UX ANALYSIS:



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INTRODUCTION

WHAT IS FLICKR?

At the rate of today's technological advancement, there is an increasing need for effective online storage and sharing systems. The ever growing abundance of digital photos or videos rely on information storage systems to preserve their content and make it easier to share and propagate in other media. Information systems like these "produce, receive, transform and transmit" information. Flickr is a popular photo sharing and hosting service where amateurs and professionals alike can share and explore each other's photos.

FLICKR'S MISSION

Flickr emphasizes two main goals: "to help people make their photos available to the people who matter to them", and "to enable new ways of organizing photos and video". Within these goals, they emphasize security and privacy, and a system that provides searchable, shareable, and organized information. While Flickr has the software in place to offer an extremely powerful and innovative platform, aspects where human interaction and design are lacking, limit the overall efficiency and user experience when using this system.

FLICKER'S IMPACTS

As a widely used and dominating image/video hosting system, the impact that Flickr has on its users can be immense. The efficiency of digital transactions that rely their services are at the mercy of its architecture and design. Effective design develops "interactive products that are easy, effective, and pleasurable to use". While Flickr has remained a popular service for many, disregarding principles of good design can confuse and frustrate users. The work and time of people, businesses, and other organizations are directly affected by these flaws, which is why it is crucial to identify and evaluate what works or could be improved in Flickr.

¹ Erin, Krupka. "A Brief History of Information and Information Overload, also: Memes," 14 Jan. 2019, Ann Arbor. Lecture.

² Flickr. Accessed March 23, 2019. https://www.flickr.com

³Yvonne, Rogers. "Chapter 1: What is Interaction Design?" In Interaction Design: Beyond Human-computer interaction, 1-34, 3rd ed. Chichester. John Wiley & Sons, 2011.

EXPECTATIONS

I predominantly focused on examining Flickr's creation, organization and sharing systems. While Flickr does cater toward more professional users who are well versed in photography or have more experience with image hosting platforms, etc, I aimed to evaluate their system from the perspective of an average user.

EVALUATION

Flickr's impact on user experience was analyzed using Nielsen's "10 usability heuristics for User Interface Design". We define User Experience as the experience people have when they interact with your product and has four components: value, usability, adoptability and desirability. Despite having good error recovery and help systems, Flickr's lack of effective user control/freedom and inconsistent design and aesthetics, limits the overall user experience and hold Flickr back from supporting an efficient and pleasurable user experience.

This evaluation uses a four point scale (Poor, Average, Good, Excellent) to rate the effectiveness of each heuristic. Based on how well Flickr's systems meet the expectations of each principle, we can then evaluate the system as a whole.

⁴ Jakob, Nielsen. "10 Usability Heuristics for User Interface Design." *Nielsen Norman Group*, 1995, accessed March 20, 2019 https://www.nngroup.com/articles/ten-usability-heuristics/.

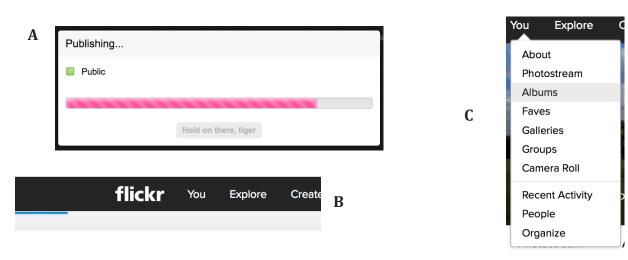
⁵ Alafaireet, Sainy. "Designing for User Experience: Perception, Action, and Some Design Principles." 18 Feb. 2019, Ann Arbor. Lecture.

HEURISTIC EVALUATION

1. VISIBILITY OF SYSTEM STATUS

Rating: Good

For efficient visibility of system status, Nielsen states that "The system should always keep users informed about what is going on, through appropriate feedback within reasonable time". In other words, the ability for the system to provide visible feedback and be transparent about the system processes is crucial for user predictability and control.



Flickr does a good job of showing progress through loading bars when publishing photos (A) or loading a page (B). It incorporates responsive buttons/design that either change in color when hovering over links (C), or in size by extending text input range (D). However, Flickr does lack confirmation after uploading photos; it takes you directly to your photostream immediately after it finishes uploading.

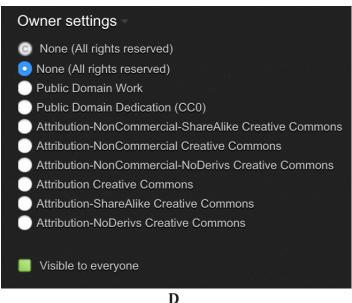


Recommendation: Including a small pop-up in the screen confirming the upload of "x amount of photos" can reassure users that their items were uploaded properly and make the system more transparent.

To meet this heuristic, "The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms" and "Follow real-world conventions, making information appear in a natural and logical order". Because users find comfort in familiarity, designing with familiar words, models or schemas, makes the system easier to understand.



The icons above acurately depict the actions they perform. One of our societal schemas is that we associate next with the right arrow, and back with the left arrow. These arrows are "graphic elements that are typically consistent and have representations that are widely understood by users". Thus, clicking those respective arrows (B) direct the user to the previous or next picture as the user expects.



However, the abundant privacy options when uploading photos (D) can make the user feel unsure and confused because the language might not familiar. This can lead to uninformed judgements and distrust in the system.

Recommendation: Provide a question-mark/help button that can expand and define a function's actions or meaning to avoid user confusion if terms might not be easily understandable.

⁶ Wong, Euphemia. "Principle of Consistency and Standards in User Interface Design." The Interaction Design Foundation. Accessed March 26, 2019. https://www.interaction-design.org/literature/ article/principle-of-consistency-and-standards-in-user-interface-design.

3. USER CONTROL AND FREEDOM

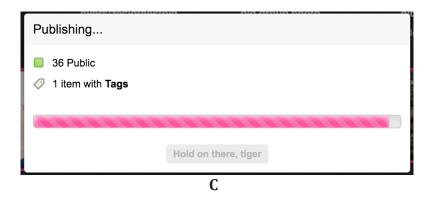
Rating: Poor

User control and freedom requires the ability for a user to efficiently make an emergency exit or "leave the unwanted state without having to go though and extended dialogue". Users frequently make mistakes and thus functions that support the undo/redo functions are especially critical for user control and freedom.



In the photo editing window, the "undo" function is present (B), however there is no "redo" option (A); undoing an action can never be reversed.

Additionally, there is no option to emergency exit while uploading pictures (C). As a result, the user must manually delete the pictures if they did not mean to upload the pictures in the first place.

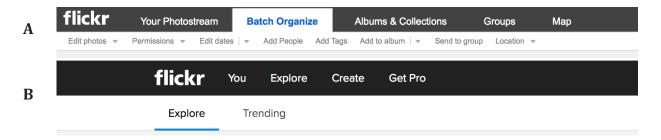


Recommendation: Add redo functions in addition to undo. Either add emergency stop/pause functions to halt upload, or have an intermediary where once all the photos are done uploading, the system promts the user to confirm the upload.

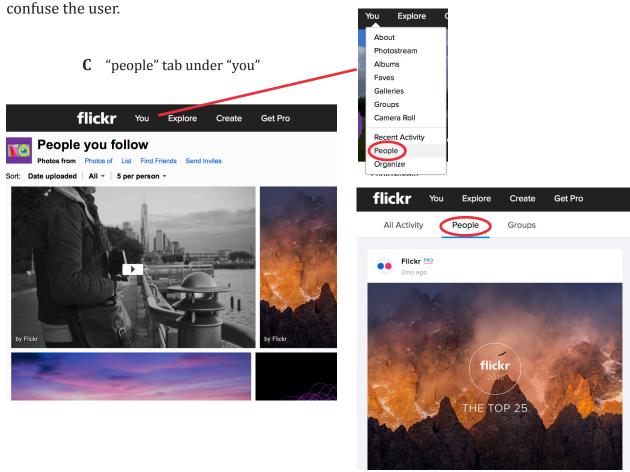
4. CONSISTENCY AND STANDARDS

Rating: Poor

To meet the consistency and standards heuristic, "Users should not have to wonder whether different words, situations, or actions mean the same thing". This means consistent layout and popular design standards increases overall usability.



Clicking on certain tabs in the homescreen navigation bar takes the user to a different page setup with new navigation (A) and eliminates the home navigation bar (B). Not only does the inconsistent page layout deviate from the user's expectations, it can disorient and



D "people" from home screen

A major inconsistency is there are two separate "people" pages accessed through two different locations. There is no difference in content. The inconsistency in what the "people" system really refers to is confusing and misleading.



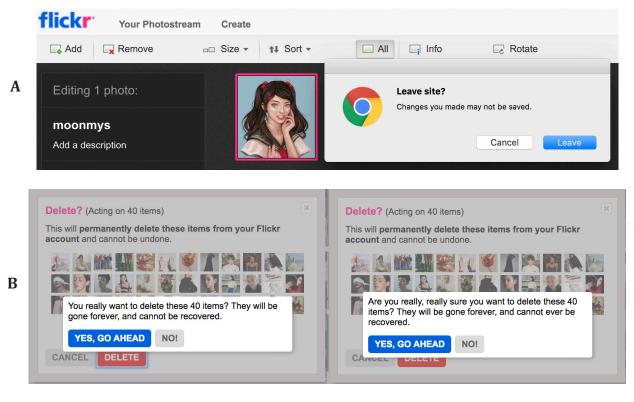
Button placement is also crucial. There is evidence that "the primary optical area is at the top left". Most websites follow this rule by placing imporant information (navigation bars, logos) at the top left. Additionally, "users first read in a horizontal movement, usually across the upper part of the content area". Flickr follows this standard in their home navigation bar (E) where frequently accessed tabs like "you" or "explore" are at the leftmost. The login and upload options are at the upper right as well. Users know where to look for main features thanks to this location principal that most websites follow.

Recommendation: Keep navigation/layouts consistent (have the home bar stay in view consistently), and dedicate one page per topic (eliminate one of the "people" pages).

⁷ Anthony. "Why Users Click Right Call to Actions More Than Left Ones." UX Movement. April 25, 2011. Accessed March 28, 2019. https://uxmovement.com/buttons/why-users-click-right-call-to-actions-more-than-left-ones/.

⁸ Babich, Nick. "F-Shaped Pattern for Reading Content." UX Planet. April 04, 2017. Accessed March 26, 2019. https://uxplanet.org/f-shaped-pattern-for-reading-content-80af79cd3394.

Perhaps better than good error messages "is a careful design which prevents a problem from occurring in the first place".⁴ This can be done by eliminating situations where errors are likely to happen, or to check for errors and alert users with a confirmation option before they "commit to the action".⁴

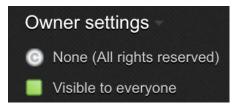


You have unsaved changes. Do you want to discard them?

YES, DISCARD THEM NO, STAY HERE

Flickr provides warning before it detects risky or undoable actions. Whether editing (A) (C) or deleting photos (B), user confirmation is required.

Additionally, good default settings assume conservative/reasonable settings and prevent user error. Privacy settings (D) set to the most conservative option is a good default that reduces the burdens on users **D** I

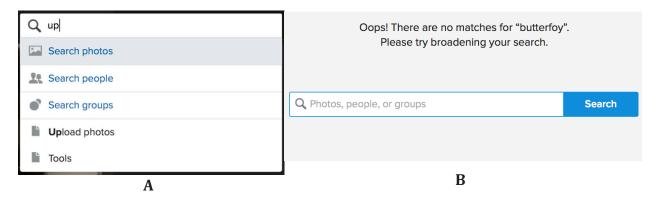


D In photo uploading, the photo privacies are by default "All rights reserved"

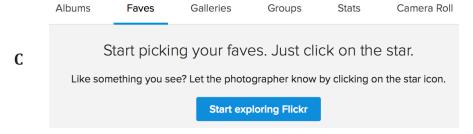
6. RECOGNITION RATHER THAN RECALL

Rating: Average

To demonstrate reognition rather than recall, systems must "Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate". This refers to methods like autofill, or tools that allow the user to find something without actually having to recall a specific keyword or set of commands; it is easily searchable.



Flickr does offer search suggestions. However, they are only for default system commands (A). This requires the user to remember a specific name or attribute that can cause error if you cannot recall the exact word when searching (B). Furthermore, there is no history of searches or pages/people viewed, making it difficult to access those items again. The system fails to provide a recall process for the user for those functions.



Conversely, there does exist a "faves section" where the user can select photos from other user to save in one place (C). This allows them to access these photos later, without needing to recall the specific image name or uploader.

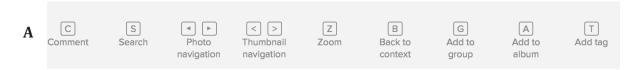
Recommendation: Offer a search system that implements recognition, or have the system remember a search so that the next time the user starts typing the keyword, the previously search word appears as a fill-in option (search history).

+ Follow

Teton Range

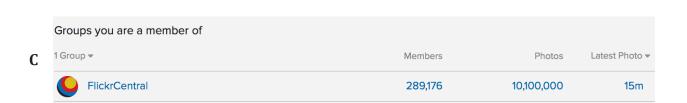
Rating: Good

Neilsen stats that "Accelerators — unseen by the novice user — may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions". For this heuristic, both experienced and unexperienced users should be able to use the system according to their expertise. This includes things like system shortcuts and the ability to personalize the system.



At the bottom of the page when an album's picture is expanded, there are commands/ keyboard shortcuts that offer experienced users who have learned the system, options for expedited editing.

B



Users are able to tailor their experience by following people or groups. The people and "group" pages in the home screen curate content from those the user follows. However, using the explore tab/search bar is the only way to find people to follow. The groups/people page can be hard to curate if you are new to the platform and do not already know users to follow.

Recommendation: Implement reccomendation systems where clicking into one user's profile suggests other similar profiles, to facilitate users who are trying to curate their content/feed. Furthermore, offering reccomended tags to follow when initially setting up the account can give the user an easy start to personalizing their feed.

8. AESTHETIC AND MINIMALIST DESIGN

Rating: Average

To have aesthetic and minimalist design, "dialogues should not contain information which is irrelevant or rarely needed". Excessive clutter and bad formatting can diminish the acessibility of important information because it "competes with the relevant units of informa-

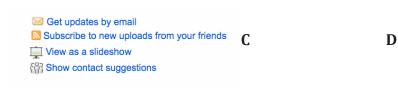
tion and diminishes their relative visibility".4

For the most part, there is minimal clutter, and good use of whitespace. The grid format (A) for albums; makes it easy for the user to quickly find what they are looking for.



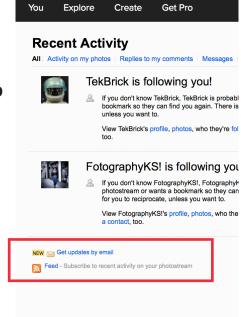
However, some icons (B) do not reflect a minimalistic style akin to the rest of the site. The lack of color contrast and unecessary shading/shadows make it

hard to discern the differences between certain actions or what the action really means.



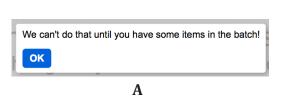
Additionally, Some Pages with outdated layouts also have non-minimalistic icons/colors (C). Link placement is tacked right below the main content, cluttering the page and distracting the user.

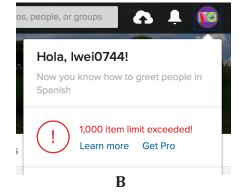
Recommendation: use a minimal and less distracting color pallete for icons, and mindfully space out information that may distract the reader.



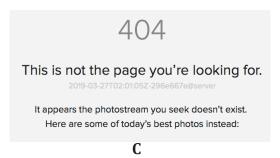
Rating: Good

A system's "error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution". This heuristic takes a more hollistic approach because it also involves human-readable language, transparency and error prevention.





The error message are not too vague, and they inform the user of what went wrong clearly. When organizing photos, it alerts the user that they must first add photos before trying to edit anything (A). It also alerts the user that the photo limit is reached, helping them understand that this is why they cannot upload more, and prompts the user to "get pro".



While this error (C) alerts the reader that something went wrong, it does not give a specific explanation what exactly went wrong. While the user recognizes that an error occured, they are not informed of the reason or how to recover.

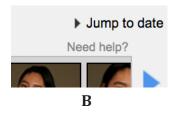
Recommendation: Ensure that all errors help the user diagnose what really went wrong and how to overcome the problem. Linking possible pages that the user might have wanted to access, or providing other help resources can give the user a direction to recovery.

10. HELP AND DOCUMENTATION

Rating: Good

While "it is better if the system can be used without documentation, it may be necessary to provide help and documentation". This information should be easy to find, central to the user's task, and efficiently list the steps to be carried out.



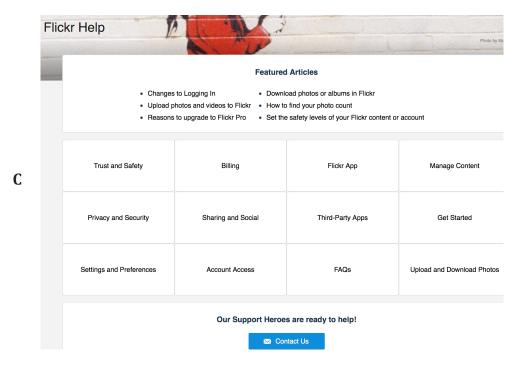


A

Flickr has a beginner guide to uploading photos (A) with contextually relevant and interactive documentation that directs the user to specific actions in a stepwise fashion.

However, specific and user centered help (A) is not always there. Most of the time, help buttons (B) link the user to Flickr's general help page/contact (C).

Recommendation: While the general help page is clearly organized and easy to navigate, complex tasks that new users might struggle with, are not as contextually helpful. Specific documentation rather than a general help page would be more user friendly.



SUMMARY

Heuristic	Rating
Visibility of system status	Good
Match between system and the real world	Good
User control and freedom	Poor
Consistency and standards	Poor
Error prevention	Excellent
Recognition rather than recall	Average
Flexibility and efficiency of use	Good
Aesthetic and minimalist design	Average
Help users recognize, diagnose, and recover from errors	Good
Help and documentation	Good

LIMITATIONS

Flickr is still a website in the midst of development– outdated layouts as mentioned in heuristic 8 seem to be in the process of being updated, which may explain why there are two "People" pages. Furthermore, the "Groups" page as of this evaluation is in "beta" mode, and was thus evaluated in a developing stage.

CONCLUSION

Through careful evaluation of Flickr's systems, Flickr overall does an proficient job when considering Neilsen's 10 usability heuristics. While it does a great job with user friendly error recognition and support, it lacks consistent aesthetic and operational qualities. Flickr fails to "keep the navigation consistent across all screens", and confusing icons and a lacking recognition system forces the user to learn new schemas to complete new tasks. In the end, these downfalls can inhibit a user's experience, and lead to an overall average performance with notable room for improvement.

⁹ Portman, Jane. "The Core Principles of UI Design." Inside Design Blog. February 16, 2016. Accessed March 25, 2019. https://www.invisionapp.com/inside-design/core-principles-of-ui-design/.

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