CREATION OF UNIVERSITY GRADUATE YEARBOOK APPLYING INTERACTIVE SOLUTIONS

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Abstract
A yearbook is a type of publication usually containing photographs of university graduates or school leavers and/or academic staff designed to highlight and commemorate the completion of a school. Unlike foreign yearbooks that commonly contain articles, award pages and messages from friends and teachers, the yearbooks that are published in Lithuania are limited to students and /or academic staff photographs. The yearbooks have been very popular for different audience ranging from schools, universities to businesses and organisations. Currently, due to the emergence of IT, yearbooks are published using computers and appropriate software. The question is what interactive tools should be used.
Key words: *yearbook, QR code, interactivity*

Yearbook as a traditional printed product

Yearbook might be considered as a unique combination of tradition, authenticity and enduring value as it captures historical events and persons at a particular time.

The museum of Lithuanian Education History exhibits an abundant collection of various yearbooks [3]. These yearbooks capture not only the portraits of famous Lithuanian people as well as iconographic symbols used at the time and other details such as engraving, imprint, photo studio, photographers' names, various records, drawings, teaching aids (a globe, a book, a bottle of ink, a fountain pen, a ruler, or a precision compass, etc.), photos of buildings, decorative ornaments, and national symbols. In commemoration of the 500th anniversary of the death of the Grand Duke of Lithuania Vytautas Magnus, it was a common practice to use his portrait in yearbooks as it is seen on the left top corner in the yearbook of Mažeikiai State gymnasium.

Over the years, some changes regarding the artistic and technical means have been noticed, namely in terms of the visual content of the yearbook. Although the changes of the size of the photographs in the yearbook have been insignificant, the size of the photographs since 1970s is gradually in-

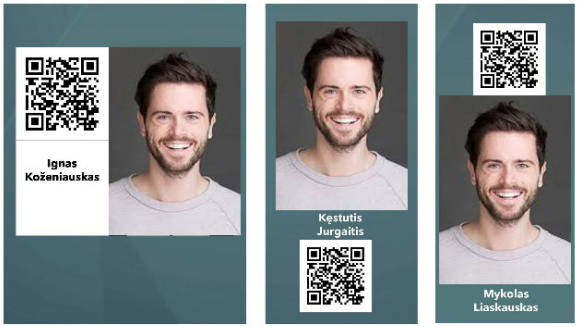
creasing, consequently resulting in a different composition and layout of the photographs. Furthermore, as in the yearbooks of the 21st century colour photography prevails, the volume of a yearbook increases − it can be available as a trifold brochure, as it contains more portraits due to a bigger team of people photographed.

Interactive solutions

Interactivity does not affect the printed product, yet it alters dimension of communication. 2-dimentional concept of interactivity or 'user-to-documents' interactivity is characterized as restricted as there is no or little possibility for a user to manipulate existing content (low interactivity), whereas 4-dimensional concept of interactivity is characterized by greater interactivity as the user has a frequent ability to act, to choose and to have great significance (high interactivity) [1]. In other words, the user becomes active .The essence of communication changes as it is not one-direction anymore−it offers an excellent opportunity for a user to interact in a more intriguing way.

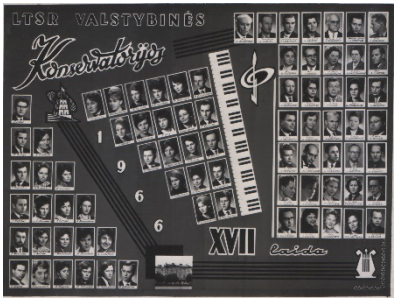
In terms of traditional media, there have not been many interactive solutions, and the development of the technology itself is directly related to the increasing number of smart devices among users. A user of the smartphone or tablet with the help of the camera can scan a QR code or Layar apps to access other media such as the Web, social networks, e-mail, or Augmented Reality.

In the printed publications, the edge of the QR code or optical label should be at least 2.5-3 cm or even bigger, in order to scan the label with a poorer quality smartphone camera. Although the QR code is a fairly flexible element, where a number of tools can be used such as *Add a Colour Palette*, *Soften Hard Edges with Round Corners*, and a part of the code squares (up to 30% of the total area) can be used to create a more attractive image, yet a limitation of the minimal QR code size complicates its insertion.



Picture 4. Application of QR codes in the printed yearbook

Picture 1. University graduate yearbooks of the interwar period (the third decade of the 20th century)

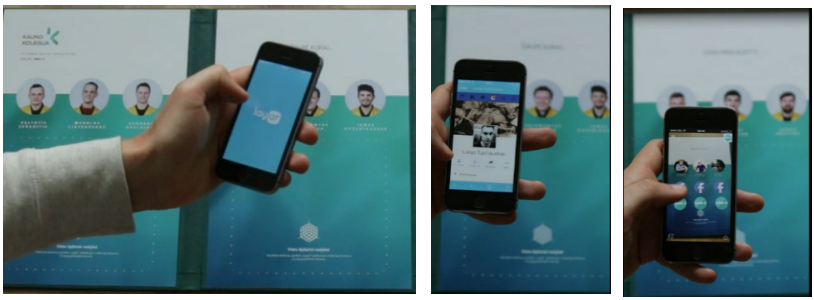


Picture 2. Graduate yearbook of higher educational institution (the sixth decade of the 20th century)

Given the QR codes for individual yearbook elements (photographs), it is important to take into account the size of the photographs. In the final product, the QR code should be smaller in size in comparison with the pictures. Not all users are keen to follow and use technological innovations. They do not necessarily have QR-code scanners on their phones, so product developers should add a QR code instruction manual. In this way, the amount of visual information in the yearbook doubles. As a result, aesthetic problems arise that affects the harmonious look of the yearbook.

The Layar and *Blippar* mobile apps offer a service that enables print production spring to life using Augmented Reality [2]. Augmented Reality app *Layar* connects our digital lives with the physical world and works in *Android OS*. Using this technology, the smartphone camera is aimed on graphic markers of the printed product (QR code analogues) to scan the code. When scanned, it communicates with *Layar* platform and performs assigned actions. It's a self-service web application that lets anyone infuse static pages with interactive experiences.

Picture 3. School leaver yearbook (the end of the 20th century)



Picture 5. Application of Layar technology for a yearbook

Layar is available in two versions: the free and the paid one. The free version is limited and is more like a demo one. Basic version offers the following services such as 1 page /€3, live for 30 days, video hosting; whereas Pro version offers 1 page/€30, published for a year, Basic, Media and Social buttons. A page represents a single item (e.g. a flyer, greeting card, poster, business card, etc.) that you can upload and add content to in the *Layar*

Creator. You can upload JPG, PNG or PDF files. After you publish your page, your audience can scan that item with the *Layar App* to view the content you have added.

Conclusions

After the application of the interactive tools in creation of the yearbook, the following conclusions can be drawn:

1. QR Code is a free convenient tool that provides an excellent opportunity to direct the user to different media. However, the technical requirements of this tool are limited by the technical requirements as the QR code edge must be at least 2.5 cm or more, depending on the characteristics of the user's webcam. This requirement significantly increases the amount of visual information in the yearbook and exhibits a lack of consistency in the design.
2. It is recommended to use Augmented Reality app *Layar* in the yearbook if the user is willing to pay a €30 annual fee. The application of this tool does not affect the final look of the product.

References

1. Jensen, J. F. Interactivity: tracking a new concept in media and communications studies. Nordicom Review 19, 185–204, 1998.
2. Layar Creator, 2009. [žiūrėta 2018-04-10]. Prieiga per internetą: https://www.layar.com/
3. Lietuvos integralios muziejų informacinės sistema. Lietuvos dailės muziejus, 2013. [žiūrėta 2018-04-10]. Prieiga per internetą: https://www.limis.lt/