

How the History of Photography Can Make Us Feel Confident in the Future of Photobooks

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Abstract

With each new technology that enters the marketplace comes the question of whether or not it will have any significant, long-lasting commercial value. Hindsight can always tell us if buying stocks in certain companies would have made us financially comfortable today, because hindsight is always 20/20. With changes in the imaging industry coming fast and furiously, it's hard to know what to invest in and what to ignore. Currently, one of the hottest products is the photobook. Is there a future in it? Is it a short-lived fad or a new way for consumers to print and share their photos for years to come? The history of photography and photo albums can lead us to a few conclusions about whether this trend should continue or fade into history. This paper explores the facts surrounding this new trend and shows why photobooks can be expected to be around for many years to come.

Introduction

With every new technology there is always the question of its commercial future. Hindsight can tell us that buying stocks in certain companies and industries would have made us financially comfortable today. With changes in the imaging industry coming fast and furious, it's hard to know what to invest in and what to ignore. Currently, one of the hottest innovations is photobooks. Is there a future in it? Is it a fad or a new way for consumers to print and share their photos for years to come? A study of photo album styles from over the years, can lead to a few conclusions about what made some photo album trends continue and others to fade into history. Albums designs have continuously changed over time, but as Grant Romer, former Director of Conservation at the George Eastman House and International Museum of Photography and Film, aptly observed, "History teaches that photography is a mutable and ever changing technology. How it changes is not as interesting as why it changes" [1]. Below is the argument, based on the history of photography and photo album designs, as to why it can be expected that photobooks will be around for many years to come.

19th Century

The first commercially viable photographic system was the daguerreotype. It was a silver image on a polished metal plate. Because the image resided directly on the surface of the plate it was very sensitive to abrasion. In order to protect the image a glass cover needed to be placed on top. This image-with-glass package was then inserted into a wood and leather case usually designed to hold only one or two pictures. Making an entire album of such objects would have been untenable due to their thickness. It was

not until paper prints became common that the photo album appeared.

Early paper prints, such as albumen, were very thin and therefore prone to damage by physical handling. The solution to this was to permanently mount the paper print to a more rigid substrate, usually a thick cardboard. While many sizes of prints and mounts were used, two were particularly popular. First was the carte de visite, or calling card. These were very fashionable for a while, but they eventually gave way to the larger cabinet card. Because both of these objects were rigid, they could not simply be pasted onto paper pages. Instead album manufacturers designed stiff cardboard pages with slots to accept the mounted prints. These albums were usually very thick and held relatively few images compared to today's albums.

20th Century

In the early 1900's thicker paper prints gained in popularity (after the advent of roll films and mass print processing in the late 1800's), and the simple paper page book overtook the thick, rigid slot albums. The paper page books had been used since before photography for scrapbooks that included all sorts of personal effects and ephemera. While initially light-colored papers were used, eventually the improved aesthetic of black paper as the background to the black-and-white images began to dominate the album market.

When color photography replaced black-and-white, the black paper page album became obsolete. Color photographs did not look as good against the black background as the black-and-white images. A new album style was needed. This, along with advances in adhesive technologies, led to the now infamous "magnetic" page album. This album used non-drying "glue" painted across the entire page surface to hold the photos and the plastic cover sheet in place. The addition of the plastic cover sheet not only shielded the unused areas of exposed adhesive, it also provided protection to the surface of the print. Pictures on one page were not able to abrade or stick to those on the adjacent page, which prints did sometimes when stored face-to-face in humid environments.

Unfortunately, the magnetic adhesive did not prove to be completely non-drying. Over time, the resins used in the rubber adhesive would oxidize or leach out causing the adhesive to harden and sometimes lose tack. The photos would then permanently bond to the page, become loose and disorganized, or fall out of the album entirely. The adhesive would also yellow severely, making the pages unsightly. Magnetic albums soon became the pariahs of the photo album market. It is potentially the

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only album style that died out simply because of its poor quality.

To replace the magnetic album, the plastic pocket page was introduced. Thin plastic films could be cut into notebook-sized pages and then glued or heat welded into patterns to create pockets of appropriate sizes for modern prints. Initially these were 3 1/2" x

5" prints, but eventually the larger 4" x 6" prints took over. An early plastic used to make these pages was flexible polyvinyl chloride (PVC). This turned out to be a poor choice because over time the PVC leached out plasticizer (a chemical additive used to keep the plastic film pliable) onto the enclosed images. PVC was later replaced with polyethylene and then polypropylene which are more stable over time and need no plasticizer to remain flexible.

An important drawback of both the magnetic and pocket page albums was the difficulty in providing labeling to the images. The magnetic pages could not be written on due to the glue that covered the entire page surface, and the plastic pocket pages almost never included areas for labeling. Some manufacturers did try to overcome this problem by adding small areas for labeling, yet nothing could compare with the original paper page album's easy and plentiful surface areas for writing on.

In the late 1980's a new album style arose - the modern scrapbook. It heralded a return to the white paper page album with large areas for labeling or journaling. This was especially important to the new generation of album makers who were willing to spend the extra time and effort to put together albums of great detail by which to record their family histories. Through the 1990's, the modern scrapbook craze evolved from a primarily genealogical tool to a new and elaborate paper craft. The album page became an "art canvas" upon which pictures and designs of astonishing complexity were being created. Eventually the craft of "scrapping" became so advanced, it became somewhat of a barrier to new album makers who only wished to create simple family albums.

21st Century

The 21st century has brought new advances in technologies that are again drastically changing the way people make photo albums. While examples of black paper, magnetic, and plastic pocket page albums are still available, the newest and most popular version of the photo album today is the photobook. The technology of on-demand printing and the bound-book design has filled the void for family photo albums created when scrapbooking moved away from its original genealogical function to a paper craft hobby. Many people had been looking for a new method to organize their images, along with text, in a simple and inexpensive way. Selected groups of images can be easily edited and uploaded to an online or retail processing service that will print and bind the images and text into a beautiful book that looks and feels just like a traditionally printed art book. There are also kits for the consumer to do all the printing and binding at home using their computer and desktop printer.

The Future

Currently there is no new physical album on the horizon that might challenge the photobook. However, there is a very real threat posed by the virtual album in its many forms, both locally on home computers and virtually in cyberspace.

With digital imaging, the routes to sharing or printing images are different from the old wet-processed photographs. Physical albums are no longer needed to share customized sets of images with one's friends and family. Electronic albums can be created on a home computer or an online service and then be shared with others sitting in the same room looking at the same screen or hundreds, even thousands of viewers sitting individually in different rooms around the globe. This switch to electronic viewing of images had appeared, to some, as the death bell for printed images; however, market data has consistently shown that people are still printing significant numbers of images. The amount is less, but that may be due to the fact that consumers are no longer being forced to print all the images from a roll of film including many they would not have if they had known the image's poor quality beforehand.

It is intuitive that physical and virtual family albums will form along the same lines - to document the people and events that will serve to preserve the family's past and educate descendants on their heritage. But how can physical and virtual albums be compared to determine the future of photobooks? Three points of examination will be helpful in answering this question: subject matter, audience interaction, and permanence.

Subject Matter

The subject matter of most physical albums has typically included important moments in a family's life, whether it is a holiday celebration or a child's first birthday. Its overall purpose has been to show the family story through images. The photographs in physical albums can show a variety of subject matter, but typically they fall under the overarching theme of family. The virtual album's subject matter, like that of the physical album, also tends to consist of candid snapshots and portraits of close friends and family members during various important moments. Therefore, albums, regardless of the format, are still functioning in the same way. They are a means of recording, remembering, and perpetuating family legacies.

One significant difference is that while the subject matter is the same in both physical and virtual albums, there can be significant repetition of the subject matter in the latter. Digital cameras, which have the ability to take pictures faster with more frequency due to their larger storage capacities, allow for various versions of one scene to be taken. It is also possible too, that less significant events will also be included in virtual albums further expanding their size and the time required to view them. It is conceivable that this can create a sort of visual overload, leading to fewer viewings of the image collection. On the other hand this may also lead to an increase in the number of photobooks created as the number of images and events/topics that can be explored increases.

Still, the subject matter of physical and virtual albums is remarkably similar due to the albums' equivalent function across both formats. With this in mind, family album trends, in regards to subject matter, will likely change little from grandmother to mother to child, regardless of its physical or virtual form.

Audience Interaction

The experience of viewing an album clearly changes from the physical to the virtual format. Physical albums are hand crafted, unlike virtual albums, which are technologically produced. The

virtual album's lack of physical materiality can make it feel impersonal and cold. However, an album's presence on the Web permits access to outsiders across time and space to access. This extends the audience beyond the physical album's traditional viewers, who are family members and a close circle of friends. This is highlighted by online photo sharing sites. Of course this begs the question of privacy. Password protection is a feature of many online virtual album sites. However, not all online album owners will protect their images this way, especially if such security costs more in online fees. Questions of privacy may also affect what images are included in online albums.

Another very important aspect of audience interaction is conversation between viewers, which changes significantly from physical to virtual. Family members and close friends, when invited to view physical albums, typically do so in a domestic setting. The album owner controls and shapes the audience's experience while they tell the story. Virtual album owners have little control over the audience experience because their sites are available to anyone at anytime, anywhere. Viewers interact with both physical and virtual albums in similar ways, by flipping or scrolling through pages and by discussing the photographs or by commenting on their content. However, the intimate conversations that exist between viewers face-to-face with physical albums are lost in the digital age as exchanges are posted as typed comments in a time lapse that runs between a fraction of a second to a few weeks or months, and at times go completely unnoticed. So while the content may be the nearly the same, the intimacy and immediacy of sharing is dramatically altered.

Permanence

When considering prized possessions, many families would rank family albums high on the list. Albums hold memories and evoke emotions upon viewing. These albums maintain value because they are unique, physical objects that are created over time and with care. The need for album permanence is therefore paramount. However, the permanence qualities of the family album, too contrast significantly from physical to virtual. The old photograph album, considered an enduring addition to the family heirlooms when in physical format, takes on an impermanent quality when in virtual form.

Studies have compared digital and physical personal mementos to establish the strength of connection with each. It was found that "Individuals exhibit strong connections with personal mementos: they express feelings of loss if these suddenly disappear and have a strong desire to pass them onto succeeding generations". However, it was also discovered that "Digital belongings are perceived as problematic: being unstable and ephemeral compared with physical ones, and too impersonal to fully express the richness of memories.", and that "none of the participants [in the study] mentioned passing digital memories across generations, while physical objects were talked about in this

way" [2]. Evidently, while digital images are useful for sharing in the near term, they are not considered of heirloom quality and worthy of the work necessary to pass along in that form. While this does not diminish all value to digital images, it should give pause to digital print providers attempting to reach customers. The focus on permanence and family legacy should be highlighted.

Additionally, it can be mentioned that physical photo albums have persistently survived competition from other imaging techniques for story telling including slide shows, home movies, and video recordings.

Conclusions

Given that there are no major foreseeable changes in how images will be printed, it is highly likely that the photobook will be the photo album of choice for many years to come. Businesses that address this market are not likely to see a drop in consumer demand for these products, despite competition from virtual album forms. The only potential threat to the market would be a flood of low quality products that quickly degrade and turn consumers off to photobooks altogether. Currently many photobooks are of very high quality, but issues surrounding image degradation through fade, yellowing, abrasion, page sticking, or binder failure have yet to be fully explored. It would be best to address this early-on to ensure that the demand for photo books continues to grow. If these potential problems are addressed, we should have every reason to believe that photobooks will eventually become a staple in every household.

References

- [1] Grant B. Romer in "Contemporary Thoughts on the History of Photography", Focal Encyclopedia of Photography: 4th edition, editor Michael Peres, Focal Press/Elsevier, Oxford UK.
- [2] Daniela Petrioli and Steve Whittaker, Family Memories in the home: Contrasting Physical and Digital Mementos, Personal Ubiquitous Computing 2010 14:153-169 Springer-Verlag London Limited 2009.

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