The Problems of Digital Data Storage and Transmission in Coherent Visual Identity Production of Large Scale Institutions & Its Reflection in COVID ’19 Pandemic Period

Naciye Derin Işıkören, Serkad Hasan Işıkören, Ayşe Ece Onur
[a]Görsel İletişim Tasarımı Bölümü, İletişim Fakültesi, Lefke Avrupa Üniversitesi, nisikoren@eul.edu.tr
[b]Mimarlık Bölümü, Mimarlık Fakültesi, Yakın Doğu Üniversitesi, serkadhasan.isikoren@neu.edu.tr
[c]Mimarlık Bölümü, Mimarlık Fakültesi, Yakın Doğu Üniversitesi
ayseece.onur@neu.edu.tr

Abstract
High speed data transmission technologies are developing day by day and their usage is spreading in the World Wide Web. Cloud computing is a recently developed powerful tool in these terms. On the other hand, graphic software and applications are becoming more effective in composing visual messages and information of all sorts. Accordingly, corporate identity and a coherent visual profile of a company is basically a series of info graphics that reflects the aim; Series of services and products, interdisciplinary consistency of a company. A successful corporate identity design can equally place the image of the company within various cultures. International graphic placement requires appropriate data transmission and storage. Especially in the period of COVİD’ 19 pandemic, the need of cloud based storages and/or related storage issues have become an important issue. Cloud computing provides necessary conditions for the international corporate identity applications of global companies, hence gives a way to a detailed creation for design companies.

Keywords: Cloud computing, corporate identity, graphic design, data transfer, advertising agencies, pandemic

Büyük Ölçekli Kurumların Tutarlı Görsel Kimlik Üretiminde Sayısal Veri Depolama ve İletim Sorunları ve COVİD ’19 Pandemi Dönemine Yansıması

Özet
Yüksek hızlı veri iletim teknolojileri her geçen gün gelişmekte ve internet ağı üzerinde kullanımları yaygınlaşmaktadır. Bulut bilişim bu anlamda yakın zamanda geliştirilmiş güçlü bir araçtır. Öte yandan, grafik yazılımları ve uygulamaları, görsel mesajların ve her türlü bilginin oluşturulmasında daha etkili hale gelmektedir. Buna göre, bir şirketin kurumsal kimliği ve tutarlı bir görsel profili, temelde hizmet ve ürünler dizisi, bir şirketin disiplinler arası tutarlılığı amacını yansıtan bir dizi bilgi grafiğidir. Başarılı bir kurumsal kimlik tasarımı, şirketin imajını çeşitli kültürlere eşit şekilde yerleştirebilir. Uluslararası görsel kimlik yerleştirme, uygun veri iletimi ve depolama gerektirir. Özellikle COVİD' 19 pandemisi döneminde bulut tabanlı depolama ihtiyacı ve/veya ilgili depolama sorunları öne çıkan bir konu haline gelmiştir. Bulut bilişim, dünya çapında şirketlerin uluslararası kurumsal kimlik uygulamaları için gerekli koşulları sağlamakta, dolayısıyla tasarım şirketlerinin detaylı bir şekilde kurumsal kimlik oluşturulmasına olanak sağlamaktadır.

Anahtar Kelimeler: Bulut bilişim, kurumsal kimlik, grafik tasarım, bilgi aktarımı, reklam şirketleri, pandemi

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1. INTRODUCTION

After 1990 computer generated information systems have entered into many fields of human life. Accordingly, a series of light speed technological developments occurred in hardware and software production. Within the last thirty years, information technologies managed to cover all the fields of human production such as arts and design, entertainment of all sorts, health, finances etc. In relation to the increasing flow of information, larger digital spaces for data transmission and data storage facilities were needed. Hence, pandemic period doubled the need for digital space since every face to face daily interaction had to be digitalized and became online such as education, marketing, catering services etc. Especially in education facilities, cloud based data transmission storages have exceeded over 100GB in a year and a half which is a very big amount to store in any other storages such as external hard disks or related hardware. The need for cloud based storages made it even more important during the pandemic. As a chain reaction, all kind of official and bureaucratic paper work had to be digitalized as well. In this case, digital corporate identity usage became compulsory for all institutions. This article is a documentation of the technological developments of digital data storage and transmission especially in terms of creating a coherent corporate image of large scale institutions starting from 1990 till pandemic period (Carpo, M. 2019, *48-51*).

2 METHODOLOGY

In this study comparative content analysis methodology will be used. Technological developments that occurred in terms of hardware and software production will be analyzed in comparison to the needs of digital image production and transmission of the time period in between 1990-2020.

3 LITERATURE REVIEW

In 1990 the process of graphic design and image processing applications transformed with the entrance of graphic design software such as Adobe Photoshop, Aldus Freehand, Page Maker, Corol Draw, Quark X press into the desk top publishing field (Becer, E. 1997 116). Before that developments in the 90's, graphic design applications were consisted of a series of workshop applications performed manually, i.e., handwork, by designers and later on repro camera transmission of the design to the negative film (Becer, E. 1997 128). After 1990 the computer graphics took over handcraft and direct film processing from computer files took over the repro camera processing. Within these changing dynamics, various data storage and transmission tools occurred.

In the beginning of these developments there were floppy discs, but the space of data in those discs was not large enough for graphic files (Shirley, 379). Afterwards, within a short time, external hard discs, zip discs and CDs were developed but they were neither reliable, nor compatible with every computer and they were expensive. As Roth and Van Horn states; *"Despite the fact that computer memory costs have decreased dramatically over the past few years, data storage still*

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remains, and will probably always remain, an important cost factor for many large-scale database applications" (Roth, M. A., & Van Horn, S. J. 1993. 31-39).

Hence, with the development and wide usage of the Internet and the spread of commercial globalization, large scale companies and holdings needed to be advertised globally and in a synchronal way within the high-speed race of global marketing strategies. Therefore, designers have used Corporate Visual Identity Systems (CVIS) to widen the communications mix. "Using name, symbol and/or logo, typography, color and slogan, a CVIS helps transmit a company's visual identity through fixed assets, such as buildings, vehicles and other business collateral. This wider view of business communications adds necessary service marketing: product, price, place, promotion, participants, physical evidence and process to corporate identity applications" (Melewar, T. C., & Saunders, J. 2000, 20). That need, increased the importance of a strong, solid and detailed corporate identity design. A properly designed corporate identity constitutes the image, face, coverage of a company and its place in the common visual culture and in the commercial global market (Özcan, 2008. 111). In addition to that, all coherent bureaucratic communication takes place in the corporate identity design of the company which helps running the inner information circulation of the company.

Increased representation needs of companies and the explosion of the Internet put high pressure on existing storage and computing facilities and the internet service providers, consequently, the underlying hardware platform by the internet service providers supplied by has cheap commodity PC's as Qian and et.al.(2009) expressed. Qian and et.al. (2009) posits that

"Various kinds of software technologies are invented to make these PCs work elastically, which has led to 3 major cloud computing styles based on the underlying resource abstraction technologies: the Amazon style, Google Style and Microsoft style. It's hard to dec' which one is better, but apparently server virtualization is more flexible and compatible with existing software and applications; while the sandboxes put more restrictions on programming languages but less abstraction overhead. Currently, server virtualization is the most popular resource abstraction technique in cloud computing." (Qian, L., Luo, Z., Du, Y., & Guo, L. 2009: 627).

With those qualities, the service that is provided by cloud offerings is important and useful for graphic designers and related companies. Big amount of data storage and transmission possibilities that are provided by the cloud service providers replace more pragmatically the usage of expensive and unreliable storage and transmission hardware.

This quality does not mean that CC is free of charge. There are specific amounts of monthly or yearly payments that have to be paid by the companies according to the virtual space they are occupying in the cloud for their storage. But since the information transmission is dependable, steady and down to earth it is specifically valuable for design application purposes. Diversely, the foremost vital advantage of this facility is that it is worldwide accessibility (Topaloğlu, Özkişi, Tekkanat, 2017: 30).

Though CC computing is useful for every applied arts and design field, its fostering in terms of design application comes forward in Corporate Identity Design because CID has to be applied for international companies, groups and holdings Omni potentially and synchronously, which

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suggests concurring to the flow of corporate promoting each graphical sign, symbol and signifier has got to be used and put within the showcase at the same time and within the same quality of color, shape, measure and appearance (Kadıbeşegil, 1999: 101).

4 CORPORATE IDENTITY FEATURES

Any kind of ambiguity and inconsistency that occurs in the image building process of the company can damage the perception of the consumer and diminish the level of coherency of the company's image internationally (Chetnam, 1990, 168). Thus, "Graphic design has exerted a powerful influence on corporate image. With corporate image being interpreted as how an organization communicates an image through a name and/or icon. This view of corporate image received a fillip through the work of graphic design consultancies in analyzing the practice of visual identity by organizations" (Balmer, 1998: 966). According to Balmer (1986) organizations and consultancies utilize graphic design for four fundamental purposes as follows;

(i) to communicate the organization's mission and philosophy,

(ii) to encapsulate the organization's cultural values,

(iii) to underpin the organization's communications efforts inside and outside of the company

(iv) as a means of keeping the visual identity fashionable

Under these representational headings, Koç Holding's corporate identity graphics represent a strong example. Its graphic content is very detailed in terms of answering every kind of presentational demands inside and outside of the company hence nationally and internationally usage of the company's image and appearance. More importantly, this worldwide company is one of the pioneers that carried its corporate profile into cloud in Turkey. Above mentioned qualities are the the reason why it takes place as an example in this study.

Such detailed corporate identity graphic design has to include graphics as

(i) logo, business card and memorandum.

(ii) envelopes, folders, notebooks, entitled papers

(iii) pens, T-shirts, car graphics, banners, pouches, bags, stickers

(iv) web sites, presentation cd s, e-card visits promotional items

Some basic corporate identity graphics that have been used in their international corporate identity e-guide by Koç Holding are as follows i.e.

Images below (Figure 1, 2,3) are the examples of the category (i).which displays the official logotype of Koç Holding, its color codes, official color versions and grayscale options and official business card.

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Figure 1: The official logotype of Koç Holding

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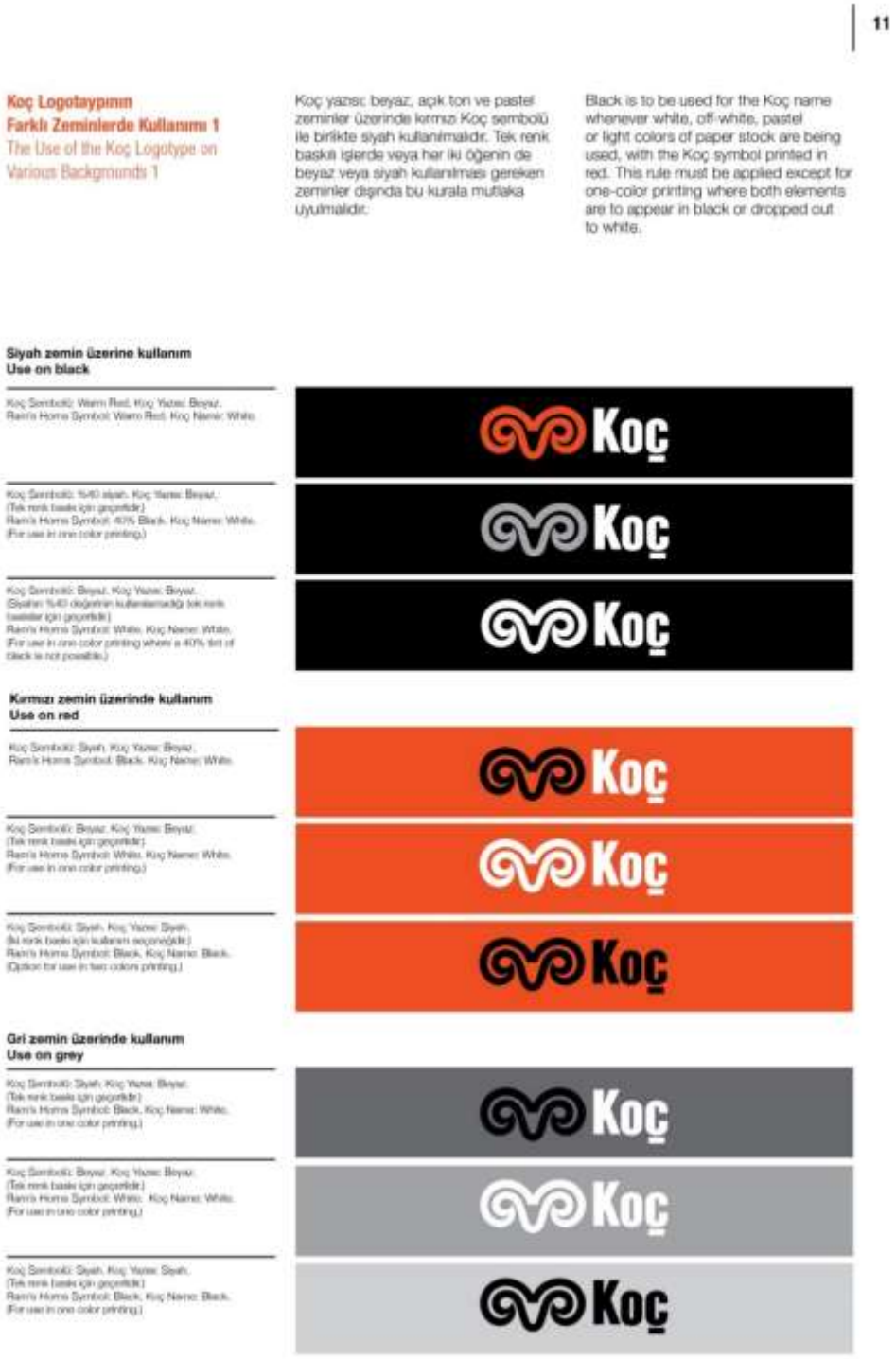

Figure 2: Color codes, official color versions and grayscale options

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Kartvizit | Business Card

Boyut: 90 mm x 50 mm
Renk: Pantone Warm Red + Siyah
Kağıt: 300 gr Çift Taraflı Bristol
Font: Helvetica Condensed Light/Bold, 6-13 pt.

Size: 90 mm x 50 mm
Color: Pantone Warm Red + Black
Paper: 300 gr Double Sided Bristol
Font: Helvetica Condensed Light/Bold, 6-13 pt.

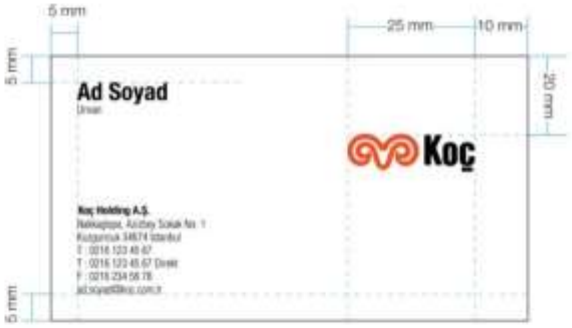

Figure 3: Official business cards with measurements

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Koç Holding's corporate identity graphic guide is consisted of 161 detailed design pages; hence it bares globally accessible vector graphics including newspaper announcement designs. The guide can be found online in the link https://www.koc.com.tr/medya-merkezi/kilavuzlar in a more larger scale.

With the help of the cloud computing globally accessible data storage facility, this kind of rich representational visual identity can be applied to any kind of presentation and advertisement of the company in all around the world at any time.

5 CONCLUSION

Since 1990 graphic design applications transformed drastically. Nowadays, designers and users of visual information do not even call the field "graphic design". The new term that is used for the field is "visual communication" The visual messages designers are creating are taking place in a large perspective of different media. Before, it was only paper top publishing but currently billions of different visual creations carries meanings to the viewers upon tv, telephone, computer and mainstream media globally.

Cloud computing procedures offer a storage space for its users besides other various facilities on the internet. The storage space provided by cloud can be decided according to the need of the users. This development and facility created a bridge in between the trio of "every time accessible and reliable visual data transfer", "needs of graphic design agencies in all sorts of visual media" and "global presentation needs of the international companies".

Globally accessible, expendable and timeless space and transfer facility of cloud computing constitute a proper solution of large amount of detailed visual data transfer of corporate identity graphics of global companies. Especially during the pandemic period, it has been observed that the need for cloud storage is very essential for companies since most of the communication and design facilities is held via online media. The Covid '19 pandemic period has hit daily routine for a year and a half and during this short period of time the need for huge storage spaces has increased in many fields such as education, marketing and all data transmission related fields. Therefore, cloud storage should be increased to serve the needs of companies for big size documents to store and transfer their folders. However, this can be another research subject for future studies since in this short period of time data collection would not be reliable.

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