Gender Diversity Culture Check:

Study of the influencing factors of the organizational culture on the number and acceptance of women in leadership positions in the aviation industry in Germany

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Abstract—Under-representation of women in leadership positions" is still a general phenomenon in Germany despite the high number of implemented measures. The under-representation of female executives in the aviation sector is even worse. In this context our research hypothesis is that the representation and acceptance of women in management positions is determined by corporate culture.

Keywords—Aviation industry, women in leadership, Corporate Culture

I. STATE OF ART

THE under-representation of women in leadership positions is still a general phenomenon in Germany. The German Bureau for Statistics reports the highest rate of female leaders in the private sector to that date. 27.7 % of top-management positions are held by women. For small businesses, women make 35 % of leaders, but this number reduces to less than 17 % in medium-sized and large corporations on the executive level. Either way, the numbers still fail to match the 45.6 % rate of female persons employed [1]. Despite the high number of implemented measures, the latest data show that in the year 2012, there is still no significant increase of women in management positions in Germany [2]–[6].

Various studies have already addressed this problem and have attempted to identify the reasons for the lack of female ubiquity in high-level corporate leadership. Reference [7], for instance, conducted an empirical investigation by surveying a large number of female and male executives.

The female leaders were presented with a list of 13 conditions that may contribute to a person's career advancement. The women were asked to rate on a 4-point scale the level of importance of these conditions on their way up. The majority of participants reported that "Consistently exceed[ing] performance expectations", "Develop[ing] style that men are comfortable with" and "Seek[ing] difficult or high visibility assignments" as critical to their success. By presenting both female executives and male CEO's alike with 10 possible barriers to career advancement, a substantial discrepancy in perception surfaced. For instance, 82 % of male CEO's perceived a "lack of significant general management experience" as a key obstacle for women to advance on the career path but only 47% of female executives agreed.

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Contrary, although roughly half of female executives considered women's exclusion from informal networks to be a prominent cause for the small number of female executives, only 15% of male CEO's felt this was true.

The researchers argue that the severe disparity of male and female perception regarding the issue is a significant determinant of why the glass ceiling continues to persevere because CEO's are a crucial source for change of corporate culture. If they fail to recognize the barriers that exist, necessary improvement within the corporation cannot be implemented. The perception on the progress made on providing equal opportunities regardless of gender also diverges significantly depending on gender. The importance of corporate culture is also consistent with the results from the first survey where women felt that adapting to male style ranked second highest in the list of things a woman needs in order to succeed.

Reference [8], however, provides contrary empirical evidence after similarly surveying 94 female and 70 male leaders on their perception. The researcher explains this with the fact that the participating women had obviously already made it to higher level leadership positions and were therefore unable to confirm such barriers to be exist.

Reference [9] investigated the cultural difference between the United States and Germany on the national level in the discourse about women's under-representation in top-management positions. They argue that despite many similarities in the cultural, social and economic environment, the subtle differences in the two societies render a generalization of the two inappropriate. The cultural differences are mainly attributed to the unique historical backgrounds. For instance, the researches refer to the fact that the United States has developed a deeply rooted culture of activism and a commitment to enhance the status of minorities.

The study concludes that the disadvantaged status of women in terms of career advancement has been recognized much earlier in the US than in Germany: American organizations fight more vigorously for women's rights and against discrimination than in Germany. Finally, he resulting pressure on the government has led to a very refined legislations in the US in comparison to Germany, enabling women to enter jobs on high executive levels. Despite all this, women in the US have still not been able to break the glass ceiling. In the end, the career advancement barriers to move up to the top positions are similar in both countries.

All of these studies point towards one major influencing factor: corporate culture. Reference [10] was probably the first to theorize organizational culture, a form of subculture that he defines as a culture within a broader (macro) culture that exhibits traits specific to the group environment from which the subculture arises. Subsequently he addresses how cultural change occurs either in a natural evolutionary process or as a result of a consciously steered process into a desired direction.

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The change mechanisms and their efficacy depend on the stage at which change is desired, whether the corporation is at the "founding and early growth", its "midlife" or "maturity and decline" stage. "Cultural forces are powerful because they operate outside of our awareness" [10]. The tacit underlying cultural assumptions are the reason why he proposes for established leaders to step back and observe the cultural setting of the corporation from a more objective point of view. However, the intention to change corporate culture is necessary but not sufficient for changes to transpire in the desired form, because people in an established corporate culture which they identify with, will be resistant to changing whatever they are used to. Schein, thus, suggests to implement what he calls a *hybrid*, a person "representing what is needed for the organization to survive, yet seen as acceptable 'because he is one of us' and therefore also a conserver of the valued parts of the old culture" [10:282] who will, due to his or her high acceptance level, be able to bring about subtle shifts in behavior, communication and other cultural traits. In order to address a desired shift, the leader can systematically promote people from an intra-organizational subculture into influential key positions where they will contribute to changes, if nothing else, by their presence as such.

It was not until 2010 and 2011 that two projects were initiated that explicitly addressed women's career advancement opportunities in light of corporate culture. Reference [11] studies why female executives often experience a halt in their career advancements and connects this to corporate culture. They conducted individual interviews about their careers with 25-30 high-potential young leaders of both genders of each of the participating companies. Preliminary results show that companies have recognized the potential of female leaders and the necessity to incorporate them. The study suggests measures that can be taken by participating companies.

The second project also studies the effect of corporate culture on the career advancements of men and women. The general conditions of the participating companies, for instance regarding human resources, were investigated. Key indicators for equal treatment as a part of the respective corporate culture were identified. They investigated the strategic and structural level of HR management and the values, norms and attitudes identified as part of the corporate culture [12].

One reason for the low proportion of women in executive positions might be the phenomenon of the self-cloning of human resource managers. In order to minimize doubts and risks, they tend to make personnel decisions based on self-cloning. In addition to personality, this process also addresses gender-specific personnel decisions [13]. If self-cloning is general practice in a company's organizational culture, this can constitute an insurmountable barrier for women (glass ceiling). A company's culture and value system – particularly that of its executives – therefore appear to possess a significant influence on women's career advancement prospects. [6], [14], [15].

The subculture relevant to this debate is, of course, the female gender. Although the approach is utterly comprehensible, the path towards change is rather slow.

Except for disasters and scandals, the only way to introduce radical change is through "The Stages of Learning", as proposed by Schein. After creating the motivation to change (Stage 1), the responsible leader must orchestrate an environment, in which new concepts, new meanings of old concepts and new standards for judgment can be learned (Stage 2). A conscious shift in corporate culture is finally achieved as the newly learned concepts, meanings and standards are internalized, incorporated into the company's self-understanding and identity.

According to Schein's theory, the debate about women leaders seems to be the kind of a vicious cycle when researchers argue that women do not make it to the top because the corporate culture in many companies is highly masculine, even though the best way to establish a gender balance is for women to function as leaders and role models. This is especially true under the assumption that only women leaders are committed enough to address the gender imbalance and to instruct the learning process as postulated by reference [10].

The under-representation of women in leadership positions in the aviation industry is particularly surprising as the industry has a high share of female employees and gives itself a touch of being international and open. The study "Why don't women run airlines?" among nearly 200 airlines worldwide show that there are only six women in Europe in CEO positions [16]. It is noteworthy that it is mostly new low cost carriers (LCC) where women head the company as opposed to larger and more traditional airlines which produce significantly less female executives, if any at all. Despite the progressive number of female LCC executives, the landscape on lower management levels resembles that of large airlines.

Whether the number of female executives even matters was a question addressed by the Catalyst. It reports that Fortune 500 companies with the highest female rate perform 35 % better than those with the lowest. However, the distinction of cause and effect is not clear-cut and neither is the robustness of the conclusion.

Moreover, the interviews conducted by reference [16] confirm the notion of a male-dominated logistics and transportation industry. In this study it was found that horizontal mobility across business units within an airline corporation, cross-country mobility and workload compatibility with family life were much easier to fulfill for the male than for the female employees.

Reference [16] also suggests approaches like the formalization of mentoring to get women to access traditionally male sectors. The interviews also elicited that the very deeply rooted and solidly established male networks are largely inaccessible for women, which makes a considerable impact because informal contacts are vital in a person's career advancement and the informal setting helps neutralizing gender.

Reference [17] surveyed men and women on their commitment to their company and to the logistics industry as such.

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He was able to find that the level of commitment was high for both groups and that that they were equally educated. However, there was a noticeable difference between men and women above the age of 40. Women older than 40 felt there were fewer opportunities for career advancement for women and minorities. Men perceived the opportunities for all to be equal.

Reference [18] found in an extensive survey of 234 female logistics managers that women are largely satisfied in their positions in the logistics industry.

Although there exist studies on women in logistics, the focus on women leaders in the field is limited, especially regarding data for Germany. Women in aviation constitute a topic that has barely been addressed in the academic literature, leaving a vast range of possibilities for initial and further investigation.

As a result, we intended to analyze the under-representation of women in management positions in the aviation industry in Germany. For this purpose, a logistics company in the aviation sector has served as our project partner. At present the analyzed company has only 9 % of the higher management positions filled with women. In this context, our research hypothesis is that the representation and acceptance of women in management positions is determined by corporate culture. The research project aims (a) to identify the possible cultural factors hindering women to advance to management positions, (b) to create awareness of these barriers among the executives and (c) to make suggestions for improvement measures relevant for a sustainable increase in numbers and in acceptance of women in management positions in the aviation industry in Germany.

II. METHODOLOGY

Based on the academic research and a first empirical study of our pilot partner, we defined our research hypothesis on elements in a corporate culture promoting or impeding the career development and the number and acceptance of women in management positions.

By means of both qualitative and quantitative instruments we intend to gain insights on why the number of women in executive positions is so low. These results were supposed to be used to define measures on how the number of women in executive positions can be sustainably increased as well as their acceptance in the company.

The aim of triangulation is to obtain higher validity and insight [19].

By means of semi-structured interviews the values, attitudes as well as the decision-making processes of the key decision makers (Board members, HR executives) were analyzed.

The quantitative part of our research consisted of a standardized online survey to all employees ranked as high potentials or high performing employees. The survey was conducted via an online tool and distributed via Email individually to all selected employees. The response rate was 76%. This method has various advantages. The tendency for responses in accordance with social norms is low.

Furthermore there is no interviewer effect, and both quality and quantity of the data are very high due to extensive coverage of the online format. Moreover, this approach allows for scalability regarding other companies.

For the qualitative part of the study, semi-structured expert interviews were used.

A. Qualitative Expert Interviews

In preparation for the design of the online questionnaire as well as the preliminary investigation of different levels of the company's corporate culture, we conducted guided expert interviews with the members of its board of directors and the HR managers.

B. Evaluation of documents

We plan to evaluate accessible documents which contain, for instance, the recruiting process and the company's leadership compass/philosophy as a source for espoused values. Thus, further formal and informal structures of corporate culture can be elicited and compared to the results from the standardized survey.

C. Development of an online questionnaire

The target group for the online questionnaire were all managers as well as high potentials and high performing employees of the company at hand. We addressed both female and male individuals with our survey in order to obtain a direct comparison between genders. Moreover, a corporation's culture is, according to Schein, "a pattern of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid and, therefore to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" [10]. Hence, corporate culture is transported by all members of the organization. A survey only addressed to women could bear the risk of losing essential information along the way. Roughly 574 employees were surveyed.

To analyze the corporate culture, we follow Edgar Schein's 3-level-model. Schein identifies three distinct levels in a corporate culture: artifacts and behaviors, espoused values and fundamental assumptions.

Artifacts are externally visible elements of corporate culture, such as the organizational structure, recurring rituals, behavioral patterns, but also the architecture of typical office buildings and uniform professional attire.

These aspects of culture are apparent for outsiders, however it is not always decipherable what the true purpose and background of such presentations are. On the mid-level the corporate culture model contains the value system that the company has acquired over the years. Values are usually only present on a higher level of consciousness of the organization's members. Finally, on the lower stage of the model, Schein locates the fundamental assumptions. Fundamental assumptions refer to the larger environmental context that the company finds itself in or to the key features of human relationships.

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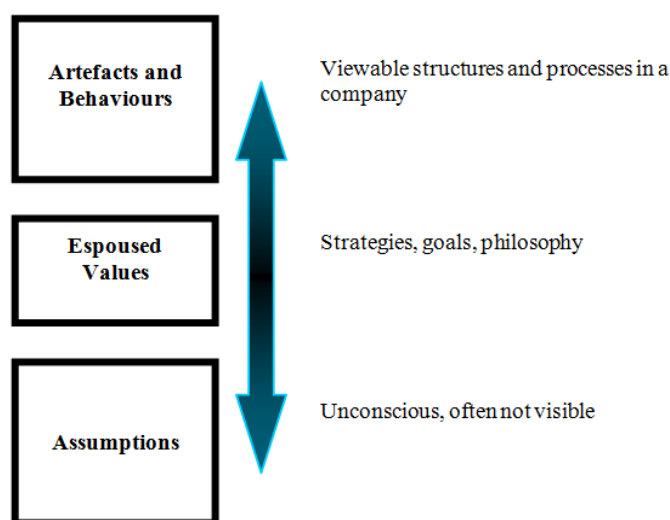Vol:6, No:10, 2012

Fig. 1: 3-level-model by Edgar Schein

The assumptions are not subject to the members' awareness, although they are, at the same time, obvious and go largely unquestioned. The assumptions compose the true core of a corporation's culture and are explanatory for the espoused values and the shape of the artifacts of culture that are built upon them.

Accordingly, we identify for each level specific clusters. This was also vital in order to test our hypotheses. For instance, all levels have a cluster with the theme *Presence versus performance-based compensation*. The special theses in the field of artifacts are *Presence culture have many meetings in the evening*. In this case, especially women who have family responsibilities have problems to attend meetings late in the evening. As a result women are less visible for decision-makers and human resource managers. A feeling that a woman is less available for projects could also arise in the perception of colleagues and supervisors.

For identifying the espoused values, we plan to analyze documents of the company, such as the company's pamphlets about their mission statement. Furthermore, we question the interviewees on their subjective perception on the importance of selected features and attributes for investigating the second stage.

The answers were collected using a Likert scale; a procedure to measure personal perception. One thesis to a question from the cluster *Presence versus performance-based compensation*, of the level of espoused values would be: *Employees can only work productively while present in the office*. The belief that employees who are physically present for a longer time also perform better is still prevalent in Germany. A consequence of this is that despite the fact that managers are granted the possibility of part-time positions, due to the low acceptance of such positions, they are seldom taken seriously.

The third level in Schein's model concerns the fundamental assumptions, which go largely unquestioned by the organization's members.

For the investigations of these, reference [10] recommends extensive psychoanalytic interviews with the organization's members. The broad application of this approach in the organizational context reaches limits quite easily. Therefore, the espoused values are questioned using an association game. For instance, the subjects are given the beginning of a sentence and are asked to complete it based on their understanding of it. An example of such a sentence completion task is *"A particularly good employee is ..."* where four out of eight possible responses must be chosen that most closely match the experience of the interviewee.

A further thesis in the cluster *Presence versus performance-based compensation* would be *The performance of an employee and manager is appreciated higher the longer they are present in the office.*

The evaluation of the online survey and the expert interviews will follow at the end of September.

III. EXPECTED RESULTS

The study provides results regarding the question how corporate culture – in the way that it is cultivated by an organization's executives – influences the number and acceptance of women in leadership positions. We expect to elicit the influencing factors in terms of career advancement conditions for women. The significance of attitude and acceptance towards women in leadership is likely to emerge as a key factor in the debate.

Also, we aspire to extract the reasons for career advances and the lack thereof, as well as the personal perception regarding men's and women's career paths. We furthermore expect clear answers to the question whether women are able to exploit their own career potential or whether they are impeded by external conditions.

For this, factors are identified that are conducive or repressive for a corporate career, such as the career stage at which children are born, or the career stage where the most promotions have occurred or which cultural factors specific to the company have influenced the career of women to a particularly high degree. We also expect to detect which conditions women themselves perceive as especially conducive or repressive regarding their own careers.

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