



“Removing the barriers on the way to European high-performance finance functions”

AUTHORS	André de Waal  https://orcid.org/0000-0002-6442-8642 Eelco Bilstra Peter de Roeck
ARTICLE INFO	André de Waal, Eelco Bilstra and Peter de Roeck (2019). Removing the barriers on the way to European high-performance finance functions. <i>Problems and Perspectives in Management</i> , 17(4), 370-380. doi: 10.21511/ppm.17(4).2019.30
DOI	http://dx.doi.org/10.21511/ppm.17(4).2019.30
RELEASED ON	Friday, 27 December 2019
RECEIVED ON	Friday, 23 August 2019
ACCEPTED ON	Friday, 20 December 2019
LICENSE	 This work is licensed under a Creative Commons Attribution 4.0 International License
JOURNAL	"Problems and Perspectives in Management"
ISSN PRINT	1727-7051
ISSN ONLINE	1810-5467
PUBLISHER	LLC “Consulting Publishing Company “Business Perspectives”
FOUNDER	LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

52



NUMBER OF FIGURES

1



NUMBER OF TABLES

1

© The author(s) 2019. This publication is an open access article.



BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10,
Sumy, 40022, Ukraine

www.businessperspectives.org

Received on: 23rd of August, 2019

Accepted on: 20th of December, 2019

© André de Waal, Eelco Bilstra, Peter de Roeck, 2019

André de Waal, HPO Center,
Hilversum; Finance Function
Research & Development, Vleuten,
The Netherlands.

Eelco Bilstra, Finance Function
Research & Development, Vleuten,
The Netherlands.

Peter de Roeck, Financial Media NV,
Aalter, Belgium.



This is an Open Access article,
distributed under the terms of the
[Creative Commons Attribution 4.0
International license](https://creativecommons.org/licenses/by/4.0/), which permits
unrestricted re-use, distribution,
and reproduction in any medium,
provided the original work is properly
cited.

André de Waal (The Netherlands), Eelco Bilstra (The Netherlands),
Peter de Roeck (Belgium)

REMOVING THE BARRIERS ON THE WAY TO EUROPEAN HIGH-PERFORMANCE FINANCE FUNCTIONS

Abstract

One of the most important staff units in an organization is the finance function, as this function maintains the relations with all parts of the organization and operates at a management team level. Therefore, this function needs to transform itself into a high-performance finance function (HPFF). Unfortunately, finance functions encounter many barriers before they can start this transformation. In this article, the research question "What are the most important barriers which have to be dealt with in order for the finance function to start its transition to a high-performance finance function?" is addressed. For this, a review of the professional literature (as no academic studies could be found on the topic), a small-scale survey among finance professionals, and Delphi research with 14 highly experienced finance experts were conducted. The results of the research were the following Top 10 of barriers of most important obstacles: 1) inefficient and not integrated business processes; 2) data not (yet) in order; 3) insufficient leadership and insufficient will to change; 4) no culture of change and improvement in the finance function; 5) inadequate ICT systems; 6) lack of buy-in from the business for the transformation; 7) insufficient knowledge in the finance function of the business; 8) not the right capacities/people/skills in the finance function; 9) insufficient/unclear business objectives and priorities; 10) business managers do not sufficiently manage the analyses and insights provided by the finance function.

Keywords

finance function, high performance finance function,
barriers, transformation

JEL Classification M10

INTRODUCTION

Nowadays when the economy has recovered from the worst recession for decades, many organizations are focusing again on growing instead of cost reduction. One of the aims of these organizations is to become more robust to deal with the inevitable next recession. Therefore, they show an increasing interest in the concept of the high-performance organization (HPO), which is defined as "an organization that achieves financial and non-financial results that are better than those of its peer group over a period of five years or more, by focusing in a disciplined way on that what really matters to the organization" (de Waal & Goedegebuure, 2017, p. 432). The core of the HPO thinking is to create such a strong internal organization that it is flexible and agile enough to deal adequately with problems inside and outside the organization while at the same time taking advantage of opportunities that present themselves. It has to be noted that the concept is called the high-performance organization, which means that all functions of the organization must contribute to building and maintaining the high-performance status. Consequently, every function has to transform itself into a high-performance function.

There are, however, not many finance functions that have been able to transform into a higher quality level, achieving the status of a high-performance finance function (HPFF) (PWC, 2017). This is because many finance functions encounter barriers on the way to HPFF. In this respect, a barrier is an issue that has to be dealt with in order for the finance function to be able to reach a higher quality level. Interestingly enough, there is hardly any academic literature to be found on the barriers finance functions have to deal with. The professional literature does mention quite a lot of these barriers, but it is unclear which of these are the most common and the most persistent, as these barriers have not been validated in a scientific manner. It is therefore also unclear on which corrective actions finance functions must focus to deal with these barriers. Hence, the research question dealt within this article is: What are the most important barriers which have to be dealt with in order for the finance function to start its transition to a high-performance finance function? To answer the research question, a review of the professional literature (as no academic studies could be found on the topic) is undertaken, a small-scale survey is conducted among finance professionals, and Delphi research with 14 highly experienced finance experts is done. This study contributes to the literature, as the barriers on the way to a high-performance finance function have not been researched and validated in an academic manner. Thus the study results will help the researchers in the field of finance administration further. There is also a practical contribution, as the study results inform the finance functions where they best can focus their improvement efforts on in order to become an HPFF, thus preventing spending time and energy on activities that will not (directly) contribute to a finance transformation.

The remainder of this article is structured as follows. In the next section, the barriers found in the professional literature are listed. This is followed by a description of the research approach, encompassing a survey, and the application of the Delphi method. Subsequently, the research results are described and analyzed. The article ends with the conclusion, limitations to the study, and opportunities for further research.

1. LITERATURE REVIEW

One of the most important functions in an organization is the finance function (Favaro, 2001; Kraan, 2017). With 'finance function', it is meant both the financial processes that are executed in an organization and the group of people that are responsible for that execution and who have specialized themselves in that execution (de Waal & Bilstra, 2016). In general, the finance function maintains relations with all parts of the organization and also operates at a management team level, often in the person of the chief financial officer (CFO). Therefore, this organizational unit needs to take the lead in the transformation of the organization into an HPO by transforming itself into a high-performance finance function (HPFF) (Hsihui, Ittner, & Paz, 2014). This is especially urgent, as organizations place increasingly higher demands on the finance function. As the need for high-quality and real-time information and strategic analytical support is increasing, the finance function is expected to deliver more added value (Hoe, 2009; Wunder & Mueller, 2008). At the

same time, it is worthwhile for finance functions to become high-performing, as these have lower operating costs than less-performing finance functions, make fewer mistakes, are more knowledgeable about the newest IT applications and use these more, have more influence during strategic decision-making, spend more time in a business partnering role, and their internal clients are more satisfied with their performance (Accenture, 2014; O'Connor, Schneider, & Willman, 2014; PWC, 2014).

In practice, only a handful of finance functions have successfully mastered the mix of culture, talent, operating model, and technology that is needed to become an HPFF (PWC, 2017). Most finance functions still seem to spend limited time on added-value activities (IBM, 2010) and do not have an active and important role during strategy-setting and strategic decision-making (Accenture, 2011; Ernst & Young, 2010; Oracle & Accenture, 2013). What is needed to turn the situation for the better is that finance functions start applying the concept of finance transformation, a concept which,

according to Ehrenhalt, Koudal, Chaudhuri, and Rao (2008, p. 37), “focuses on improving performance, stewardship and control of the company by enabling chief financial officers and their finance organizations to have greater impact on strategy formulation and execution across the enterprise.” In their research, Ehrenhalt et al. (2008) found that finance functions first must master the fundamental finance capabilities – in which they ensure the organization-wide compliance with financial reporting and control requirements, manage the risk, and provide the high-quality information to management, achieving this with efficient and effective low-cost operations and highly-skilled professionals – before they can truly start with a finance transformation. In short, they need to have their “finance function house in order” before they can become an HPPF. However, as mentioned before, many finance functions still struggle with getting the fundamental finance capabilities right while encountering many barriers before they can start a transformation. Finance functions have to deal with these barriers so that these do not hamper them in making the transition to HPPF (Jindal-Snape & Snape, 2006).

The research started with a review of the academic literature on the barriers finance functions encounter when they want to become high-performing. For this, a search of the various academic databases (EBSCO, Emerald, Google Scholar) was performed, using the keywords ‘finance function,’ ‘financial administration’ and ‘financial department’ in combination with ‘barriers,’ ‘obstacles,’ ‘transformation’ and ‘high performance.’ This search yielded no articles. Therefore, the professional literature was examined, using the same keywords, as according to Mahlendorf (2014), the changing role of the finance function is a prominent topic in descriptive studies conducted by consultants and professional associations. The limitation was to look for studies that were no older than ten years, so it could be assumed that the findings of these studies were still relevant for present-day finance functions. In total, 19 professional studies were found that fitted this criterion. All these studies were performed by consultancy firms and/or professional associations and were based on surveys, often combined with interviews with financial professionals. The barriers mentioned in these studies were collected and subsequently summa-

rized in categories. Appendix 1 provides the result of the literature review, with the barriers ranked according to the frequency of occurrence in the professional literature. This review yielded 14 barriers, of which almost half (6 studies) were only mentioned sparingly (a maximum of three times), and even the most frequently mentioned barriers did not occur in all literature sources. This illustrates that even in the limited (professional) literature available there does not seem agreement on the barriers, which have to be addressed by finance functions in order to be able to start the transformation into HPPF.

As the professional literature review yielded rather meager results, it was decided to conduct a short survey among finance professionals into the barriers they had encountered in practice while improving their finance function. The aim was to add to the list of barriers derived from the literature review. The approach used was the following. A questionnaire was designed to obtain information on the barriers on the way to the HPPF. This questionnaire basically consisted of one question: “What are the three main barriers, i.e., the three issues that you first have to resolve, before you can bring your finance function on a higher quality level and thus transform it into a high-performance finance function?” Additional questions asked for information on the respondents, their finance function, and the organization they worked for (e.g., size of the finance function, number of employees working in the company, the industry of the organization). The questionnaire was distributed to finance professionals in the authors’ networks. In addition, the list was sent to the members of a professional association of finance professionals. This way, approximately 150 financials were approached, of whom 46 responded, a response rate of about 30 percent. The responses were collected and grouped according to similarity, thus giving main categories of barriers as experienced in practice by financial professionals. Appendix 2 gives the result of the questionnaire, with the barriers ranked according to the frequency of mentioning by the respondents. All 14 barriers derived from the professional literature review were mentioned by the survey respondents, who added another ten barriers not found in this review. This list of 24 barriers was taken as the basis for the Delphi research, in which experts in the

finance administration field were asked to come to a consensus about the most important and severe barriers facing finance functions in their journey toward becoming high performing.

2. METHODS

A discovery-oriented approach was adopted by turning to experts in the finance administration field to solicit their opinion. It was decided to use the Delphi method as Van de Ven and Delbecq (1974) noted that this technique is very effective when dealing with a fact-finding problem with no known solution. In addition, Wang, Wang, and Tai (2016) remarked that the Delphi method is eminently suitable when dealing with uncertainties in an area of imperfect knowledge. Laick (2012, p. 261) concurred that the Delphi method is particularly “well suited as a research instrument when there is incomplete knowledge about a problem or phenomenon.” According to Loo (2002, p. 763), the Delphi method “structures and facilitates group communication that focuses upon a complex problem that over a series of iterations a group consensus can be achieved about some future direction.” Alternative descriptions are provided by Van de Ven and Delbecq (1974, p. 606): “The Delphi technique provides for the systematic solicitation and collation of judgments on a particular topic through a set of carefully designed sequential questionnaires interspersed with summarized information and feedback of opinions derived from earlier responses,” and by Skulmoski et al. (2007, p. 1): “The Delphi method is an iterative process to collect and distill anonymous judgments of experts using a series of data collection and analysis techniques interspersed with feedback.”

Loo (2002) described the Delphi method as having five major characteristics: (1) there is a panel of carefully selected experts representing a broad spectrum of opinions on the topic in question; (2) the panel experts are usually anonymous; (3) the researcher constructs a series of structured questionnaires or feedback reports for the panel to review; (4) there are several iterations (often three to four) in which the panel evaluates the questionnaires or feedback reports; and (5) there is an output report containing the results of the Delphi process. The advantage of using the Delphi meth-

od over other methods, such as the nominal group technique or interacting group method, is that the Delphi method is individual-based and thus independent from, for instance, group think, a relatively smooth process, as there are no conflicts between panel members (as they do not meet), cost-efficient (for instance, no travel is involved), the Delphi panel size requirements are modest, and the Delphi study, in general, is flexible in its design (Van de Ven & Delbecq, 1974; Loo, 2002; Okoli & Pawlowski, 2004).

In general, the Delphi process consists of two sequential phases: exploration and evaluation (Ziglio, 1996). During exploration, the research topic is identified, a panel of subject matter experts is selected, and open-ended questions on the topic are offered to experts who explore the topic in an anonymous manner. During the evaluation phase, experts’ opinions on the ideas collected during the exploration phase are solicited. This is firstly done by reporting back the results from the exploration phase to the experts and asking them whether they concur with those results. Their opinions are analyzed and summarized and then sent back again to the experts for another round of evaluation and judgment. This is repeated until consensus has been reached among the experts (Winklbauer, 2014). For a high-quality Delphi process, Turoff (1970) proposed that three groups of individuals should be involved:

- decision makers, i.e., individuals expecting an outcome from the Delphi process, which they can use for their purposes. In this research, these were the respondents on the initial questionnaire who are all working in the finance function and potentially can use the research results for the improvement of their finance functions;
- staff group, which designs the questionnaire, manages, and facilitates the Delphi iterations, and summarizes the feedback. In this research, this role was taken by the authors;
- respondent group, i.e., the group whose judgments are being sought in the Delphi iterations and who are asked to respond to the results of the initial questionnaire. In this research, these were the experts (see next section).

The steps in a Delphi process, as described by Loo (2002) and Okoli and Pawlowski (2004), were followed: problem definition, panel selection, determining the panel size, and conducting the Delphi rounds.

2.1. Problem definition

The problem to be dealt with was to address the current lacuna in the academic literature about the barriers finance functions encounter when they start and make a transformation to a higher quality level, i.e., become an HPPF. In addition, the aim was to obtain knowledge about how finance functions can best deal with these barriers.

2.2. Panel selection and panel size

The Delphi method requires a panel of carefully selected subject-matter experts to evaluate the feedback reports on the topic in question. After all, the quality of the results from the Delphi process is directly related to the quality of the panel of experts (Hsu & Sandford, 2007; Stitt-Gohdes & Crews, 2004). Experts are defined as “a group of knowledgeable people: those who can provide relevant input to the process, have the highest authority possible, and are committed and interested” (Gutierrez, 1989, p.33). According to Adler and Ziglio (1996) and Dawson and Brucker (2001), experts ideally should satisfy the following requirements: have good knowledge and experience in the field of study, have the willingness to participate, are

willing to spend sufficient time to participate, and have effective communication skills. There is no single sample size preference for Delphi studies (Chapman, 1998), but a size of between 5 to 15 experts is suggested in the literature for a homogeneous population such as in this research: people working in the finance function (Loo, 2002; Skulmoski, Hartman, & Krahn, 2007; Wang et al., 2016; Winklbauer, 2014).

In this research, the experts constituted of people who work or have recently worked on a high job level in the finance function and who have experience with improving the financial function. The authors had extensive contacts in the finance world and discussed the suitability of the finance professionals they knew as potential candidates for the panel. A long list of potential candidates were drafted, and these candidates were personally approached. The authors explained to them the topic of research, the research approach, and the duties of a Delphi Expert (stressing that there would be multiple rounds of feedback reports). From the 17 potential candidates approached, 14 people agreed to participate in this Delphi study. On average, the Delphi experts had been working 28,3 years in the finance function. They all worked for organizations based in Europe, and these organizations employed on average 483 FTEs (full-time equivalents). Their finance function consisted of, on average, 34,6 FTEs. Five experts were employed as chief financial officer (CFO) or finance director, six were controller or finance manager, and three had other roles in finance.

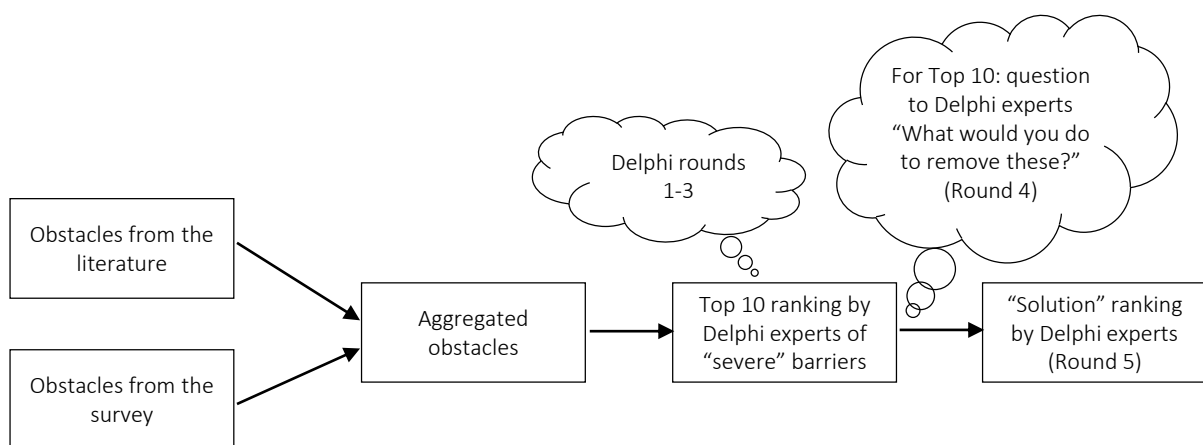


Figure 1. Schematic overview of the Delphi research process

2.3. Delphi rounds

There is a considerable variation in how the Delphi process is administered (Van de Ven & Delbecq, 1974). Figure 1 schematically depicts the Delphi research process used in this research.

3. RESULTS

In Delphi Round 1, the list of barriers, sorted alphabetically in an Excel sheet, was sent to the expert panel, with the request to rate these barriers according to severity. In this respect, a 'severe' barrier meant that this was a barrier that absolutely had to be dealt with (i.e., removed) otherwise it would not be possible to transform the finance function successfully into an HPFF. The experts were also asked to add barriers, which they had encountered in the past and which were not on the list. The feedback of the experts was summarized in a way that a new ranking of barriers was achieved. The lowest ranking barriers were removed, as these were deemed not to be that important. The additional barriers suggested by the experts were added to the new list. In Round 2, the experts were again asked to rank the barriers according to severity, but now without adding additional barriers. Again, the feedback of the experts was summarized and put in order of severity, with the lowest-scoring barriers being removed from the list. After Round 3, consensus was achieved among the Delphi experts about the severity of the barriers, giving a clear Top 10 of the most severe barriers. Needing three rounds to achieve consensus is quite common in a Delphi process, as Linsonte and Turoff (1975), Watson (2008) and Delbeq, Van de Ven, and Gustafson (1975) already noticed. Table 1 gives the Top 10 of the most severe barriers in the transformation into HPFF, according to the Delphi experts.

Then, in Round 4, the Delphi experts were asked for each barrier to describe the best way in which the finance function can deal with this barrier, i.e., remove it so that it will no longer be an obstacle on the way to HPFF. This resulted in multiple suggestions. These suggestions were summarized in categories of possible solutions. Finally, in Round 5, the Delphi experts were asked to rank the possible solutions for each barrier according to effective-

ness to reach consensus about this effectiveness, i.e., the best solutions finance functions can apply to deal with specific barriers. This consensus was already reached in one round, as for each barrier there was a clear Top 3 of solutions the Delphi experts found the most effective. These solutions are listed in Appendix 3.

Table 1. Top 10 of most severe barriers in the transformation into HPFF

No	Barriers
1	Inefficient and not integrated business processes
2	Data not (yet) in order
3	Insufficient leadership and will to change from the CFO/finance director
4	No culture of change and improvement
5	Inadequate ICT systems
6	Lack of buy-in from the business
7	Insufficient knowledge of the business
8	Not the right capacities/people/skills
9	Insufficient/unclear business objectives and priorities
10	The executive board and management do not sufficiently manage with the analyses and insights provided by the finance function

4. DISCUSSION

This research aims to find an answer to the question: What are the most important barriers which have to be dealt with in order for the finance function to start its transition to a high-performance finance function? In the academic literature, no studies on these barriers could be found so; instead, these barriers had to be identified from the professional literature. This yielded a rather meager number of 14 different barriers, with no one barrier obviously being more severe than other barriers. It was therefore decided to conduct a small-scale survey among finance professionals, asking them the three main barriers, which they found most important to address and resolve in order to bring their finance function on a higher quality level. This yielded 24 barriers. Interestingly, all 14 barriers derived from the literature review were mentioned by the survey respondents, but they added another ten barriers, which might be an indication that the professional literature actually lags after actual practice. Another indication of this is that the rankings of the literature review and the survey differed for quite a few barriers.

In order to obtain some consensus on which barriers are in practice the most severe, i.e., to see which barriers absolutely have to be dealt with otherwise it will not be possible to transform the finance function successfully into an HPFF, experts in the finance administration field were turned to by using the Delphi technique. The idea behind using Delphi experts was that these finance professionals, with on average 28 working-years in the finance field, would be able, based on their extensive experience, to estimate quite accurately which barriers in practice were the most severe. As seems to be customary, the Delphi experts were able to reach consensus about a Top 10 of severe barriers in three Delphi rounds. When comparing this Top 10 with the barriers as found in the professional literature, it is conspicuous that half of the Top 10 is not mentioned in the professional literature, and that for the five barriers mentioned the ranking of their severity differed quite a lot. Again, this is an indication that the professional literature lags reality. Another possibility is that using a survey to identify the barriers, as applied in most of the professional literature on barriers, is not the best way

to identify these barriers. To check this, the Top 10 was compared with the barriers from the small-scale survey. The matching revealed that eight barriers were found in both lists and that, in fact, six of these were among the Top 10 survey barriers. This seems to indicate that using a survey is potentially a good way to identify the barriers, but that it is crucial to whom this survey is distributed: clearly, the respondents need to be experienced finance professionals.

Having obtained a Top 10 of barriers made it possible to go one step further, and ask the Delphi experts how these barriers, in their experience, can be best dealt with. It is interesting to note that from a large number of potential solutions given by the experts, it was not that difficult to create categories of similar solutions and that the Delphi experts agreed on their effectiveness in one Delphi round. This seems to be an indication that the solutions, as suggested by the experts, probably have been proven already in practice, as the Delphi experts recognized them to be effective solutions.

CONCLUSION, LIMITATIONS AND FUTURE RESEARCH

This research has both a theoretical and practical contribution. Theoretically, the study results fill a gap in the current literature on improvement, specifically of the finance function, by identifying an agreed upon set of barriers finance functions must deal with before or during their improvement process. In addition, the identified solutions for dealing effectively with the barriers, as agreed upon by financial experts, are new and therefore add to the theoretical literature. The practical contribution of the research can be found in that finance functions can now better prepare themselves for the transition to a higher quality level, as they know which barriers to expect and what potential solutions they should apply. When finance functions start to use the research results, it is expected in the future to see many more successful transitions and, therefore, many more HPFFs.

There are several limitations to the research, some of which provide the opportunities for future research. Despite potential thorough review of the academic literature, sources might have been missed, which describe the barriers that should have incorporated. The same could be said for the professional literature review, where sources containing barriers might have missed. The survey conducted was small-scale of nature. In future research, a larger number of respondents could be included to evaluate whether all practical barriers have indeed been identified. In the Delphi research, a decent number of experts participated, but in future research, respondents with another background than finance could be included, e.g., managers who use the output of the finance function. This might shed a different light on barriers between the finance function and the business (operations). Finally, future research should look at transformations of finance functions in which the study results are applied, in order to evaluate whether taking the identified barriers and their solutions into account indeed raises the chance on a successful transformation into an HPFF.

REFERENCES

1. ACCA (2016). *Professional accountants – the future: generation next*. The Association of Chartered Certified Accountants, London. Retrieved from <https://www.accaglobal.com/in/en/technical-activities/technical-resources-search/2016/november/generation-next.html>
2. ACCA & IMA (2014). *Financial insight: challenges and opportunities*. The Association of Chartered Certified Accountants, London. Retrieved from <https://www.accaglobal.com/gb/en/professional-insights/global-profession/financial-insight-challenges-and-opportunities.html>
3. Accenture (2011). *Delivering value in a complex world: the next battleground for the Finance organization*. Accenture LLC, Chicago.
4. Accenture (2014). *The CFO as architect of business value, delivering growth and managing complexity*. Accenture 2014 High Performance Finance Study, Accenture LLC, Chicago.
5. Adler, M., & Ziglio, E. (1996). *Gazing into the oracle: The Delphi Method and its application to social policy and public health*. Jessica Kingsley Publishers, London.
6. CFO Research & SAP (2014). *Building High-Performing Finance Functions*. CFO Publishing LLC, Boston.
7. CFO Signals (2017). *What North America's top finance executives are thinking - and doing*. The CFO Program, Deloitte Development LLC.
8. Chapman, R. J. (1998). The effectiveness of working group risk identification and assessment techniques. *International Journal of Project Management*, 16(6), 333-343. [https://doi.org/10.1016/S0263-7863\(98\)00015-5](https://doi.org/10.1016/S0263-7863(98)00015-5)
9. Dawson, M. D., & Brucker, P. S. (2001). The utility of the Delphi method in MFT research. *The American Journal of Family Therapy*, 29(2), 125-140. <https://doi.org/10.1080/01926180126229>
10. De Waal, A., & Bilstra, E. (2016). *Hoe bouw je een high performance financiële functie [How to build a high-performance finance function]*. Vakmedianet, Deventer.
11. De Waal, A., & Goedegebuure, R. (2017). Investigating the causal link between a management improvement technique and organizational performance: The case of the HPO framework. *Management Research Review*, 40(4), 429-450. <http://dx.doi.org/10.1108/MRR-03-2016-0058>
12. Delbeq, A., Van de Ven, A., & Gustafson, D. H. (1975). *Group techniques for program planning: A guide to nominal group and Delphi processes*. Scott Foresman, Glenview.
13. Deloitte (2013). *Finance business partnering, making the right move*. Deloitte & Touche, Dublin. Retrieved from https://www2.deloitte.com/content/dam/Deloitte/ie/Documents/Finance%20Transformation/2013_finance_business_partnering_survey_deloitte_ireland_finance_transformation_finance_survey_partnering.pdf
14. Deloitte (2015). *The Deloitte Finance benchmark, getting back to growth*. Deloitte Development LLC. Retrieved from <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/audit/deloitte-uk-finance-benchmark-2015-report.pdf>
15. Ehrenhalt, S., Koudal, P., Chaudhuri, A., & Rao, A. (2008). Finance masters: How Finance is Quietly Emerging as a Key to Business Transformation. *Deloitte Review*, 3, 35-45. Retrieved from <https://www2.deloitte.com/us/en/insights/deloitte-review/issue-3/finance-masters-business-transformations-unsung-heroes.html>
16. Ernst & Young (2010). *The DNA of a CFO: a study of what makes a Chief Financial Officer*. Ernst & Young, New York. Retrieved from <https://www.consultancy.nl/media/Ernst%20&%20Young%20-%20The%20DNA%20of%20the%20CFO-1228.pdf>
17. EY (2016). *Is the future of finance new technology or new people? Preparing for the future finance function*. EYG, London. Retrieved from <https://www.financialexecutives.org/FEI-Daily/September-2016/is-the-future-of-finance-new-technology-or-new-peo.aspx>
18. Favaro, P. (2001). Beyond bean counting: the CFO's expanding role. *Strategy & Leadership*, 29(5), 4-8. <https://doi.org/10.1108/EUM000000006063>
19. Guitierrez, O. (1989). Experimental techniques for information requirements analysis. *Information and Management*, 16(1), 31-43. [https://doi.org/10.1016/0378-7206\(89\)90025-6](https://doi.org/10.1016/0378-7206(89)90025-6)
20. Hoe, S. L. (2009). Transforming finance for the future. *Journal of Organisational Transformation & Social Change*, 6(1), 65-77. https://doi.org/10.1386/jots.6.1.65_1
21. Hsuhui, C., Ittner, C. D., & Paz, M. T. (2014). The Multiple Roles of the Finance Organization: Determinants, Effectiveness, and the Moderating Influence of Information System Integration. *Journal of Management Accounting Research*, 26(2), 1-32. <https://doi.org/10.2308/jmar-50802>
22. Hsu, C., & Sandford, B. (2007). The Delphi technique: making sense of consensus. *Practical Assessment Research & Evaluation*, 12(10), 1-8. Retrieved from <https://pareonline.net/getvn.asp?v=12&n=10>
23. IBM (2010). *The new value integrator: insights from the Global Chief Financial Officer study*. IBM Global Business Services, New York. Retrieved from <https://www.ibm.com/downloads/cas/VVAEMAKR>
24. KPMG (2008). *Finance of the Future: looking forward to 2020*. KPMG LLP, London.
25. Kraan, D. (2017). Enhancing the finance function in line ministries. *OECD Journal on Budgeting*, 16(2), 75-92. <https://doi.org/10.1787/budget-16-5jg30cchbf5k>
26. Laick, S. (2012). Using Delphi methodology in information system research. *International Journal of Management Cases*, 14(4), 261-268. Retrieved from <http://ijmc.org/IJMC/Home.html>
27. Lawson, R. (2013). *Rising to the challenge, achieving real-time visibility across the organization*, IMA® the association of accountants and financial professionals in

- business. Retrieved from http://www.bridgpointconsulting.com/wp-content/uploads/2013/03/IMA_Real-Time-Visibility-Study_0114133.pdf
28. Linstone, H., & Turloff, M. (1975). *The Delphi method: Techniques and applications*. Addison-Wesley Pub. Co, London.
 29. Loo, R. (2002). The Delphi method: a powerful tool for strategic management. *Policing: An International Journal of Police Strategies & Management*, 25(4), 762-769. <https://doi.org/10.1108/13639510210450677>
 30. Lyon, J., & Kops, D. (2012). *Finance transformation: experts insights on shared services and outsourcing*. Accountants in Business, ACCA. Retrieved from <https://www.ac-caglobal.com/content/dam/acca/global/PDF-technical/finance-transformation/Expert-insights-shared-services-outsourcing.pdf>
 31. Mahlendorf, M. D. (2014). Discussion of: The Multiple Roles of the Finance Organization: Determinants, Effectiveness, and the Moderating Influence of Information System Integration. *Journal of Management Accounting Research*, 26(2), 33-42. <https://doi.org/10.2308/jmar-10407>
 32. McKinsey & Company (2016). *Are today's CFOs ready for tomorrow's demands on finance?* McKinsey & Company, New York. Retrieved from <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/are-todays-cfos-ready-for-tomorrows-demands-on-finance#>
 33. O'Connor, J. Schneider, L., & Willman, T. (2014). *The world-class performance advantage: how leading finance organizations outperform their peers*. Finance Executive Insight, The Hackett Group.
 34. Okoli, C., & Pawlowski, S. D. (2004). The Delphi method as a research tool: an example, design considerations and applications. *Information & Management*, 42(1), 15-29. <https://doi.org/10.1016/j.im.2003.11.002>
 35. Oracle & Accenture (2013). *The CFO as catalyst for change*. Oracle and Accenture, Redwood Shores.
 36. Owens, D. W. (2016). *The Finance Function's Readiness for Change*. CFO Research and WNS, CFO Publishing, Boston. Retrieved from https://www.wns.com/Portals/0/Documents/Whitepapers/PDF-Files/651/38/CFO-WNS_Finance_Function_Readiness_for_Change_report.pdf
 37. Payne, R. (2014). *Finance business partnering: a guide*. ICAEW, London. Retrieved from <https://ion.icaew.com/talkaccountancy/b/weblog/posts/financebusinesspartneringaguide>
 38. PWC (2012). *Putting your business on the front foot: Finance effectiveness benchmark study 2012*. PricewaterhouseCoopers LLP. Retrieved from www.pwc.co.uk/finance
 39. PWC (2014). *Finance matters, Finance Function of the future*. PricewaterhouseCoopers LLP. Retrieved from <https://www.pwc.nl/assets/documents/pwc-finance-matters.pdf>
 40. PWC (2017). *Stepping up: How finance functions are transforming to drive business results*. Finance Effectiveness Benchmark Report 2017, PricewaterhouseCoopers, USA. Retrieved from <https://www.pwc.com.au/consulting/assets/finance-effectiveness-benchmark-2017.pdf>
 41. Robert Half (2013). *The growing importance of finance teams*. Robert Half Netherlands, Amsterdam.
 42. Skulmoski, G. J., Hartman, F. T., & Krahn, J. (2007). The Delphi Method for Graduate Research. *Journal of Information Technology Education*, 6, 1-21. <https://doi.org/10.28945/199>
 43. Stitt-Gohdes, W. L., & Crews, T. B. (2004). The Delphi technique: A research strategy for career and technical education. *Journal of Career and Technical Education*, 20(2), 55-67. <https://doi.org/10.21061/jcte.v20i2.636>
 44. Turoff, M. (1970). The Design of a Policy Delphi. *Technological Forecasting and Social Change*, 2(2), 149-171. [https://doi.org/10.1016/0040-1625\(70\)90161-7](https://doi.org/10.1016/0040-1625(70)90161-7)
 45. Van de Ven, A., & Delbecq, A. L. (1974). The Effectiveness of Nominal, Delphi, and Interacting Group Decision Making Processes. *Academy of Management Journal*, 17(4), 605-621. <https://doi.org/10.5465/255641>
 46. Van Wensveen, M., & Lepeak, S. (2013). *Being the best: Inside the intelligent finance function. Insights from our latest global CFO research*. KPMG International Cooperative. Retrieved from <https://assets.kpmg/content/dam/kpmg/pdf/2013/12/being-the-best-v2.pdf>
 47. Wang, J. C., Wang, Y. C., & Tai, Y. F. (2016). Systematic review of the elements and service standards of delightful service. *International Journal of Contemporary Hospitality Management*, 28(7), 1310-1337. <https://doi.org/10.1108/IJCHM-08-2014-0400>
 48. Watson, T. (2008). Public relations research priorities: a Delphi study. *Journal of Communication Management*, 12(2), 104-123. <https://doi.org/10.1108/13632540810881938>
 49. Wilkinson, M., Boyle, M., Haughey, J., Fisher, S., Haupt, M., Alston, R., Mackey, C., & Wanbon, C. (2012). *Finance Business Partnering, changing the focus*. Deloitte LLP, London. Retrieved from <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/finance-transformation/deloitte-uk-finance-business-partnering.pdf>
 50. Winklbaauer, W. T. (2014). Identifying Technical Competencies: A Delphi Approach. *Asian Journal of Engineering and Technology*, 2(2), 83-97. Retrieved from <https://ajournalonline.com/index.php/AJET/article/view/986>
 51. Wunder, T., & Mueller, M. (2008). In search of finance excellence. *Journal of Corporate Accounting & Finance*, 19(3), 41-49. <https://doi.org/10.1002/jcaf.20384>
 52. Zigliio, E. (1996). The Delphi method and its contribution to decision-making. In M. Adler & E. Zigliio, *Gazing into the oracle: The Delphi Method and its application to social policy and public health* (pp 3-33). London: Jessica Kingsley Publishers. Retrieved from https://books.google.com.ua/books/about/Gazing_Into_the_Oracle.html?id=jo1Z1JZrKIC&redir_esc=y

APPENDIX 1. BARRIERS FROM THE THEORY

Appendix 1 gives the result of the professional literature review, with the barriers ranked according to frequency of occurrence in the literature.

No.	Barriers	Literature sources
1	Inadequate (financial) ICT systems	1, 2, 4, 5, 8, 9, 10, 11, 16, 18, 19
2	Not the right capacities/people/skills	1, 3, 4, 7, 8, 9, 13, 15, 16, 19
3	Not enough resources/lack of investment in the finance function	1, 4, 5, 8, 12, 16, 17, 18
4	Lack of buy-in from the business	1, 4, 5, 7, 9, 12, 16
5	Inefficient and not integrated business processes	1, 3, 6, 11, 17
6	Unclear role of the business partnering function	3, 4, 7, 15, 19
7	No culture of change and improvement	1, 2, 15, 17
8	Lack of IT knowledge	8, 9, 16, 17
9	Organizational complexity	8, 10, 17
10	Lack of time/opportunity to train financials	1, 14
11	Poor management information	1, 16
12	Lack of time for the business partnering role	7, 12
13	Not enough career opportunities for financials	14
14	Difficulty in managing the complex need of multiple stakeholders	15

Legend

1. KPMG (2008)	11. CFO Research and SAP (2014)
2. Lyon and Kops (2012)	12. Payne (2014)
3. PWC (2012)	13. Deloitte (2015)
4. Wilkinson et al. (2012)	14. ACCA (2016)
5. Deloitte (2013)	15. EY (2016)
6. Lawson (2013)	16. McKinsey & Company (2016)
7. Robert Half (2013)	17. Owens (2016)
8. Van Wensveen and Lepeak (2013)	18. CFO Signals (2017)
9. ACCA & IMA (2014)	19. PWC (2017)
10. Accenture (2014)	

APPENDIX 2. BARRIERS FROM THE SURVEY

Appendix 2 gives the result of the survey into the barriers, conducted among a group of finance professionals. The barriers are ranked according to frequency of mentioning by the respondents.

No.	Barriers
1	Not the right capacities/people/skills
2	Inadequate ICT systems
3	Data not (yet) in order
4	Poor management information
5	Inefficient and not integrated business processes
6	Inadequate ERP system
7	Lack of buy-in from the business
8	Lack of time for the business partnering role
9	No culture of change and improvement
10	Reorganization of the finance function not yet completed
11	Insufficient time for the business partner role
12	Insufficient support from staff departments (HR, IT)
13	Difficulty with good planning and forecasting
14	Difficulty in meeting compliance and legislation
15	Insufficient knowledge of the business
16	Lack of time and opportunity to train financials
17	Insufficient/unclear business objectives and priorities
18	Not enough resources/lack of investment in the finance function
19	Organizational complexity
20	Lack of financial knowledge among business managers
21	Unclear role of the business partnering function
22	Lack of IT knowledge
23	Not enough career opportunities for financials
24	Difficulty managing the complex need of multiple stakeholders

APPENDIX 3

This appendix lists per barrier the three solutions the Delphi experts have reached consensus on as being the most effective to deal with the barrier.

<p style="text-align: center;">Barrier 1. Inefficient and not integrated business processes</p> <ol style="list-style-type: none">1. Appoint owners for the improvement of processes, application, data and value chains.2. Establish a multidisciplinary team that maps the processes, data and systems, identifies the bottlenecks, and builds and implements the solutions.3. Together with the business, create an improvement plan and implement it consistently and step by step.
<p style="text-align: center;">Barrier 2. Data not (yet) in order</p> <ol style="list-style-type: none">1. Define the data model, monitor it constantly, and update it regularly.2. Create one single version of the truth by establishing the data definitions, installing a master data management process, creating a data warehouse, and creating the unique source files.3. Analyze the data and use kaizen solutions for improvement.4. Establish a multidisciplinary team that maps the processes, data and systems, identifies the bottlenecks, and builds and implements the solutions.
<p style="text-align: center;">Barrier 3. Insufficient leadership and will to change from the CFO/finance director</p> <ol style="list-style-type: none">1. Show how successful peers improve their finance function.2. Make sure there is a financial with authority in the top of the organization.3. Create urgency for change at the CFO/finance director level, by forecasting changing circumstances, measuring employee (un) satisfaction, identifying possible cost savings, charting organizational improvements, and measuring quality problems.
<p style="text-align: center;">Barrier 4. No culture of change and improvement</p> <ol style="list-style-type: none">1. Be as CFO/finance director the role model in changing and improving.2. Make it clear that mistakes can be made and learning is crucial, but that doing nothing is not an option for the finance function.3. Appoint change/improvement teams with employees who have the "improvement gene" and give these teams enough space to actually make changes and improvements.
<p style="text-align: center;">Barrier 5. Inadequate ICT systems</p> <ol style="list-style-type: none">1. First improve the processes before purchasing a new ICT system.2. Put ICT higher on the strategic agenda and see ICT as a business enabler and not as a cost.3. Make an analysis of whether it the ICT systems themselves or their architecture, which forms the barrier.
<p style="text-align: center;">Barrier 6. Lack of buy-in from the business</p> <ol style="list-style-type: none">1. Give regular explanations to the business about what the finance function is doing, and show how the business benefits from a properly functioning finance function.2. Let the executive board testify openly and demonstrate that a strong finance function is important for the business.3. Involve the business more in processes within the financial domain.
<p style="text-align: center;">Barrier 7. Insufficient knowledge of the business</p> <ol style="list-style-type: none">1. Have employees make regular work visits to the business.2. Let employees join in management teams and do internships in the business.3. As CFO talk more with the finance function employee about the business.
<p style="text-align: center;">Barrier 8. Not the right capacities/people/skills</p> <ol style="list-style-type: none">1. Map the required competencies, and select and recruit new staff on the basis of these.2. Be open and transparent towards employees about the lack in the finance function of the required knowledge and skills.3. Use HR instruments such as "the fleet review."
<p style="text-align: center;">Barrier 9. Insufficient/unclear business objectives and priorities</p> <ol style="list-style-type: none">1. Develop the mission/vision/strategy/objectives together with the business, and derive the most important financial and non-financial KPIs from these.2. Determine together with the business what is really important and give that focus, do not strive for 100% completeness.3. As finance function, persistently ask the business for the reasons that certain things are done.
<p style="text-align: center;">Barrier 10. The executive board and management do not sufficiently manage with the analyses and insights provided by the finance function</p> <ol style="list-style-type: none">1. As CFO give the good example and use the analyses, provided by the finance function, in the management team meetings.2. Start with small improvements and score points with small projects.3. Establish the required exemplary behavior, with regard to the use of analyses/insights, of the executive board and the management towards the rest of the organization.