# Corporate Culture Influence on the HEI's Information Image on the Internet

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Abstract. Corporate culture is a must-have attribute of successful enterprises and institutions as well as HEIs. In today's conditions, it is not enough just to publish information about the HEI on websites and social network services. It is expedient to carry out purposeful activities concerning formation of the HEI's information image on the Internet. This study summarizes the practical experience gained during development of principles of corporate culture and formation of the informational image at Lviv Polytechnic National University. The HEI's information image on the Internet is considered as a set of content managed and/or unmanaged by the HEI's employees. The HEI's corporate culture directly affects the HEI's informational image on the Internet which formation begins with the HEI's websites. So, all the HEI's employees must adhere to the corporate culture on the Internet including corporate ethical standards, core values, publishing rules as well as HEI's Information Security Policy. Further HEI's informational image formation is carried out on HEI's public resources at other websites and other public resources and websites. It not fully depends on the HEI's direct activities because of partial (not full) and not allowed content management.

**Keywords:** Corporate culture, HEI, Information image, Internet, Website, Social network service.

#### 1 Introduction

Corporate culture introduction is a sign of many successful enterprises and institutions. This allows normalizing both rules of internal cooperation between staff and rules of interaction between employees and external environment. Higher education institution (HEI) as any organization needs to develop and implement its own corporate culture.

Traditionally, HEI is an authoritative center for ideas exchange, information and knowledge accumulation. Therefore, HEI directly affects formation of various social groups, since HEI serves as a focal point of social life and communication. Therefore, the HEI's corporate culture has an influence not only on effectiveness of its activities, but also it influences on public opinions and relations.

Modern development of information and communication technologies (first of all the Internet) allows almost instantaneous delivery of information to the necessary group of people. However, not all potential consumers of the information are ready to perceive it as it is necessary for the author of the information. This means that it is not enough to just publish the information about HEI's life, but it is necessary to develop a certain strategy for the information publication and to carry out targeted activities for its proper perception. In other words, HEI should directly influence the publication of information about its functioning, that is, to form its information image.

The HEI's information image on the Internet is considered as a set of information with open access rights, published on websites and specialized web services that provide opportunities for creating and modifying existing information or wide public discussing directly at the posting address [20]. From this definition, it follows that the process of forming the information image is affected not only by the information quality itself, but also by the behavior of an author or a publisher of the information, leaving the relevant information trace on websites and specialized web services. Therefore, by publishing the information about the HEI's activities, regardless of a type of the information publishing platform (corporate or private), the person (the author or the publisher) must adhere to the corporate culture, since it directly or implicitly affects the HEI's information image.

This study summarizes the practical experience gained during development of principles of corporate culture and formation of the informational image at Lviv Polytechnic National University.

#### 2 State-of-the-art

The term "corporate culture" has been known since the 19th century. In the second half of the 20th century, a corporate culture became the subject of scientific research. And in 1982 it was identified as the most important factor affecting an organization behavior and social development [7]. This understanding of the corporate culture is clearly followed in all subsequent publications.

A corporate culture promotes the manifestation of various talents of individuals and allows elimination of negative phenomena that arise when employees perform their direct functions. The corporate culture with information technologies supports formation of a competitive person with leadership qualities [15]. Emphasis on ethical leadership reduces the level of Internet access at legitimate work for personal use called cyberloafing. It also leads to development of a flexible, innovative organizational structure with an adhocracy culture [38].

A corporate culture is an important mean for ensuring enterprise sustainability. It impacts various organizational and production processes increasing their performance [30]. Mostly, companies with the corporate culture of sustainability are solidly committed to environmental and social activities [8]. Also, it allows to significantly reduce possible negative effects of personal changes in the company's management, that particularly may be reflected in productivity of the enterprise [9]. A common understanding of the corporate culture and the organization mission increases effectiveness

of corporate conflict management improves perception of organizational justice [21] and reduces level of employees' Internet abuses [34]. Also, in a relatively stable environment, the strong corporate culture provides better reliability of company's performance [30] based of employees' creativity [10].

A corporate culture is important not only for its institution. If the institution has high authority, then its corporate culture is one of possibilities to change the culture of a society's part associated with the institution [11]. Such understanding of the corporate culture importance is fundamental when HEI importance in the modern Internet-oriented society is considered. But public oriented institutions like HEIs are less able to sustain their integrity as a dimension of the corporate culture [12]. Therefore, the only HEIs that have been able to put their corporate culture above particularities of individual educational units can have a significant impact on the society culture.

Customer-centric content of company's website is one of indicators of a well-considered cooperative culture on the Internet [3]. Actually, a combination of presence of features of corporate identity and the company's strategies positively affects the company perception by customers [5].

Of course, developed approaches to corporate culture raising are effective for enterprises and commercial companies. However, the direct copying of manufacturing models of the corporate culture for HEIs did not yield expected performance results. This is due to the fact that it is not possible to fully commercialize HEIs because in addition to commercial educational or scientific activities, they are set up to fulfill the social role of producing ideas. That is HEIs are idea factories [6]. Having such social role HEI needs to pay great attention to its public (or corporate) image [13, 26], and with on the Internet to its information image [17] because it has a large impact on students' satisfaction with HEI's information resources [1], students' academic achievements [27] and on an ability to involve specialists to employment or collaboration with a social network service (SNS) [28].

The HEI's public image on the Internet relates to users' impression based on information published on HEI's websites and SNS communities. First of all, such impression is based on visual perception of such website elements as design quality, perspicuity, content quality, inclusion of social elements, Q&A, Wiki, rich text publications, mobile version [31] etc. Each of the website elements affects two main components of the image [26]: cognitive image (concerns usefulness of published information) and affective image (concerns emotions gained after perception of the information like pleasure, stimulating, relax, etc.).

The HEI's information image on the Internet is determined by information about the HEI published on the websites and specialized web services. It is a result of interaction between HEI and its stakeholders. This interaction is based on the cultural and social behavior of individuals. The cultural behavior of individuals depends on their belonging to HEI. If a person is an employee of HEI, then its behavior culture on the Internet should combine its own culture and the HEI's corporate culture. Otherwise, the culture of the person's behavior does not depend on the HEI's corporate culture.

The HEI's corporate culture can only set certain restrictions on cultural behavior of its employees on the Internet and cannot completely limit their information activities.

These restrictions refer to HEI's corporate social responsibility, which has the following characteristics [14]: diversity, sustainable environment, community involvement. The social behavior of individuals on the Internet depends on opportunities that SNS gives individuals, communities and organizations to create, collaborate and exchange user-generated content [22]. It is based on personal ability to communicate publicly with other users of websites and SNSs that includes elements of promotion of professional and entrepreneurial activities.

There are two types of entrepreneur-related communication strategies on the Internet [35]: "making yourself a person" (directs to personal qualities that induces the information image to be formed by social responsibility associations) and "managing your own affairs" (emphasizes enterprise abilities that stimulates the information image to be formed by enterprise's capacities associations). In general, the strategies are universal, but from the HEI's point of view they must be adapted to characteristics of information consumers of different societies [33].

The social behavior is important for social marketing with SNS. HEI's social marketing is to manage the SNS community platform and to manage relationships with stakeholders. Social marketing strategies take into account analysis of the community activities statistics [2], in particular activity countdown in words and images, quantity of published articles and reports, quantity of shared pictures and news, Q&A interaction [32] etc. Also, effective social marketing is based on linguistic peculiarities of information published by stakeholders [37].

The HEI's information image on the Internet may be changed significantly over time and requires permanent monitoring. For the information image forming, the active position of the HEI is important that consists in conducting targeted campaigns on publication of certain types of information on HEI's websites and SNS communities. The lack of such persistent information activities may lead to appearance of certain motivations of stakeholders [36], that will encourage them to publish HEI related content with elements of discrimination and aggression [19] or to perform focused aggressive actions [18].

One of tasks of the HEI's information image monitoring is its adequate measuring. The problem is too complex and existing approaches to HEI web ranking like Webometrics are permanently criticized [16].

#### 3 Peculiarities of HEI Representation on the Internet

HEI's activities can be represented on various websites and SNSs. At the same time, these information platforms are not always administered and maintained by the HEI's staff. That is, formation of the HEI's information image is carried out in those conditions where publication and discussion of information about the HEI is not always managed by its employees.

**Помилка!** Джерело посилання не знайдено. shows two components of the HEI's information image depending on the content ability to be managed.

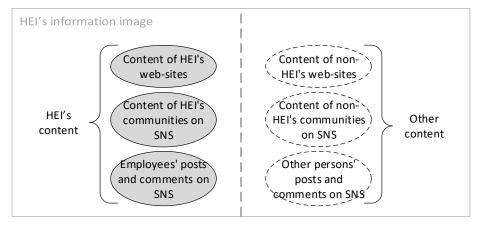


Fig. 1. Components of the HEI's information image.

The HEI's content is directly managed by HEI's employees and comprises the following:

- content of HEI's websites including official HEI's website, website of HEI's departments, projects and special activities;
- content of HEI's communities on SNS including official HEI's SNS pages, SNS pages of HEI's departments and projects;
- HEI employee's posts and comments on SNS including user's profile information.

The following other content cannot be directly managed by HEI's employees: content of non-HEI's websites, content of non-HEI's communities on SNS, other persons' posts and comments.

The appearance of unmanaged content about HEI may require some reaction. The main reactions on the unmanaged content are:

- commenting of posts of other SNS users;
- submission requests on publishing new, changing existing or removing unnecessary information through tools of the corresponding websites or services;
- appealing to third-party websites' or services' administrators regarding elimination or correction of false information about the HEI or its employees;
- concluding agreements with HEI's partners for information exchange on websites.

The HEI should develop different scenarios of reactions on the unmanaged content, depending on authority of the website and the content authors. The strategies could cover a full set of reactions from intensive activities to complete neglect.

# 4 HEIs' Corporate Culture on the Internet

The HEI's corporate culture on the Internet is a part of the overall corporate culture and is intended to ensure efficiency and sustainability of information activities during the HEI representation and HEI's information image formation on the Internet. All HEI's employees must demonstrate an appropriate level of corporate culture, as otherwise negative consequences for the information image and reputation of the HEI may occur.

The HEI's employees must adhere to the following corporate ethical standards:

- observance of all rules of business communication both during preparation of own materials for publishing, and during commenting on posts of other authors;
- care about the HEI and its reputation;
- joint work on achievement of main goals of the HEI;
- quality control of information activities on the Internet [25];
- responsibility for information activities on the Internet.

Surely, the HEI's corporate culture should be based on such core values as competence and professionalism, honesty and impartiality, respect for the human person, patriotism, interchangeability, harmony and effective interaction, morality, etc.

But special attention should be paid to information security as the value of corporate culture because it is often difficult to draw a line between work at HEI and private life. Therefore, employees must adhere to HEI's Information Security Policy, in particular, they are prohibited to publish on HEI's websites and SNS pages the following:

- protected information including personal data according to EU General Data Protection Regulation [4];
- private information not related to the HEI's activities;
- discriminatory materials;
- information outside the context (which is not relevant to the given topic);
- information with elements of aggression.

Also, employees are not allowed on SNS:

- to conduct public discussions among themselves on internal problems of the HEI functioning;
- to discuss work of other employees without their consent.

Considering the social role of HEIs these restrictions should not violate the right of employees to express their views on important problems of their city, region or state. The corporate culture also includes rules of publishing information about HEI on its websites and SNS pages. In particular, the following issues require special attention:

- affiliation of websites and SNS pages of departments and separate projects to the HEI and existing of relevant links to the HEI's official website;
- referencing of publications of official SNS pages of the HEI and departments on relevant publications of the HEI's and departments' websites;
- authenticity and timeliness of published information about the HEI;
- presence of personalized or non-personalized contact information (including e-mail addresses) in contact details of HEI's managers and departments;

• usage of subdomains of the domain name of the HEI's official website for websites of departments and separate projects.

The last issue generally is not important for the HEI, but it can significantly affect the HEI ratings like Webometrics [24].

# 5 Influence on the HEI's Information Image on the Internet

Formation of the HEI's informational image begins with the official website, which is the main source of public information about the HEI's activities. Also, websites of departments and separate projects can be considered as the sources. Therefore, initially, the HEI's corporate culture manifests precisely on these websites. Because materials published on the HEI's websites can be either republished or used by other websites with mandatory links to them depending on the Terms of Use.

Помилка! Джерело посилання не знайдено. shows general scheme of distribution of public information about HEI on websites and SNSs that comprises four platforms

Firstly, information for public publication can be obtained from HEI's unpublic (local) systems and services.

Secondly, public HEI's websites and services initially representing the HEI's corporate culture include the following:

- the HEI's official website that contains information about HEI's founding and management, regulations of main activities, financing, staff, services, news and events, etc.;
- the HEI's knowledge websites including an online HEI's Encyclopedia (Wiki resource [23] containing general information about the HEI, its history, scientific schools, achievements, etc.), a catalog of multimedia content (first of all classified photos and videos), an online scientific archive (scientific publications with corresponding bibliographic descriptions and classifications), etc.;
- the HEI departments' websites that contains information about the departments' management, fields of research and education, news and events, etc.;
- the HEI's specialized websites including websites for entrants and alumni, websites of scientific journals and conferences, websites of HEI's projects, etc.

Thirdly, the HEI's public resources at other websites consist of official SNS pages of the HEI and its departments, in particular:

- the HEI's official page at SNSs contain advertising and consulting information, news and events republished from the HEI's official website;
- the HEI departments' pages at SNS contain advertising and consulting information related to the departments, news and events republished from the departments' websites or the HEI's official website;
- the HEI's YouTube Channel is a collection of videos about the HEI.

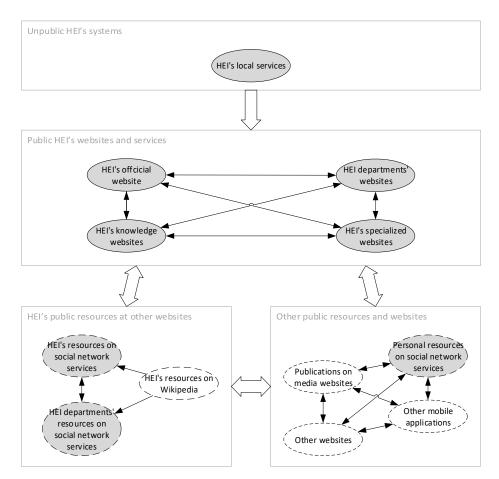


Fig. 2. Distribution of public information about HEI on websites and social network services.

Fourthly, other public resources and websites contain additional related to the HEI information and cover media websites, personal pages on SNSs, etc.

As shown in Помилка! Джерело посилання не знайдено., only highlighted in gray services are fully or partially managed by the HEI's staff. Services with dashed border line represent ability of partial (not full) content management. And services with hyphened border line not allow content management by the HEI's staff.

### 6 Conclusions

Corporate culture is a must-have attribute of successful HEI. Its effective applying issues perception of information about the HEI on the Internet. However, in today's conditions, it is not enough just to publish information about the HEI on websites and SNSs. It is expedient to carry out purposeful activities concerning formation of the

HEI's information image on the Internet. This study summarizes the practical experience gained during such activities at Lviv Polytechnic National University.

The HEI's information image on the Internet consists of two types of content: managed and unmanaged by the HEI's employees. There is no problem to administer managed content, but appearance of unmanaged content about the HEI may require some reaction as posts commenting on SNSs or submission some requests on publishing new, changing existing or removing unnecessary information on websites.

All the HEI's employees must adhere to the corporate culture on the Internet including corporate ethical standards, core values, publishing rules as well as HEI's Information Security Policy. They are prohibited to publish on HEI's websites and SNS pages protected and private information, discriminatory materials, information outside the context and with elements of aggression. On SNSs they are not allowed to publicly discuss on internal HEI problems.

General distribution of public information about HEI on websites and SNSs comprises four platforms: HEI's unpublic (local) systems and services, public HEI's websites and services, HEI's public resources at other websites, other public resources and websites. The HEI's corporate culture directly affects the HEI's informational image which formation begins with the official website, websites of departments and separate projects. Initially, the HEI's corporate culture manifests precisely on these websites. Further HEI's informational image formation not fully depends on the HEI's activities because of partial (not full) and not allowed content management.

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