and loyalty which are two major variables in marketing research as they guarantee the company's competitive advantage. This double role of the shopper, i.e. a downstream supply chain member and customer/consumer at the same time, justifies a dedicated conceptualization of logistics packaging functions (LPF) and logistics packaging function fulfilment (LPFF) as important elements of LSQ. Consequently, dedicated LPF/ LPFF concepts will mobilise both logistics/supply chain management (SCM) and marketing literature streams in an integrated manner.

Our research objectives for this study are as follows:

- ***RQ1: What elements of LPF are perceived as important by a shopper in influencing positively his/her satisfaction and loyalty?*** To properly address this objective we will compare the shopper's importance or weight of LPF with other drivers of shopper satisfaction and loyalty, particularly marketing factors and general retail service quality factors.
- ***RQ2: What is the LSQ gap between shopper expectations and firm perceptions of those expectations regarding LPF?*** To properly address this objective we will measure the LSQ gap between shopper expectations and firm perceptions of those expectations for the LPF (shopper's weightings related to LPF versus packaging experts' weightings related to LPF).

- ***RQ3: How can we characterize the influence of actual LPF fulfilment scores (LPFF) obtained during the shopper's most recent purchase on both shopper satisfaction and loyalty?*** To properly address this objective, we will test relationships between the constructs of LPFF, other factors, satisfaction and loyalty to determine the true strength of any relationships.

Our study is original for several reasons. First, as opposed to extant literature we are not integrating marketing, logistics and ethics to influence packaging strategy (Vernuccio et al., 2010), rather we are developing a holistic concept starting from a logistics point of view i.e. the LPF and LPFF concepts should cover all packaging-related LSQ dimensions affecting shopper satisfaction and loyalty. Thus, the adjective of holistic or systemic refers more to 'being complete' as regards logistics and LSQ. Second, we target the shopper as both consumer and the 'last logistician' in a traditional retail chain, clearly adopting a B2C approach in retail as opposed to B2B settings dominating extant research. Third, our research issue is not restricted to packaging innovations or new package designs (as it is the case for Vernuccio et al., 2010; Holmes & Paswan, 2012) but also includes existing packaging solutions and their respective LPF weights or LPFF levels as actually experienced by shoppers. In the same manner, we do not exclusively focus on the design of packaging, covering form, function and appearance, but adopt a packaging systems approach to fulfilling various logistics functions.

Literature Review and Determination of Variables

Logistics packaging function (LPF) and logistics packaging function fulfilment (LPFF)

We consider LPFF as an extension of LSQ and we derived our holistic construct of LPFF from the 'seven rights' notion of the right quantity, product, place, time, condition, price and information (Mentzer et al., 1999, 2001; Bienstock et al., 2008). The 28 manifest variables of LPF shown in Table 1 comprise the logistics packaging functions related to these seven rights while our LPFF measure will provides respective fulfilment levels or scores related to a shopper's most recent purchase of dairy products, reflecting a direct and concrete buying experience (Parasuraman et al., 1985; Grant, 2004). Contextualization with regards to our logistics product category, i.e. dairy products, has been carried out as follows.

First, packaging is more important for food products such as dairy products than for other consumption goods, as consumers want to make informed decision regarding food quality and safety and make choices that support their lifestyle (Geetha & Naidu, 2014). Second, the necessity for a prior identification of shoppers' expectations and the best adjustment of packaging features to the identified requirements in-line with a marketing orientation (Baruk & Iwanicka, 2015) seems to be particularly vital in highly competitive markets, which food products including dairy belongs to and where packaging constitutes one of the basic characteristics of the product. This knowledge appears essential for retailers' effective and efficient creation of packaging features to meet shopper expectations as they become a more and more important choice factor in the buying process of purchasers characterized with an increasing level of market awareness (Baruk & Iwanicka, 2015). Third, particularly for food, shoppers evaluate packaging on ease of use and ease of handling dimensions (Holmes & Paswan, 2012,). Fourth, functional foods (Kraus, 2015) that overlap with the dairy products category need practical packaging that implies ease of use, time saving characteristics, preservation of freshness, and quality.

For this study LPFF is considered the primary factor and an antecedent of shopper satisfaction and loyalty. Accordingly, LPF importance levels or weights will be measured both amongst shoppers and packaging experts asked to adopt the shopper's perspective. Both the marketing and the logistics/SCM literature streams advise delimiting product categories for research purposes. Thus, we consider it relevant to focus on dairy products purchased in retail stores.

Code	Variable
LPF1	Product detection right from the store aisles is facilitated, particularly via adequate packaging
LPF2	Shopping ergonomics are satisfactory for you particularly easy identification on shelves and easy shelf packaging
LPF3	In this store, packaging-based information on product features is sufficient
LPF4	The considered packaging optimizes display efficiency on shelves (minimal space for display in retail outlet)
LPF5	The considered packaging helps avoid out-of-stock situations and enables on-shelf availability
LPF6	The considered packaging accelerates shelf replenishment by retail staff
LPF7	Product identification is facilitated, particularly via adequate packaging
LPF8	Product traceability is facilitated, particularly via adequate packaging
LPF9	Information available on the packaging is completely accurate including information on product components
LPF10	Products received from the store are undamaged (strength and resistance of packaging) and delivery of products purchased is always correct
LPF11	Packaging performs well hygiene, microbiological, food contact and taste preservation (organoleptic issue) requirements
LPF12	The considered package enables extension of shelf life (cf. best before date)
LPF13	The considered pack size is convenient (e.g. six-pack) with options for multiple pack sizes
LPF14	The considered packaging can be carried easily and safely, e.g. via low weight characteristics (easy and efficient handling, ergonomics)
LPF15	The considered packaging prevents product theft
LPF16	The considered packaging shows time-saving features during your shopping process
LPF17	You consider as adequate or fair the price of the product-package system
LPF18	Packaging characteristics (e.g. weight, dimensions, unitization) are adapted and convenient during your transportation trip towards your residence
LPF19	Packaging characteristics (e.g. weight, dimensions, unitization) are adapted and convenient before and during your consumption process at your residence, including stackability and space-saving
LPF20	The considered package dispenses products conveniently (easy-open features, reclosability, resealability, easy disposal after use)
LPF21	The considered product is delivered in quantities and formats tailored to suit how and when they will be consumed
LPF22	The considered package dispenses products safely
LPF23	The considered packaging adds convenience to the products
LPF24	The considered packaging is environmentally friendly or eco-compatible
LPF25	The considered packaging is socially responsible and committed (e.g. fair trade)
LPF26	The considered packaging reduces the risk of damage to person beyond the legal obligations
LPF27	The considered package enables extension of product life at your residence (maintaining quality and freshness over a period of time, coping with different temperature and humidity)
LPF28	The considered package acts as a silent salesman facilitating your purchase

Table 1: Logistics packaging function (LPF) variables

Other factors of shopper satisfaction and loyalty

LPF and related fulfilment levels LPFF are of course not the only factors or antecedents of shopper satisfaction and loyalty. In order to determine the importance of LPF in this context we need to compare the contribution LPF/ LPFF with other potentially important factors of shopper satisfaction and loyalty, in particular marketing factors (quality, freshness, functionality, prestige and innovative character), other LSQ variables and general retail service quality factors. Extant research in this context reports that product assortment, store environment and atmosphere as well as location are not only important factors for shoppers' retail format choice (Carpenter and Moore, 2006) but also potential antecedents for satisfaction. In the same manner, Huddlestone et al. (2009) found that price, product assortment, quality, and employee service influence store satisfaction. Table 2 shows the important other factors of shopper satisfaction and loyalty.

Code	Variable
OA1	Product price, the terms or modalities of payment
OA2:	Brand image
OA3	Freshness of the product
OA4	Product quality
OA5	Functionality of the product
OA6	Prestige of the product
OA7	Store characteristics (proximity, opening hours, assortment, proposed choice, store layout and organisation)
OA8	Shopping atmosphere or the shopping experience
OA9	Quality of the store staff or the retail service quality

Table 2: Variables of other factors of satisfaction and loyalty beyond LPF

Output variables of satisfaction and loyalty

It is widely accepted that perceived general service quality has an impact on customer satisfaction, which in turn leads to later behaviours towards the service firm, including loyalty (Grant, 2004). LSQ strives, together with marketing and other business domains, for consumer satisfaction and loyalty, in order to guarantee the firm's competitive advantage. Satisfaction may be considered a response that pertains to a particular focus and occurs at a certain time. Thus, shopper satisfaction is an attitude, unlike shopper loyalty which is a purchasing behaviour or a combination of attitude and behaviour (Jones & Taylor, 2007). Table 3 shows satisfaction variables from Saura et al. (2008), Huddlestone et al. (2009) and Bouzaabia et al. (2013). We postulate that LPF/ LPFF as LSQ element contributes to shopper satisfaction. Satisfaction can refer both to the retail store and the producer brand.

Code	Variable
SAT1	Overall, you are satisfied with the services provided by this store
SAT2	You wish more of your stores were like this one
SAT3	You are delighted with the overall retail service relationship
SAT4	In general, you are satisfied with this store
SAT5	Overall, you are satisfied with the purchased products and related brands
SAT6	You wish more of your brands were like those purchased here

Table 3: Variables of satisfaction

Loyalty may be considered a combination of repeat purchase levels and relative attitude. For the specific domain of services, Jones & Taylor (2007) empirically found that loyalty has two dimensions: a behavioural element and a combined attitude/ cognitive element. In their study dedicated to food packaging for tomato products, Holmes & Paswan (2012) approached loyalty as an attitude as shoppers based their purchase intentions not necessarily upon a concrete past purchase situation, but upon a package design evaluation that also included indirect levels of experience (e.g. merely looking at a picture of a sample of the package). Loyalty in retail settings occurs when shoppers repeatedly purchase a good or service over time and hold favourable attitudes towards a good or service or towards the company supplying the good or service, e.g. the retailer. Applied to grocery producer brands and related primary packaging as marketing stimulus, Gbadamosi (2009) distinguishes between loyalty and repeat purchases. In the case of brand loyal purchases, the shopper continues with the purchase of a particular brand based on previous experience having carefully selected the product in the past and noticed that it offers the needed satisfaction. The repeat purchase category on the other hand is based on the belief that all products offer the same benefits and the one being chosen all the time is simply one of them (Gbadamosi, 2009). Table 4 sums up our loyalty variables: the second describes the variables while the third notes the dimension (attitude versus behaviour). Similar to satisfaction loyalty can refer to both the retail store and the producer brand.

Code	Variable	Dimension
LOY1	You prefer this store to other retailers in this category	Attitude (store)
LOY2	You say positive things about the store to other people	Attitude (store)
LOY3	You intend to repurchase from this store again in the future	Behaviour (store)
LOY4	The likelihood that you would switch to another store	Behaviour (store)
LOY5	You prefer this brand to other suppliers in this category	Attitude (brand)
LOY6	You say positive things about the brand to other people	Attitude (brand)
LOY7	You intend to repurchase this brand again in the future	Behaviour (brand)
LOY8	The likelihood that you would switch to another brand	Behaviour (brand)

Table 4: Variables of loyalty

Methodology

Given that extant research has separately examined and verified the LPF variables discussed above, we are undertaking explanatory research to link in our holistic framework of LPFF and LSQ and test the disparate concepts from marketing and logistics. The variables above are being tested within a quantitative empirical study conducted in France. There are two phases to the study that involved two sets of data collection.

A questionnaire survey was personally administered to young shoppers from December 2014 to April 2015. More precisely, respondents were students at ESCE International Business School in Paris. The sample is characterised by an average age of 21 years and 3 months, an average household size of 2.79 persons, 120 female and 49 male students. Twelve different nationalities were represented in the sample (questionnaire exists in both English and French versions), though most respondents were French (145). Students stem from three different levels of studies: bachelor level in general business (65 students), master1 level specialized in SCM (103 students), and master2 level specialized in SCM (one student). The questionnaire measured importance levels or weightings of the LPF variables and actual LPF fulfilment scores or LPFF from the respondent's most recent purchase of dairy products at a retail store. The survey yielded 169 valid shoppers' questionnaires out of 273 initially administered which is equivalent to a response rate of 62%. Student surveys as methodology can highly benefit to issues in logistics, SCM and retailing according to Brown & Dant (2008), who proposed that shaking up the historical patterns of methodologies may provide additional insights into old retailing problems, including explicitly the retail supply domain, and reveal new problems for retailing researchers to tackle, particularly for those concepts or substantive content areas for which researchers traditionally prefer some methodology approaches at the detriment of others. Loyalty explicitly appears as an output variable in our study, consumer surveys other than students and secondary data are most frequently applied by researchers. Concerning the "channel" concept that appears implicitly via our LPF/ LPFF constructs, industry surveys dominate as traditionally favored methodology which is in line with the above mentioned preference of B2B approaches in extant literature as conceptual framework for packaging logistics issues, thus neglecting B2C settings. Only few scientific articles targeting students as packaging "assessors" and respondents exist so far (one example being Holmes & Paswan, 2012, where consumers evaluate food packaging solutions).

Secondly, a similar questionnaire was administered to packaging experts and executives in March during a regular team meeting for "packages and logistics" affiliated with the French National Packaging Council (CNE) in Paris. One of the co-authors participated in this meeting, presenting our research objectives and distributing the questionnaires to the experts. This survey yielded 11 valid experts' questionnaires out of 14 initially administered to the audience, 9 directly returned during the meeting, with one sent later by mail and another returned in April during the consecutive team meeting. This questionnaire replicated the shopper's weightings exercise related to LPF, but asked the experts to adopt the shopper's perspective and see the world through the shopper's eyes. More precisely, the questionnaire was introduced to the packaging experts beginning with the following statement: According to you as a packaging expert, how do you perceive shoppers evaluate the importance of the various packaging functions? The packaging experts sample includes retailers,

packaging engineers, recyclers, public packaging associations, lawyer – consultant, packaging producer. The sample was composed with the help of the packaging and logistics team affiliated with the French National Packaging Council (CNE) in Paris. If targeting students makes our study original as discussed above, we can now argue that also involving packaging experts, i.e. industry survey contributes to complementarity and validity (Brown & Dant, 2008).

Findings to Date

Tables 5-8 again present the variables shown in Tables 1-4 with their respective scores.

Code	Weights from Experts (1.0=low importance; 5.0=high importance)	Weights from Shoppers (1.0=low importance; 5.0=high importance)	Gap (Experts minus Shoppers)
LPF1	4.27	3.86	0.41
LPF2	3.64	3.70	-0.06
LPF3	3.91	3.61	0.30
LPF4	2.64	3.34	-0.70
LPF5	2.09	2.92	-0.83
LPF6	2.55	3.08	-0.53
LPF7	4.18	4.20	-0.02
LPF8	3.45	3.61	-0.16
LPF9	4.36	4.27	0.10
LPF10	4.82	4.33	0.49
LPF11	4.64	4.49	0.15
LPF12	3.91	4.04	-0.13
LPF13	4.00	3.80	0.20
LPF14	3.91	3.98	-0.07
LPF15	2.45	2.68	-0.22
LPF16	3.09	3.41	-0.32
LPF17	3.91	3.53	0.38
LPF18	3.64	3.91	-0.27
LPF19	4.00	3.91	0.09
LPF20	4.09	4.05	0.04
LPF21	3.55	3.70	-0.15
LPF22	4.64	4.02	0.62
LPF23	2.64	3.19	-0.55
LPF24	3.45	3.81	-0.36
LPF25	2.73	3.60	-0.88
LPF26	4.64	3.78	0.86
LPF27	4.27	4.00	0.27
LPF28	2.55	3.41	-0.87

Table 5: Results of logistics packaging function fulfilment (LPFF)

We identified both positive and negative gaps between shoppers and experts concerning the LPF weight, translating both superior and inferior shopper expectations with regards to experts' perceptions. Eight LPF elements has a positive gap greater than 0.2 (the threshold value) which suggests a potential waste of company resources (i.e. 'current overestimation' of the LPF weight). On the other hand, there is a negative gap less than -0.2 (threshold value) for 10 LPF elements that might need corrective actions (i.e. 'current underestimation' of the LPF weight). A need for action may be required if the company faces simultaneously a negative gap and a relatively poor LPFF score which is the case for LPF5, LPF6, LPF15, LPF16, LPF24, and LPF25. Concerning other drivers of satisfaction and loyalty, OA8 translates a similar situation of both negative gap and relatively low score. Fifteen out of 28 LPF elements had an average weight superior to the average weight of other satisfaction and loyalty drivers (average=3.78), stressing the crucial role of LSQ towards the shopper. Concerning our output variables, both satisfaction and loyalty have values less than 3.0 which means that shoppers are more satisfied/ loyal than dissatisfied/ disloyal (1 = maximum, 5 = minimum). More precisely, values are between 2.51 and 2.82 for satisfaction and 2.2 and 2.94 for loyalty. When we

control for bias we might expect even higher levels of both satisfaction and loyalty when using larger or differently composed samples.

Code	Weights from Experts (1.0=low importance; 5.0=high importance)	Weights from Shoppers (1.0=low importance; 5.0=high importance)	Gap (Experts minus Shoppers)
OA1	4.18	4.19	-0.01
OA2:	3.82	3.57	0.25
OA3	4.64	4.51	0.12
OA4	4.64	4.46	0.18
OA5	3.73	3.73	-0.01
OA6	3.36	3.05	0.31
OA7	3.09	4.14	-1.05
OA8	2.73	3.05	-0.33
OA9	3.45	3.32	0.13

Table 6: Results of other factors of satisfaction and loyalty beyond LPF

Code	Scores from Shoppers (1.0=maximum)
SAT1	1.09
SAT2	1.06
SAT3	0.94
SAT4	1.01
SAT5	1.00
SAT6	1.04

Table 7: Results of satisfaction variables

Code	Scores from Shoppers (1.0=maximum)
LOY1	1.10
LOY2	1.17
LOY3	1.16
LOY4	1.10
LOY5	0.96
LOY6	1.10
LOY7	1.19
LOY8	1.06

Table 8: Results of loyalty variables

Conclusions

So far there have been some interesting results from the brief analysis undertaken. The packaging experts are more concerned about those functions that provide safety and security for products and hence reduce risk and potential liability. However, the shoppers consider that the marketing elements of brand, prestige and store atmosphere are more important than the logistical functions of packaging. Regarding the influence of LPFF on shopper satisfaction and loyalty there are positive relationships however they are weak.

The next steps in this study are to fully analyse the shopper responses. Also, since the number of expert responses was limited we will seek further respondents to verify the findings related to the experts. Regarding our framework we will test if these four sets of factors are appropriate and robust and that all variables are underlying them, or whether some variables should be deleted and if there are other resulting factors. Finally, we will look at and test relationships between the constructs of LPFF, other factors, satisfaction and loyalty to determine the true strength of any relationships.

References

- Baruk, A.I. & Iwanicka A. (2015), "Polish final purchasers' expectations towards the features of dairy product packaging in the context of buying decisions", *British Food Journal*, Vol. 117 (1), pp. 178-194.
- Bienstock, C.C., Royne, M.B., Sherrel, D &, Stafford, T.F. (2008), "An expanded model of logistics service quality: incorporating logistics information technology", *International Journal of Production Economics*, Vol. 113, pp. 5-22.
- Bouzaabia, R., Bouzaabia, O. & Capatina, A. (2013), "Retail Logistics service quality: a cross-cultural survey on customer perceptions", *International Journal of Retail & Distribution Management*, Vol. 41 (8), pp. 627-647.
- Brown, J.R. & Dant, R.P. (2008), "Scientific method and retailing research: A retrospective", *Journal of Retailing*, Vol. 84 (1), pp. 1–13.
- Carpenter, J.M. & Moore, M. (2006), "Consumer demographics, store attributes and retail format choice in the US grocery market", *International Journal of Retail & Distribution Management*, Vol. 34 (6), pp. 434-452.
- Gbadamosi, A. (2009), "Cognitive dissonance*", International Journal of Retail & Distribution Management,* Vol. 37 (12), pp. 1077-1095.
- Geetha, M. & Naidu, G., (2014), "Attributes and retail format preference for branded pulses", *South Asian Journal of Global Business Research*, Vol. 3 (2), pp. 190-208.
- Grant, D.B. (2004), "UK and US management styles in logistics: Different strokes for different folks?" *International Journal of Logistics: Research and Applications*, Vol. 7 (3), pp. 181-197.
- Grant, D.B. (2012), Logistics Management, Pearson Education Ltd.: Harlow, UK.
- Hellström, D. & Saghir, M. (2007), "Packaging and logistics interactions in retail supply chains", *Packaging Technology and Science*, Vol. 20 (3), pp. 197-216.
- Holmes, G.R. & Paswan, A. (2012), "Consumer reaction to new package design", *Journal of Product & Brand Management*, Vol. 21 (2), pp. 109-116.
- Huddlestone, P., Whipple, J., Mattick, R.N. & Lee, S.J. (2009), "Customer satisfaction in food retailing: comparing specialty and conventional grocery stores", *International Journal of Retail & Distribution Management*, Vol. 37 (1), pp. 63-80.
- Jones, T. & Taylor, S.F. (2007), "The conceptual domain of service loyalty: how many dimensions?" *Journal of Services Marketing*, Vol. 21 (1), pp. 36-51.
- Kraus, A. (2015), "Factors influencing the decisions to buy and consume functional food", *British Food Journal*, Vol. 117 (6), pp. 1622-1636.
- Mentzer, J.T., Flint, D.J. & Kent, J.L. (1999), "Developing a Logistics Service Quality Scale", *Journal of Business Logistics*, Vol. 20 (1), pp. 9-32.
- Mentzer, J.T., Flint, D.J. & Hult, G.T. (2001), "Logistics Service Quality as a Segment-Customized Process", *Journal of Marketing*, Vol. 65 (October), pp. 82-104.
- Parasuraman, A., Zeithaml, V.A. & Berry, L.L. (1985), "A Conceptual Model of Service Quality and Its Implications for Future Research", *Journal of Marketing*, Vol. 49 (Fall), pp. 41-50.
- Saghir, M. (2004), "The concept of packaging logistics", *Proceedings of the Fifteenth Annual POM Conference,* Cancun, April 30-May 3.
- Saura, I.G., Frances, D.S., Contri, G.B. & Blasco, M.F. (2008), "Logistics service quality: a new way to loyalty", *Industrial Management & Data Systems*, Vol. 108 (5), pp. 650-668.
- Teller, C., Kotzab, H. & Grant, D.B. (2012), "The relevance of shopper logistics for consumers of store-based retail formats", *Journal of Retailing and Consumer Services*, Vol. 19 (1), pp. 59-66.
- Vernuccio, M., Cozzolino, A. and Michelini, L. (2010), "An exploratory study of marketing, logistics, and ethics in packaging innovation", *European Journal of Innovation Management*, Vol. 13 (3), pp. 333-354.