Dimensions of Leadership and Service Quality: The Human Aspect in Performance Measurement

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Introduction

There is an increasing focus on leadership and management in both the private and public sector. The development of a so-called leadership barometer in Denmark demonstrates this interest. It was the Aarhus School of Business Studies and the Danish Association of Managers and Leaders that jointly created a monitoring instrument like the leadership barometer. There has been great interest in the results of the first comprehensive investigation conducted by means of this instrument (Dansk, 2000). The first edition of the instrument was applied to leaders and managers in both the private and the public sector. Later, the instrument was tailored to analyse managers in the public sector.

At the Royal School of Library and Information Science, in cooperation with the Union of Librarians, we developed a similar measurement instrument. We have used part of this instrument as a starting point for our investigation into leadership problems in the library sector. We have modified the questionnaire quite a lot and directed it towards the information sector; however, it will still be possible to compare at least some of the main results with the private and other sections of the public sector.

The increasing awareness of leadership is a concern not only in the library sector but also in society as a whole. This concern is due to the ever increasing speed and turbulence of change processes, and especially to some pertinent factors like lack of applicants for job positions in some areas, the need for a constant development of competencies, growing pressures from financing bodies, changes in the attitudes in the workforce, and so on.

Leadership is associated with management although the emphasis in leadership is more on development, strategy, vision and adapting the organisation to a changing environment. Management is about planning, organising and controlling the resources of the library, both human and non-human, to achieve the goals and objectives (Riggs, 1997).

Much of the literature on leadership in libraries has focused on leadership roles, leadership styles and personality issues (Edwards et al, 2000). On the other hand, there is remarkably little evidence on how leaders perceive their role and future challenges (Hernon et al, 2001).

In many respects, the library sector does not seem to differ from other public institutions. However, libraries do have some particular features:

- There is a relatively high degree of female leaders.

- There are many rather small units.

- There is a strong sense of tradition and professional criteria of quality.

- There is a strong sense of service towards a community.

- There are many myths and prejudices.

- There are very radical change processes due to information technology.

- There is growing competition and increasing awareness from political bodies with demands of value for money.

We found it would be interesting to analyse the views and perceptions of library leaders.

The data was collected by means of a questionnaire sent to 562 managers in the library sector. We achieved a response rate of 73%. 411 managers completed the very comprehensive questionnaire. These 411 respondents represent 265 different public and academic libraries. For the purposes of this paper, we have selected 265 top managers from 265 libraries to avoid getting multiple answers from employees at the same library.

The questionnaire consisted in total of approximately 230 variables or questions. It was a 10 page long form. The questionnaire was mailed in April of 2001. The follow up was conducted during May of 2001. The processing of data into a statistical package (SPSS) was finished in the beginning of July 2001. The survey questions concerned the following dimensions of leadership:

- Perception of future challenges
- Perception of leadership roles
- Knowledge about existing management tools
- Structure and processes of leadership
- Stakeholders
- Definition of the job
- Satisfaction
- Leadership tools and competences
- Organisation

- Demographic variables like the number of employees, type of library, the degree of digitalisation and use of service quality tools.

It is useful to start with a short characterization of the sample group in regards to the type and size of the libraries and the gender of the directors. The sample consists of 265 libraries. 215 are public libraries and 50 are academic libraries. The size of the libraries is based on the number of employees. The distribution of size is independent of the type of library. There is no gender difference in relation to type of library. There is a slight tendency that male directors lead bigger libraries. By looking at the kind of responsibilities, we classified the leaders into 3 groups.

- Top-leader: leads a library with more than 51 employees or a library with more than 16 employees in addition with broader responsibilities
- Leader: is the director of a library with less than 50 employees
- Middle manager: will often be a deputy. From some of the libraries, the director did not answer the form but the deputy did.

This classification was based on the number of employees and the range of responsibilities. For example, some public library directors have responsibilities for all the cultural activities in a municipality. We did not see any gender differences in relation to the level of management.

The problem

We were primarily interested in relationships and associations between different dimensions of leadership qualities and dimensions of service quality. The service quality level of the library can be difficult to define.

However, in this context, we have defined it as the degree of digitalisation. This term means the extent of coverage of digital services and of digital tools like automatic devices for issuing documents. We focused on the user-oriented digital services. We also scrutinized the range of systematic assessments the libraries conduct on a regularly basis, such as analysing the collection in relation to user needs, user surveys, ethical guidelines, measurement of waiting times and so on. What we wanted to investigate in this paper was the possible relationship between two types of variables. We employed background variables like the size and type of the library, gender, position in the library, the degree of digitalisation or user orientation and the different attitudes and perceptions of the leaders.

At this state in the research process, the paper focuses more on the presentation of findings than theory development or discussion.

The knowledge of library directors

One of the questions we asked dealt with the directors' knowledge of different leadership tools, including management theories and methodologies. We asked the respondents to classify their familiarity with 24 different leadership and management tools. Table 1 lists some of the results.

We have cross-tabulated by the size of the library simply to answer the research question about the association between the knowledge level and the number of employees.

Table 1 indicates that there is a positive relationship between library size and management's level of knowledge. The table below only includes the respondents that stated they possessed a comprehensive knowledge of the subject or issue. There are statistically significant differences among all the topics.

Table 1: The proportion of respondents that claim they have a comprehensive knowledge about the topics and issues.

In %	Proportion	Size of library: number of employee			
	Total	<7	7-15	16-50	>51
Management by objectives	38.2	*20.8*	*31.7*	*51.7*	*78.1*
User surveys	34.4	*19.8*	*34.4*	*40*	*65.6*
Development of competencies	26.7	*12.8*	*25*	*37.7*	*50*
Strategic planning	23.5	*5.5*	*14.8*	*42.4*	*56.3*
Management based on contracts	21.2	*12*	*14.8*	*25*	*53.1*
Value-based management	17.4	*10.8*	*16.9*	*20.7*	*31.3*
Performance related fee-structure	16.5	*10.3*	*15.6*	*11.5*	*46.9*
Benchmarking	14.4	*3.3*	*8.5*	*20*	*46.9*
Knowledge management	10	*5.5*	*8.5*	*11.9*	*22.6*
Management information systems	6.4	*1.1*	*3.3*	*7.1*	*25*
Balanced scorecard	4.1	*1.1*	*3.4*	*3.3*	*15.6*
Image and Branding	3.7	*3.3*	*0.0*	*1.7*	*15.6*

The numbers in italics signify statistically significant differences.

These results are not that easy to interpret. A look at the total distribution indicates an increasing knowledge correlated with how long the issue has been on the market. On the other hand, most libraries do have obligations to manage by objectives, to employ development of competencies in strategic documents and they all have some system of performance-related pay.

The striking feature in Table 1 is the difference in the professed knowledge base according to library size. In general, the high perception of one's knowledge base correlates with the size of the library one manages. One can ask if you become a leader or manager at a large library because of the level of knowledge you have or one could hypothesise that you become a top figure because of your perception of your level of knowledge, which reflects certain personality traits. Especially the leaders and managers of the small libraries differ in respect to professed knowledge level. We have no reason to believe they possess unusual personalities.

When we test in relation to gender, we only find the issue of performance-related pay to be significant. Female managers claim a more comprehensive knowledge than their male colleagues. There is a slight tendency for male directors to know more about strategic planning.

We asked the respondents in which areas they perceived that they needed to upgrade their skills and competencies. The issues we asked about were partially overlapping with the issues in Table 1.

We have run an ANOVA-test. There are statistically significant differences in all issues with the exception of the issue of networked-based organisation.

We also ran an ANOVA-test related to gender and this test shows that female directors perceive their need for upgrading of competencies as greater than male directors for the following issues: change management, personal competencies, quality management, team management and knowledge management. Placed in relation to Table 1 and the tests run there, we do have an indication that the female directors perceive their need for competency development as greater than their male colleagues.

The ranking indicates an aspiration to be at the frontline of management. It is the hot topics that come first in the list. There are some interesting differences according to library size. Team management is less important in the small libraries. This is also the case for networking. The leaders and managers of libraries of different sizes also tend to rank their need for updating of competencies differently.

Table 2: The respondents' perceptions of their need for own development of competencies. Averages based on a scale from 1 to 7. (Seven indicates a great need for upgrading. 1 indicates no need for upgrading of competencies.)

	Total	Size of library: number of employee			
	Mean	<7	7-15	16-50	>51
Value-based management	4.7	4.5	5.1	4.8	3.9
Change management	4.6	4.6	5.0	4.7	3.9
Quality management	4.6	4.6	5.1	4.5	4.6
Knowledge management	4.5	4.3	4.9	4.5	4.0
Development of personal compe-tences	4.2	4.5	4.0	4.4	3.2
Network based organisation	4.2	3.9	4.4	4.4	4.2
Management by teams	3.9	3.7	4.5	4.0	3.4
Management by objectives	3.9	4.0	4.4	3.6	2.8
Economic issues and problems	3.2	3.4	3.9	2.8	2.2

The picture we get from Table 2 is that directors at large libraries perceive a lesser need for personal upgrading. There are exceptions in relation to networking and quality management, but as a whole, the picture is consistent with the data in Table 1. The higher your knowledge level, the lesser the perceived need for updating it. But it is also evident that one's perception of a comprehensive knowledge base influences the perceived need of competency development.

In Table 1 we saw that the leaders of the small institutions perceived a rather low level of knowledge. It is interesting that they do not feel a huge need for updating. A preliminary explanation could be that many of the theories and tools embedded in the issues are of minor importance running a small library.

Service quality levels

We will now present some indicators of the libraries' orientation towards service quality. We emphasise that our interpretation of service quality differs a lot from the standard definitions and it could be called inductive in character. In the context of the leadership project, we define service quality as the extent to which the library applies tools and tasks in relation to the users and in relation to ICT – technologies.

We find it pertinent to investigate which procedures the libraries have employed to increase customer focus or user-orientation. This means that we have been interested in issues like the adoption of user surveys, analysis of visitors, queuing, waiting times, use of quality indicators, benchmarking, complaint-management

systems, service standards and ethical guidelines. All these things are elements in a user-oriented library that emphasises service quality and user orientation.

We also see the application of different ICT – technologies as a measure for classifying libraries according to their level of digitalisation. In this context it is relevant to ask if the library conducts teaching in the use of the Internet and if the library answers users' questions via e-mail. Other topics concern delivery of electronic documents to the e-mail address of the user and lending of e-books and electronic reading devices, among others.

Table 3: The proportion of libraries, which have conducted the following during the last 3 years or do give a special service.

In %	Total	Type of library		Size of library: number of employee			
		public	academic	<7	7-15	16-50	>51
Systematic traffic count	63	65	54	*35*	*71*	*88*	*88*
Service standards	48	51	38	*32*	*43*	*66*	*76*
Analysis of remote use	41	39	53	*27*	*44*	*52*	*63*
Systematic user surveys	34	33	37	*20*	*32*	*41*	*70*
Analysis of process time	23	*18*	*42*	*8*	*12*	*24*	*85*
Ethical guidelines for users	23	*27*	*8*	*18*	*20*	*27*	*41*
Ethical guidelines for staff	20	*23*	*6*	*12*	*17*	*22*	*49*
User/collection evaluation	18	*15*	*29*	*12*	*9*	*17*	*53*
Use of quality indicators	17	*14*	*28*	*6*	*9*	*21*	*55*
Benchmarking	16	*14*	*27*	*3*	*9*	*24*	*58*
Users' waiting times	13	12	17	4	10	19	39
ILL - investigations	12	*10*	*21*	*11*	*3*	*15*	*30*
Systematic complaint system	11	11	11	*4*	*6*	*16*	*30*
Queuing studies	9	9	9	*3*	*3*	*9*	*39*
Teaching internet use	80	79	85	72	82	83	100
Answer users via e-mail	71	69	79	66	80	64	79
Delivery electronic doc to e-mail	32	*29*	*49*	*27*	*33*	*29*	*56*
Individualised services	28	*18*	*71*	28	23	23	39

The numbers in italics indicate a statistically significant difference.

The table indicates again that the size of the library is a pertinent factor. It is more important in general than the type of library.

Table 3 indicates the rank of initiatives the libraries have taken. Some of the issues are user oriented and others are more directed towards data collection for statistical purposes. The traffic count, for example, is a category that public libraries are asked to report to the national library authorities.

One third of the libraries have conducted some kind of user survey but only one out of five have investigated the collection in relation to user needs. One could argue that collection measures in relation to user needs are the true test of how customer-focused a library is. The inconvenience in terms of waiting times, queuing and possibilities of complaints are not issues that many libraries deal with on a systematic basis. The ethical guidelines are to a certain degree a direct response to the publics' access to Internet and serve as a way to try to control behaviour (Pors, 2001). The systematic use of quality indicators is not widespread, but together with the other indicators of user-orientation, we see that many of the libraries have invested a considerable amount of money and manpower in different quality-assurance systems.

The overall picture is that the large libraries have implemented much more of these systems than the smaller ones. It is of course not surprising simply because the amount of work involved in many of these exercises. There are also remarkable differences between the public libraries and academic libraries. Some of these differences are possibly due to serving different user groups, but some of them can be explained by the different legal requirements.

Benchmarking is much more important in the academic libraries than in public libraries. This is partly due to the way they are financed. The mode of financing can also explain the focus on collections in academic libraries. Part of their financing structure depends on the number of issues. In such instances, the collection becomes rather important.

Nearly all of the libraries engaged in teaching activities concerning Internet use and most of the libraries used technology to deliver fast and prompt services to the users by means of e-mail, etc. It is difficult to categorize libraries in terms of degree of digitalisation. We have used some rather simple indicators. Electronic document delivery becomes more and more widespread. Over 70% of the academic libraries do give some kind of individualised service. It can be different search profiles, circulation of a selected set of journal, copies for content pages and the like.

A look at the level of digitalisation reveals interesting features. Only 10% of the libraries are involved

actively in distance learning activities. It is the large and the smallest libraries that are ahead of the rest and the academic libraries are much more active in this area than the public libraries.

Tools like digital equipment for self-service are not widespread, but it is an option in nearly 20% of the libraries. The size plays a significant role. The public libraries are much more active in this area. Their average circulation is, of course, bigger which could explain that savings then tend to be more substantial.

Two thirds of all the libraries cooperated in consortia for buying licenses. The difference be-tween public and academic libraries was not substantial.

One of the questions that was of interesting was the degree to which the library performed digital tasks for the community or mother institution of which they were a part. This was really a question about the library's impact. 18% of the libraries perform such tasks and there is no difference according to size. However, 50% of the academic libraries undertake digital tasks for their institutions. Only 12% of the public libraries do the same.

It has proved rather useful to classify libraries according to their degree of digitalisation.

The perception of future leadership challenges

In the previous paragraphs we have investigated some very remarkable differences in the perceived knowledge – base of the library managers. We have also seen that the number of service tools or management tools employed differs very much, especially according to the size of the library.

A very important aspect of leadership is thinking about the future. Do library mangers differ in their perception of future challenges according to some of the background variables used in this analysis? In the questionnaire, we asked about 24 challenges. We only use 10 here. Overall, there is a high degree of correspondence in the perception of the future challenges. But there are some interesting differences.

Table 4: The perception of future leadership challenges. Averages based on a scale from 1 to 7. 7 indicates that the issue will have a major importance in the future. 1 indicates that the issue will have a very minor or no importance in the future.

	Total	Type of library		Size of library:		Gender	
	Mean	public	academic	<51	>51	Female	Male
Development of competence	6,2	6,2	6,0	6,2	6,0	*6,3*	*6,0*
Development of leadership qualities	5,8	*6,0*	*5,3*	5,5	5,6	*6,0*	*5,6*
Co-operation with other partners	5,8	*5,9*	*5,3*	5,9	5,3	5,9	5,7
Recruitment of staff	5,5	*5,6*	*5,1*	5,5	5,6	5,6	5,3
Development of quality	5,4	5,5	5,1	5,5	5,3	5,5	5,3
Management by objectives	5,4	5,6	5,3	5,5	5,3	*5,8*	*5,3*
Value-based management	5,3	*5,4*	*5,6*	5,3	5,3	5,5	4,9
User orientation	5,2	*5,0*	*5,9*	5,1	5,5	5,2	5,2
The Internet	5,0	*4,9*	*5,7*	4,9	5,5	4,8	5,3
Generation of income	3,8	3,8	3,4	3,7	3,8	*3,9*	*3,5*

The numbers in italics indicate a statistically significant difference.

If we look at the perception of future challenges in relation to the type of library we find statistical differences in all cases except the issue concerning income generation and quality development. There is no clear pattern. On some of the issues, managers in the public library sector tend to evaluate with higher averages. On some others, managers in the academic library sector tend to evaluate more highly. The academic sector looks at the Internet as a major challenge in the future. There are some interesting factors here. It is not surprising that development of competencies is seen as a major challenge. This is simply due to societal change processes and, of course, the ICT revolution. It is a bit more surprising that the customers of the library, in the issue "user-orientation", do not score higher. At the same time, one wonders a bit because income-generation is not really seen as a challenge.

The new Library act that passed the Danish parliament in 2000 opened up a huge increase in self-generated income in the public library system. The scope of different services increased but naturally, the budgets did not follow. The intention behind the act was to enable libraries to generate income to cover their extra expenses. Many of the challenges are internal and staff-oriented. Few of the challenges are externally directed.

It is remarkable that the managers of different sized libraries do have nearly the same perception of future challenges. Directors in small and large libraries differ only in their perception of the need for external cooperation. In this analysis, we have recoded the 3 smaller groups of libraries into one group. The previous analyses showed that there was a certain similarity among at least some factors.

A hypothesis concerning the degree of digitalisation and the perception of future challenges is appropriate,

but a T-test did not reveal any statistically significant difference between the perception of the future and the degree of digitalisation.

On the other hand we see that the gender of the director is an important factor in relation to the perception of the importance of future challenges. The perception differs in all instances except the 3 concerning co-operation, recruitment of staff, and quality development.

It is interesting that the gender factor seems to be of major significance when we look at the directors' perception of challenges. By and large, it appears that the leaders' perceptions do not correlate with at least some of the indicators of digitalisation.

The future challenges are not the same as the competencies the leaders judge will be important in their job over the next 3 years.

Table 5: The proportion of leaders that claim that the following competencies will be of major significance in their job in the next 3 years.

In %	Total	Type of library		Size of library:		Gender	
	Mean	public	academic	<51	>51	Female	Male
Openness and willingness to change	93	94	92	93	94	96	90
The ability to motivate and inspire	91	91	90	90	94	*95*	*84*
Ability to communicate	89	90	82	88	91	*94*	*82*
Seeing the broad picture	80	*84*	*65*	79	88	83	76
To possess self confidence	69	73	55	69	73	*76*	*59*
Decisiveness and getting things done	68	69	63	69	61	*74*	*60*
Focused on goals and objectives	58	58	54	57	61	60	54
Empathy	57	*61*	*43*	58	52	62	50
User-orientation	56	53	67	56	58	57	54
Theoretical competencies	43	42	45	*46*	*21*	*50*	*32*
Understanding economic issues	43	46	31	44	39	48	36
Willingness to take risks	43	*46*	*29*	43	46	45	41
Ability to manage conflicts	38	38	35	38	36	42	32
IT knowledge	37	34	49	38	27	37	37
Language skills	16	*13*	*33*	17	25	45	41
Intercultural understanding	15	15	14	*17*	*4*	17	16
International experience	11	7	*26*	*10*	*17*	15	8

The numbers in italics indicate a statistically significant difference.

Table 5 gives information about the leaders and managers perception of the requirements in their job in the near future. A wide range of the issues is human-oriented and it certainly appears that most of the managers find these softer topics significant. All the international issues come at the bottom of the ranking and the traditional discipline-oriented issues are rather low in priority.

There are only small differences in the estimation by leaders in the different types of libraries. Leaders in the public library tend to prioritise the need for the bigger picture and it is understandable because many of these libraries interact with the political and administrative level of the community on a daily basis. There are differences in the estimation of risk willingness and the need for language skills.

When we look at directors from libraries of different sizes, the most striking feature is the similarity in the perception of requirements for getting the job done in the future. There are differences if we look at the issue about professional qualifications. Simply, it signifies that leaders and managers in smaller libraries take an active part of the traditional work of a librarian. This factor can also explain the other issue about

intercultural understanding. One needs it when participating in user interactions.

The most interesting feature of Table 5 is the significant differences we see according to gender. Female and male leaders tend to judge the requirements of the job differently. It is not just the human-related issues that are ranked differently. Also, harder topics like focus on goals and getting things done are ranked differently according to gender. It is also striking that female leader perceive that the job require theoretical competencies much more than their male colleagues.

Conclusion

This presentation is the first analysis of a large and comprehensive body of material about li-brary leadership. This paper has just ploughed the surface, but some interesting results have come up. Here, it must be emphasised that the analysis is preliminary and it has only involved a minority of the many variables.

It is evident that female and male leaders perceive future challenges and job requirements differently. It is interesting that leaders at libraries of very different sizes have very similar rankings of future challenges.

Differences in ranking can be explained by gender and the type of library.

The self-perceived knowledge levels of library leaders differ significantly according to the size of institution they manage. It is impossible on the basis of the included variables to draw conclusions about causal relationships in this regard. The results are consistent with the respondents' perception of the need for skills updating.

Other studies (Alimo-Metcalfe, 1995) have also emphasised gender as an important factor in leadership attributes (Shirley, 1999).

There do appear to be associations between the leaders' characteristics in regard to their knowledge level and the way in which the library conduct its services. The employment of management tools are much more widespread in the larger libraries. It would be premature to infer causal relationships. The simple size of libraries and the flexibility, manpower and resources could easily explain that phenomenon.

It is evident that further analysis will have to look much more carefully into some of these relationships, especially focusing on gender differences.

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