JBR-09023; No of Pages 6

ARTICLE IN PRESS

Journal of Business Research xxx (2016) xxx-xxx



Contents lists available at ScienceDirect

Journal of Business Research



Experience-focused thinking and cognitive mapping in ethical banking practices: From practical intuition to theory

Fernando A.F. Ferreira ^{a,b,*}, Marjan S. Jalali ^a, João J.M. Ferreira ^c

- ^a ISCTE Business School, University Institute of Lisbon, Avenida das Forças Armadas, 1649-026 Lisbon, Portugal
- ^b Fogelman College of Business and Economics, University of Memphis, Memphis, TN 38152-3120, USA
- ^c Department of Business and Economics, NECE Research Unit, University of Beira Interior, Estrada do Sineiro, 6200-209 Covilhã, Portugal

ARTICLE INFO

Article history:
Received 1 February 2016
Received in revised form 1 March 2016
Accepted 1 April 2016
Available online xxxx

Keywords: Ethical banking Cognitive mapping Holistic perspective Value-focused thinking Practical experience

ABSTRACT

Concern over ethical management and ethical principles in banking practices is rapidly increasing. The alignment of such concerns with daily operations, however, is often far from simple. This study proposes the use of cognitive mapping to enhance our understanding of the key factors underlying ethical banking and the manner in which they inter-relate with each other. Cognitive mapping provides a process for the integration and representation of a group of experts' experience-focused thinking, and as such allows for the development of a well-informed methodological framework. By depicting the cause-and-effect linkages among determinants of ethical banking, and analyzing them in a holistic way, such a map not only serves as a support for the integration of values, ethics and banking, but can help create theory, based on experts' practice in this field.

© 2016 Elsevier Inc. All rights reserved.

1. Introduction

Many organizations, including banks, commonly provide their stakeholders with mission and vision statements, as well as outlines of organizational goals. There are well-documented theoretical benefits to doing so (Barney & Hesterley, 2012; Grant, 2013); however, in practice, these statements and institutional objectives are often vague or even unrealistic. Clarifying values and vision, making objectives explicit, and aligning these elements with ethical principles is crucial for business survival, but constitutes a notoriously complex and difficult endeavor (Buttle, 2007).

In this regard, a relatively new and exciting field of collaboration is between ethics and neural sciences (i.e., disciplines related to human cognition, perception, memory, categorization, and problem solving) (cf. Anderson, 1997; Ferreira, Jalali, & Ferreira, 2016). This collaboration is helping strategic thinkers to recognize the importance of values in the definition of well-structured goals and objectives, as well as in the pursuit of good decisions. Indeed, as Grinyer (2000) notes, "there is a continuing need for senior managers to develop coherent, well articulated

E-mail addresses: fernando.alberto.ferreira@iscte.pt, fernando.ferreira@memphis.edu (F.A.F. Ferreira), marjan.jalali@iscte.pt (M.S. Jalali), jjmf@ubi.pt (J.J.M. Ferreira).

cognitive structures, or mental models, which adequately map the key aspects of their business and its environment" (p. 51).

Keeney (1996) proposes a practical way to approach the creation of such models through what he terms "value-focused thinking". Based on the premise that values should be both "the driving force for our decision making", and "the basis for the time and effort we spend thinking about decisions" (p. 537), value-focused thinking proposes a set of concepts and procedures which place values at the heart of decision making situations. These concepts span from the identification of objectives to the creation of better alternatives and, even further, to the "identification of better decision situations" (i.e., decision opportunities rather than problems) (Keeney, 1996, p. 358).

The process of identifying objectives in value-focused thinking typically involves discussions with relevant decision makers and stakeholders, and the use of techniques such as cognitive mapping to stimulate creativity (Keeney, 1992). Over time, and as experience accrues, thinking about objectives in terms of values becomes both easier and more fruitful. This is because: (1) as practice with putting values first accumulates, it becomes an increasingly intuitive process; (2) structuring values enhances understanding of those values, and compels the clarification of any resulting difficulties or value conflicts; and (3) undertaking these processes typically leads to a coherent value pattern and frame of reference for decision making to emerge (Keeney, 1994).

This study focuses on the banking sector, and makes use of cognitive mapping and experience-focused thinking to understand how ethical banking practices interrelate. The result is a well-informed methodological framework which supports the integration of values in ethical

http://dx.doi.org/10.1016/j.jbusres.2016.04.058 0148-2963/© 2016 Elsevier Inc. All rights reserved.

[★] The authors are grateful to contributions from Ronald Spahr, University of Memphis, Gyula Fülöp, University of Miskolc, and two anonymous reviewers for their careful reading and helpful comments. The authors also thank Ana Luísa Morgado, António Neves, Bianca Viana, Erica Vaz, Joana Reis, João Aguiar, and Nuno Torres for their contribution during the panel meetings.

^{*} Corresponding author.

banking practices. Although there is significant literature discussing the role and moral responsibilities of banks (Buttle, 2007; Green, 1989; Polychronidou, Ioannidou, Kipouros, Tsourgiannis, & Simet, 2014), there is little evidence reporting the use of cognitive mapping for the study of ethical banking.

Notwithstanding, cognitive maps are widely used in "problem-structuring interventions" (Montibeller & Belton, 2006, p. 57), as they allow "a rich representation of ideas, through the modelling of complex chains of argument, and are suitable for several types of analysis" (Montibeller & Belton, 2006, p. 57). As decision-support tools, cognitive maps reduce cognitive load (Gavrilova & Leshcheva, 2015), help reveal frequently-omitted variables (Eden & Ackermann, 2000; Ferreira & Jalali, 2015; Ferreira, Santos, Rodrigues, & Spahr, 2014), and improve understanding of decision situations (Durif, Geay, & Graf, 2013; Ferreira, Jalali, Ferreira, Stankevičienė, & Marques, 2015a; Filipe, Ferreira, & Santos, 2015). As such, they hold great potential for analyzing the cause-and-effect linkages among determinants of ethical banking practices, and creating a more holistic conception of the phenomenon.

The next section provides the theoretical and methodological backgrounds of the study. Section 3 describes the construction of a collective cognitive map for ethical baking practices; and Section 4 analyzes the results. The last section concludes the paper and proposes avenues for future research.

2. Theoretical and methodological frameworks

2.1. Ethical banking practices

Although banks have historically often been seen as trustworthy institutions (Ferreira et al., 2016; Forseth, Røyrvik, & Clegg, 2014; Green, 1989; Harvey, 1995), in today's fiercely competitive and rapidly changing economic climate, the battle for survival and the competition for market share can tempt banks to compromise their ethical stance (Jalali, Ferreira, Ferreira, & Meidutė-Kavaliauskienė, 2015; Paulet, Parnaudeau, & Relano, 2015). Indeed, like any other service industry, banking is a people business, and as the financial markets become more open through deregulation, and as technology replaces face-to-face contact, creating anonymity, the potential for unethical behaviors and abuse of power is greater (Ferreira, Spahr, & Pereira, 2011; Green, 1989; Reis, Ferreira, & Monteiro-Barata, 2013; Seele, Jensen, & Dalva, 2015; Selmier, 2013).

Given the possibility of misbehaviors, and because the impact of poor decisions can easily ripple out from individual circumstances to the community at large, the banking industry has been making significant transformations over the past few decades toward a more ethical stance. According to Harvey (1995), these transformations are, in broad terms, related to: (1) not doing business with firms involved in fur trade activities, tobacco and cigarette manufacturing, arms and narcotics trade, blood sports, animal experimentation and oppressive regimes; (2) actively encouraging links with organizations benefiting the community in terms of healthcare and housing provision; and (3) ensuring that banking operations are as benign as possible to the environment.

As a result of these changes, banks are now often acknowledged as one of the key-players in economic development and ethical practices worldwide (Atakan-Duman & Ozdora-Aksak, 2014; Fatma, Rahman, & Khan, 2014; Paulet et al., 2015; Zheng & Ashraf, 2014). This move toward more ethical banking is particularly important, because the perceived ethics of a bank can affect its reputation, and as a result contribute to its long term success or failure (Green, 1989; Simpson & Kohers, 2002; Tayşir & Pazarcık, 2013).

In light of this reasoning, and because the financial services industry is often exposed to moral dangers of a scale not often found elsewhere, an enhanced understanding of ethical banking practices is paramount to achieving higher rates of market share, profit and advancement in bank

rankings (Green, 1989; Mocan, Rus, Draghici, Ivascu, & Turi, 2015; Polychronidou et al., 2014). Indeed, banks interact with, and require the trust of, different stakeholders, such as governments, customers, shareholders, employees, and the communities in which they operate. However, the ethical obligations that they have toward each of these specific stakeholders, and the manner in which such obligations relate to each other, are yet to be clarified (Atakan-Duman & Ozdora-Aksak, 2014; Fatma et al., 2014; Green, 1989). As such, there seems to be considerable scope to explore the use of cognitive mapping to shed light on the cause-and-effect relationships among ethical practices in banking. A greater knowledge of the determinants of ethical practices in banking institutions is particularly important because "ethical banks" typically "take higher risks than conventional banks in their lending policy" (Paulet et al., 2015, p. 202). That is, in integrating ethics into their lending policies, these banks must then consider a larger number of variables (i.e., those related to ethics and social responsibility) in their decision making.

2.2. Cognitive mapping

Cognitive maps are recognized in the decision-making arena as well-established and interactive visual tools, which allow for the structuring and clarification of complex decision situations (Ackermann & Eden, 2001; Belton & Stewart, 2002; Padova & Scarso, 2012; Santos, Belton, & Howick, 2002). Gavrilova, Carlucci, and Schiuma (2013) note that cognitive maps "facilitate the representation and communication [of knowledge], support the identification and the interpretation of information, facilitate consultation and codification, and stimulate mental associations" (p. 1756). The added value of this constructivist methodological approach has been variously recognized in the literature (cf. Bell & Morse, 2013; Eden & Ackermann, 2001; Ferreira, Jalali, Meidutė-Kavaliauskienė, & Viana, 2015b), and stems primarily from the maps' interactivity, versatility and relative simplicity.

Their subjective nature notwithstanding, cognitive maps and the process through which they are constructed, promote discussion and the negotiation of different points of view, allow for increased transparency and provide a deeper understanding of the decision situations under analysis (Ferreira et al., 2016; Jalali et al., 2015; Ormerod, 2013). In addition, the technical procedures underlying the construction of such maps allow the participants to express and record value judgments that may not be immediately evident, or even consciously identified, until they surface through group discussion. As such, these procedures reduce the likelihood of omitted criteria (Ferreira & Jalali, 2015). Cognitive mapping is therefore a powerful experience-focused thinking instrument, which can be useful in the definition of strategic guidelines (Howick & Eden, 2011), and holds great potential for integrating values and ethical principles in baking practices.

3. Mapping ethical banking

The development of the collective cognitive map presented in this study took place during two intensive workshops of around four hours each. Prior to these sessions, the definition of a panel of experts in banking practices and the formulation of the "trigger question" were carefully addressed. The work sessions themselves then allowed not only for the design of the cognitive map, but also for its validation and final discussion of the research outcomes, including the framework's practical and managerial implications for ethical banking practices.

3.1. Participants

The literature on problem structuring methods proposes that the outputs obtained from the direct involvement of a decision-maker or panel of experts should be the key source of data, from which, with the assistance of a facilitator (i.e., scientist or researcher), a knowledge

F.A.F. Ferreira et al. / Journal of Business Research xxx (2016) xxx-xxx

representation of the issue at hand can be obtained (in this case, ethical banking practices) (cf. Ackermann & Eden, 2001; Bell & Morse, 2013; Belton & Stewart, 2002; Eden & Ackermann, 2000; Gavrilova & Leshcheva, 2015; Shaw, 2004).

With regard to group size, Grinyer (2000) notes that "early research found that the larger the group size the greater the diversity that can be encompassed but the lower the opportunity for each individual to contribute to discussion" (p. 27). With this tension in mind, and after several attempts, a panel composed of seven decision-makers operating in the metropolitan area of Lisbon was formed (for further details regarding the panel size, see Ackermann & Eden, 2001). These participants had several years of experience in the banking activity, represented three of the most well-known banks in Portugal and, from a practical standpoint, were available for the group meetings. The panel members in this study were thus carefully selected; however, the process-oriented stance of this research allows the technical procedures followed to work well with almost any group of (ideally expert) participants (cf. Belton & Stewart, 2002; Montibeller & Belton, 2006; Ormerod, 2013; Steiger & Steiger, 2008).

An experienced facilitator – one of the authors of this paper – coordinated the meetings, accompanied by an ICT technician, who was responsible for registering the research outcomes.

3.2. Journey making and the "post-its technique"

The operational phase of our study is grounded on an approach known as *Journey Making*, developed by Fran Ackermann and Colin Eden, which makes use of cognitive mapping (cf. Ackermann & Eden, 2001; Eden & Ackermann, 2000, 2001). In broad terms, this approach starts with an initial briefing during which, in order to avoid misunderstandings among the participants, basic concepts, research objectives,

and methodological aspects are carefully explained. During this briefing, the "post-its technique" is summarily explained (see Ackermann & Eden, 2001), and the panel members are then asked to consider a trigger question. In the current study, the trigger question was: "based on your own values and professional experience, what are the common practices of an ethical bank?".

The "post-its technique" then consists of inviting the group to reflect on the decision situation at hand, share opinions and experiences, and identify relevant concepts/criteria, which should be written on post-its. The rule is one concept per post-it and, as result of the dialog and interaction established among the panelists, the technique typically allows for the identification of a wide range of different (but interrelated) concepts (for technical discussion and practical examples, see Ackermann & Eden, 2001; Ferreira & Jalali, 2015; Filipe et al., 2015; Jalali et al., 2015).

During the second stage of the method, the post-its are grouped by clusters (or "areas of concern"), so that the cause-and-effect linkages among the criteria in each area of concern can be analyzed. In the current study, after carrying out these procedures, the session outcomes were then mapped using the *Decision Explorer* software (www.banxia.com), which provided a holistic view of ethical banking practices and their determinants, as defined by the panel members themselves. Fig. 1 presents the collective map obtained, which was provided, during a second group meeting, to the decision-makers for form and content analyses and validity.

The map presented in Fig. 1 projects the panel's consensus on the criteria that can allow ethical principles to be integrated into banking practices. It is also context-dependent, because cognitive maps are always contingent on the decision circumstances, participants involved, facilitator skills and session duration, for instance (cf. Ferreira, Marques, Bento, Ferreira, & Jalali, 2015c). However, the focus in problem structuring

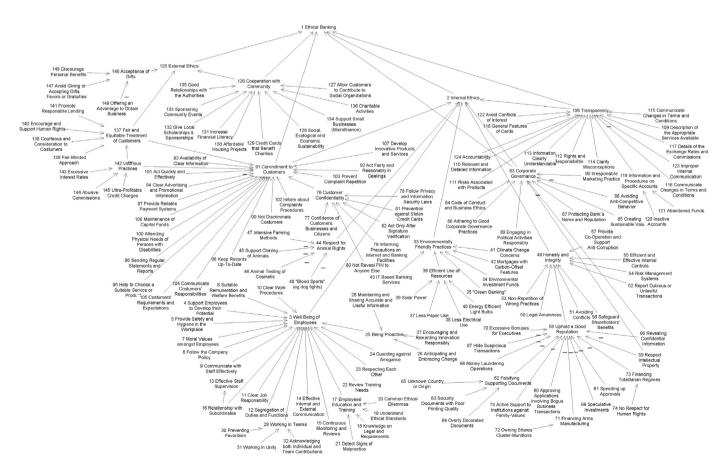


Fig. 1. Collective cognitive map.

methods, such as cognitive mapping, is on the discussion and learning that develop through their application: "there is less emphasis on outputs per se and more focus on process" (Bell & Morse, 2013, p. 962). The method is thus constructivist in nature (for discussion, see Jalali et al., 2015).

Cognitive maps such as Fig. 1 also provide panel members with a holistic view of the decision problem – in this case, of ethical practices in banking –, and the manner in which the concepts included in it relate to each other. After construction of the map, a final discussion of the results, with and among the panel members, is important for further reflection on the research outcomes and in order to derive practical lessons and managerial guidelines.

3.3. Analyzing the results

As can be observed in Fig. 2, eight major lines of thought underpin what respondents considered the main determinants of ethical banking. Table 1 also presents some of the criteria with the highest centrality scores.

To a great extent, these results mirror the concept of the "triple bottom line" of profit, people and planet (Buttle, 2007; Grant, 2013; Harvey, 1995). Profit concerns are arguably present in the preoccupation with *reputation*, *transparency* and *corporate governance*, *illustrated in Fig. 2*. These relate to the more "visible" aspects of ethics, such as *codes of conduct*, *avoiding conflicts of interest*, or *having effective controls*. It is interesting to note that with regard to *reputation*, most of the determinants identified were negatively related to this factor. This is suggestive of a still reactive, rather than proactive stance toward ethics in banking: in terms of the reputation factor, the concern is not with activities that might lead to a positive reputation, but ensuring distance from

Table 1Criteria with the highest centrality scores.

Rank	Explanations and consequences ^a	Centrality scores ^b
1	Commitment to customers	21
2	Well-being of employees	19
3	Transparency	16
4	Good reputation	13
5	Cooperation with community	12
6	Corporate governance	11
7	Fair and equitable treatment of customers	7
7	Environmental friendly practices	7

^a Concepts and criteria identified by the panel members after group discussion. Centrality score upper or equal to 7. *Internal ethics* and *costumer confidentiality* were separately considered "aggregated areas of concern".

those that can damage a reputation (e.g., *falsifying documents, money laundering*, or *financing totalitarian regimes*).

In terms of people, the cognitive map suggests that the way a bank deals with both its internal and external stakeholders is fundamental to achieving ethical banking. The "well-being of employees", for instance, emerged as a key cluster, with over 18 determinants. In terms of external stakeholders, *commitment to customers* and their *fair and equitable treatment* were seen as key determinants of ethical behavior, and this was extended even further, through the "cooperation with the community" cluster, which considered initiatives such as *local scholarships* and sponsorships, and *credit cards benefitting charities*.

Concern with the planet is reflected in the "environmentally friendly practices" cluster, which contains six key determinants, ranging from simple operational decisions related to the amount of paper or other resources used, all the way to higher level concerns, such as environmental investment funds and green banking.

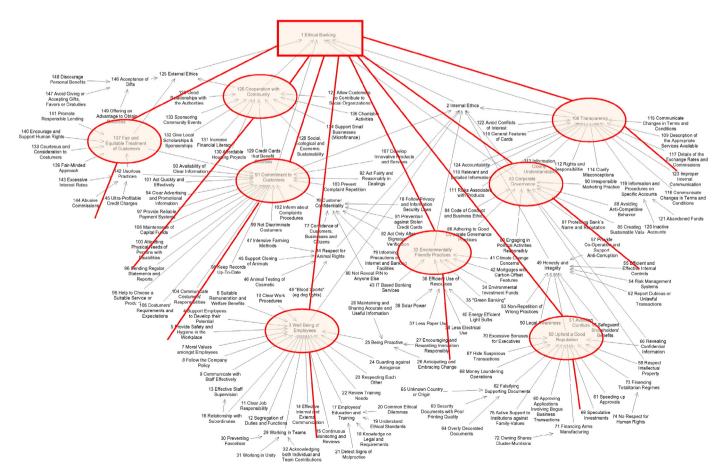


Fig. 2. Lines of thinking.

^b Centrality score = (#In) + (#Out).

F.A.F. Ferreira et al. / Journal of Business Research xxx (2016) xxx-xxx

In light of these results, it seems that the use of cognitive mapping within the context of the present study can allow banking experts to: (1) identify key determinants of ethical practices in banking; (2) understand the cause-and-effect relationships among these aspects/concepts, reducing the rate of omitted criteria, and increasing transparency and learning in the decision-making process; and (3) obtain insights about the driving forces and the key feedbacks that can improve bank performance in this domain. In essence, then, what cognitive mapping allows for is an encompassing and practice-based perspective of the matter at hand — in this case ethical banking. It makes experts' thinking and even intuition about the topic explicit, in ways that may have not previously been within the conscious awareness of even the participants themselves. It furthermore provides a visual representation of this thinking to those outside of the group, highlighting not only the determinants of ethical banking as seen by a group of experts, but the many connections between these determinants.

4. Conclusion and recommendations

The current study applies cognitive mapping to the study of ethical practices in banking. Cognitive mapping is a well-established problem structuring method, which allows comprehensive frameworks to be developed on the basis of experience-based thinking, as groups of experts discuss and negotiate their views on a topic based on their personal values and practice. The resulting frameworks can serve not only to further understanding of complex issues (in this case, ethical banking), but as guidelines for business ethics theory-building and managerial action.

In the present study, this framework was applied to the context of ethical banking. Ethical practices are increasingly understood to be fundamental to any company's operations, but even more so within banking. This understanding and many good intentions notwithstanding, following such practices in day-to-day operations is often very difficult, and the incentives are not always present to do so. By identifying the main determinants of ethical practices, then, this study hopes to contribute to a better understanding of how the integration between ethics theory and every day banking practices can occur.

While some fundamental points of view were identified, it is worth noting that this study is only the first step in what is aimed to be a much more detailed research project. Notwithstanding, even at such an incipient stage, the current study is able to lay out some managerial priorities — in terms of not only avoiding "bad" behaviors and associations, but also promoting positive ones, such as links with charitable institutions. Furthermore, the data clearly shows the need for a greater concern with people, both within and outside of the organization.

Despite the abundance of practice-based results obtained, the short-comings of the present study are worth noting. In particular, the methodology used is highly context-dependent, such that different results might be obtained with a different group of experts or even a different facilitator. That said, it is also worth referring that the methodology in question is essentially constructivist in nature, and to that extent, more process than result oriented.

In terms of future research, it would be of interest to compare the strengths and weaknesses of this framework with those of other methods. Further research might also consider the use of multiple criteria decision analysis techniques to help prioritize and weight the determinants identified in the present study (for details, see Belton & Stewart, 2002; Canas, Ferreira, & Meidutė-Kavaliauskienė, 2015; Mardani, Jusoh, Zavadskas, Khalifah, & Md Nor, 2015; Martins, Filipe, Ferreira, Jalali, & António, 2015; Zavadskas, Turskis, & Kildienė, 2014). It would furthermore be of interest to develop such maps with different groups of stakeholders, or in different cultural contexts, so as to broaden our understanding of the determinants of ethical baking, and the interactions between them. This would not only greatly enrich the discussion, allowing for a broadening of perspectives, but could also contribute to

our understanding of the processes whereby banks incorporate ethics in banking practices.

References

- Ackermann, F., & Eden, C. (2001). SODA Journey making and mapping in practice. In J. Rosenhead, & J. Mingers (Eds.), *Rational analysis for a problematic world revisited:*Problem structuring methods for complexity, uncertainty and conflict (pp. 43–60) (2nd ed.). Chichester: John Wiley \$_amp_\$amp; Sons.
- Anderson, J. (1997). What cognitive science tells us about ethics and the teaching of ethics. *Journal of Business Ethics*, 16, 279–291.
- Atakan-Duman, S., & Ozdora-Aksak, E. (2014). The role of corporate social responsibility in online identity construction: An analysis of Turkey's banking sector. *Public Relations Review*, 40, 862–864.
- Barney, J., & Hesterley, W. (2012). Strategic management and competitive advantage. New Jersey, NY: Pearson Prentice-Hall.
- Bell, S., & Morse, S. (2013). Groups and facilitators within problem structuring processes. Journal of the Operational Research Society, 64, 959–972.
- Belton, V., & Stewart, T. (2002). Multiple criteria decision analysis: An integrated approach.

 Dordrecht: Kluwer Academic Publishers.
- Buttle, M. (2007). 'I'm not in it for the money': Constructing and mediating ethical reconnections in UK social banking. *Geoforum*, 38, 1076–1088.
- Canas, S., Ferreira, F., & Meidutė-Kavaliauskienė, I. (2015). Setting rents in residential real estate: A methodological proposal using multiple criteria decision analysis. International Journal of Strategic Property Management, 19, 368–380.
- Durif, F., Geay, B., & Graf, R. (2013). Do key account managers focus too much on commercial performance? A cognitive mapping application. *Journal of Business Research*, 66, 1559–1567.
- Eden, C., & Ackermann, F. (2000). Mapping distinctive competencies: A systemic approach. *Journal of the Operational Research Society*, 51, 12–20.
- Eden, C., & Ackermann, F. (2001). SODA The principles. In J. Rosenhead, & J. Mingers (Eds.), Rational analysis for a problematic world revisited: Problem structuring methods for complexity, uncertainty and conflict (pp. 21–41) (2nd ed.). Chichester: John Wiley \$ amp \$amp \$cons.
- Fatma, M., Rahman, Z., & Khan, I. (2014). Multi-item stakeholder based scale to measure CSR in the banking industry. *International Strategic Management Review*, 2, 9–20.
- Ferreira, F., & Jalali, M. (2015). Identifying key determinants of housing sales and time-onthe-market (TOM) using fuzzy cognitive mapping. *International Journal of Strategic Property Management*, 19, 235–244.
- Ferreira, F., Jalali, M., Ferreira, J., Stankevičienė, J., & Marques, C. (2015a). Understanding the dynamics behind bank branch service quality in Portugal: Pursuing a holistic view using fuzzy cognitive mapping. Service Business. http://dx.doi.org/10.1007/ s11628-015-0278-x.
- Ferreira, F., Jalali, M., Meidutė-Kavaliauskienė, I., & Viana, B. (2015b). A metacognitive decision making based-approach to bank customer loyalty measurement and management. *Technological and Economic Development of Economy*, 21, 280–300.
- Ferreira, F., Jalali, S., & Ferreira, J. (2016). Integrating qualitative comparative analysis (QCA) and fuzzy cognitive maps (FCM) to enhance the selection of independent variables. *Journal of Business Research*, 69, 1471–1478.
- Ferreira, F., Marques, C., Bento, P., Ferreira, J., & Jalali, M. (2015c). Operationalizing and measuring individual entrepreneurial orientation using cognitive mapping and MCDA techniques. *Journal of Business Research*, 68, 2691–2702.
- Ferreira, F., Santos, S., Rodrigues, P., & Spahr, R. (2014). Evaluating retail banking service quality and convenience with MCDA techniques: A case study at the bank branch level. *Journal of Business Economics and Management*, 15, 1–21.
- Ferreira, F., Spahr, R., & Pereira, J. (2011). New banking trends, MCDA and financial decisions: Insights and a framework for retail banking. *Banks and Bank Systems*, 6, 23–35.
- Filipe, M., Ferreira, F., & Santos, S. (2015). A multiple criteria information system for pedagogical evaluation and professional development of teachers. *Journal of the Operational Research Society*, 66, 1769–1782.
- Forseth, U., Røyrvik, E., & Clegg, S. (2014). Brave new world? The global financial crisis' impact on Scandinavian banking's sales rhetoric and practices. Scandinavian Journal of Management, 31, 471–479.
- Gavrilova, T., & Leshcheva, I. (2015). Ontology design and individual cognitive peculiarities: A pilot study. Expert Systems with Applications, 42, 3883–3892.
- Gavrilova, T., Carlucci, D., & Schiuma, G. (2013). Art of visual thinking for smart business education. *Proceedings of the 8th International Forum on Knowledge Asset Dynamics (IFKAD-2013)* (pp. 1754–1761). Croatia: Zagreb.
- Grant, R. (2013). Contemporary strategy analysis. Hoboken, New Jersey: Wiley.
- Green, C. (1989). Business ethics in banking. *Journal of Business Ethics*, 8, 631–634.
- Grinyer, P. (2000). A cognitive approach to group strategic decision taking: A discussion of evolved practice in the light of received research results. *Journal of the Operational Research Society*, 51, 21–35.
- Harvey, B. (1995). Ethical banking: The case of the co-operative bank. *Journal of Business Ethics*, 14, 1005–1013.
- Howick, S., & Eden, C. (2011). Supporting strategic conversations: The significance of a quantitative model building process. *Journal of the Operational Research Society*, 62, 868–878.
- Jalali, M., Ferreira, F., Ferreira, J., & Meiduté-Kavaliauskiené, I. (2015). Integrating metacognitive and psychometric decision making approaches for bank customer loyalty measurement. *International Journal of Information Technology and Decision Making*, http://dx.doi.org/10.1142/S0219622015500236.
- Keeney, R. (1992). Value-focused thinking: A path to creative decisionmaking. Harvard: Harvard University Press.

ARTICLE IN PRESS

F.A.F. Ferreira et al. / Journal of Business Research xxx (2016) xxx-xxx

- 6
- Keeney, R. (1994). Creativity in decision making with value-focused thinking. MIT Sloan Management Review, 35, 33–41.
- Keeney, R. (1996). Value-focused thinking: Identifying decision opportunities and creating alternatives. European Journal of Operational Research, 92, 537–549.
- Mardani, A., Jusoh, A., Zavadskas, E., Khalifah, Z., & Md Nor, K. (2015). Application of multiple-criteria decision-making techniques and approaches to evaluating of service quality: A systematic review of the literature. *Journal of Business Economics and Management*, 16, 1034–1068.
- Martins, V., Filipe, M., Ferreira, F., Jalali, M., & António, N. (2015). For sale... but for how long? A methodological proposal for estimating time-on-the-market. *International Journal of Strategic Property Management*, 19, 309–324.
- Mocan, M., Rus, S., Draghici, A., Ivascu, L., & Turi, A. (2015). Impact of corporate social responsibility practices on the banking industry in Romania. *Procedia Economics and Finance*, 23, 712–716.
- Montibeller, G., & Belton, V. (2006). Causal maps and the evaluation of decision options: A review. *Journal of the Operational Research Society*, 57, 779–791.
- Ormerod, R. (2013). Logic and rationality in OR interventions: An examination in the light of the 'critical rationalist' approach. *Journal of the Operational Research Society*, 64, 469–487.
- Padova, A., & Scarso, E. (2012). Managing large amounts of knowledge objects: Cognitive and organisational problems. Knowledge Management Research and Practice, 10, 287–295.
- Paulet, E., Parnaudeau, M., & Relano, F. (2015). Banking with ethics: Strategic moves and structural changes of the banking industry in the aftermath of the subprime mortgage crisis. *Journal of Business Ethics*, 131, 199–207.
- Polychronidou, P., Ioannidou, E., Kipouros, A., Tsourgiannis, L., & Simet, G. (2014). Corporate social responsibility in Greek banking sector: An empirical research. *Procedia Economics and Finance*, 9, 193–199.

- Reis, J., Ferreira, F., & Monteiro-Barata, J. (2013). Technological innovation in banking services: An exploratory analysis to perceptions of the front office employee. *Problems and Perspectives in Management*, 11, 34–49.
- Santos, S., Belton, V., & Howick, S. (2002). Adding value to performance measurement by using systems dynamics and multicriteria analysis. *International Journal of Operations & Production Management*, 22, 1246–1272.
- Seele, P., Jensen, O., & Dalva, C. (2015). Ethical free riding? The double entendre of "dirty hands" in finance, exemplified by ethical investment guidelines. Studies in Communication Sciences, 15, 61–67.
- Selmier, W., II (2013). Stand by me: Friends, relationship banking, and financial governance in Asja. *Business Horizons*. 56, 733–741.
- Shaw, D. (2004). Creativity and learning through electronic group causal mapping. *International Journal of Innovation and Learning*, 1, 364–377.
- Simpson, W., & Kohers, T. (2002). The link between corporate social and financial performance: Evidence from the banking industry. *Journal of Business Ethics*, 35, 97–109.
- Steiger, D., & Steiger, N. (2008). Instance-based cognitive mapping: A process for discovering a knowledge worker's tacit mental model. Knowledge Management Research and Practice, 6, 312–321.
- Tayşir, E., & Pazarcık, Y. (2013). Business ethics, social responsibility and corporate governance: Does the strategic management field really care about these concepts? Procedia — Social and Behavioral Sciences, 99, 294–303.
- Zavadskas, E., Turskis, Z., & Kildienė, S. (2014). State of art surveys of overviews on MCDM/MADM methods. Technological and Economic Development of Economy, 20, 165–179
- Zheng, C., & Ashraf, B. (2014). National culture and dividend policy: International evidence from banking. *Journal of Behavioral and Experimental Finance*, 3, 22–40.