Eller College of Management
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*MIS 111 Freshman Honors Showcase*

*ThingLink*

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Executive summary

ThingLink is a website that creates the possibility of interactive photographs, a useful tool in the educational sector. Our project aims to identify the strengths of ThingLink, as well as to suggest its implementation within one or more classes at the University of Arizona. ThingLink has a creative tagging ability that enables the user to link bullets on the photo to external content through the use of hyperlinks. There are a variety of accounts, some of which are available only through the purchase of an upgrade, which enable users to create, view, and share your creations with the online world. There is no clear data that displays the amount of revenue this company intakes, but it was found that ThingLink has a small team of fourteen individuals based in Finland, though the company found its roots in Palo Alto, California in 2010 under Social Objects Oy. ThingLink is a primarily web-based site, though there are mobile applications available for both iOS and Android users, making the website that much more accessible. Although it can be used from a mobile device, ThingLink is best suited to a computer.

ThingLink is a product that can be used in multiple academic disciplines - we chose to target the physiology and psychology departments at the University of Arizona. Each of these lecture-based courses use a multitude of visuals, and thusly ThingLink would prove an efficient supplemental learning tool to streamline this content. A ThingLink image can serve as an electronic flash card, or study guide, or presentation base, making it the perfect tool to use in a classroom, or for pre- and post-class activities. And because ThingLink is visual, can incorporate videos, sounds, and text, and requires physical engagement from users, all learning styles and preferences are met. All types of learners would benefit from the innovative platform created by ThingLink.

After interviewing Dr. Julie Feldman, a professor of psychology, our group found that ThingLink, though still suitable as a supplement to an in-person lecture, is better suited to an online course, where instructors can simply post a link to a ThingLink picture and students have access. There are other accessibility questions, such as ease of access and ease of creation, two areas in which ThingLink is exceptional. A user must have internet access, and the website will walk you through exactly how to use the website, along with instructional videos to follow if the user so desires. It is a visual and auditory website, which could prove difficult for users with disabilities in either of these areas, which is a problem these users would face with many technologies. The best solution we came to would be to have another individual helping the disabled individuals understand the content of the interactive ThingLink image. ThingLink does not require any personal information except for an email and a password for login, nor do they require that you spend any money to use the site, although there are advantages to paying for an upgraded account.

ThingLink is an extremely user-friendly website that serves well in an educational environment as well as in a business environment. From account setup, to creation of an interactive picture, to browsing the site for other creative images, ThingLink is a tool for those interested in the technologies of today.
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**Introduction**

This project aims to provide an explanation of ThingLink’s product, to summarize and analyze the strategies employed by the company, and to determine how the product can be implemented within a classroom at the University of Arizona. Should the technology introduced in this plan be adopted, students and teachers alike can utilize the innovative technologies to improve comprehension of class materials and enhance learning – a single picture can be converted into an interactive learning experience. The website itself says: “Every image contains a story and ThingLink helps you tell your stories” (ThingLink). The subject matter of classes is often presented in PowerPoint or lecture formatting; the use of ThingLink would extend beyond the lecture environment and help students better understand the story being conveyed.

**Product assessment / overview**

What makes ThingLink unique is its innovative tagging platform, which allows users to create interactive images utilizing hyperlinks so that viewers can have an immersive and broad experience with the image. This is particularly useful in an educative forum, so teachers can create more engaging modes of education for their students. ThingLink is especially advantageous for students who are visual learners, because it makes an image - which is already stimulating for visual learners - become more interactive, and allows students to delve further into the information provided to them. Students can also use ThingLink to create presentations for their classmates, and share the images they’ve created as a study tool. Because of these and many other
benefits to educators and students, a primary target market for ThingLink is education. Other target markets for ThingLink include businesses. ThingLink is easily applied in a business context, like when it comes to creating engaging presentations to showcase your ideas or your project to co-workers and supervisors. Advertisers and publishers are also target markets for ThingLink. “Enrich editorial images, maps, collages, and infographics. Empower your advertising business with embedded videos and brand links inside ThingLink-powered ad units and native images. ThingLink is compatible with popular ad servers such as Flite and AdStream” (ThingLink).

ThingLink has different pricing structures for different types of users: for students and educators, the platform is free to use (with limitations). There is the option to upgrade to a “Premium Education” account, which is priced at $35 a month, a stark discount from the $208 a month for a regular “Premium” account with ThingLink. Here is a simple comparison of the different types of accounts available with ThingLink, and their respective costs:
A full comparison of the different plans is available here:

https://www.thinglink.com/business-options

It can be assumed that a significant portion of ThingLink’s revenue comes from membership fees for its various plans, but no amount of research could not reveal how much money ThingLink makes, or where its money comes from. There were no available financial statements other than one provided by Hoover.com, but it wasn’t reliable because it put ThingLink Oy’s Revenue at $0.064, and its net income at -$1.01 (Hoover). ThingLink is a private company, based in Helsinki, Finland with fourteen employees. It was developed in 2006 under Social Objects Oy, and incorporated in Palo Alto, California 2008, and after a closed test version, was launched in 2010.
When hyperlinks are added to an image, icons of the user’s choosing (and a wider variety of icons are available to premium plan users) can be moved around the image, and typically will be placed on the part of the image where the hyperlink’s information is relevant. ThingLink is predominantly website based, however it does have an app available to both iOS and Android users, making it accessible from many different platforms. However, for ease of use, it is recommended that the brunt of the work to develop an interactive image be done on a computer, not a smartphone, because it is faster to apply all the hyperlinks and place them in the desired positions.

**Proposed instructional activity**

ThingLink is a product that can be used across a wide variety of academic disciplines. Since ThingLink allows you to use your own information and represent it visually how you want, there are no limitations to what information can be used with ThingLink. The market that identified as best suited for a product like this is a physiology or psychology class. This market was selected because of the amount of information covered in courses like these. By incorporating ThingLink into a classroom such as physiology or psychology, the information can be concentrated into one source and can efficiently and effectively either be used for lectures, study guides, or just more practice.

ThingLink is a highly innovative product. The amount of information included is limited only by the amount of time spent creating a ThingLink. With so much freedom to express class content, ThingLink can be used at all instructional levels. Tailored towards online learning, professors could assign ThingLink as a study guide that they
themselves have created. Or professors could assign students to create their own
ThingLink as a way to study. Creation of a ThingLink is essentially the creation of one
giant electronic flash card with all of the information for class just one click away.

The purpose of ThingLink is to represent information gathered from class into
one easily accessible location. Teachers would grade student ThingLinks on the amount
of information covered, the accuracy of information covered, and creativity of how the
information was represented. By making this a student activity, students would
demonstrate their own understanding of the course material.

From an instructor's standpoint this is a great way to have students review for an
upcoming exam. Students that utilize ThingLink are incorporating all three types of
learning styles: auditory, visual, and kinesthetic. Each student has the ability to modify
his or her ThingLink to best represent their type of learning style. For example, if a
student is a visual learner, that student’s ThingLink would have visual connections to
the material that he or she chose. If the student was a kinesthetic learner, then that
student’s ThingLink would connect tangible examples with the class material. Each
learning style can be adapted to each students own ThingLink in order to best prepare
students for upcoming tests or exams.

As mentioned previously, certain courses that require students to retain a lot of
information such as physiology, psychology, chemistry, or even certain general
education classes are very good candidates for adapting ThingLink into the curriculum.
Adapting ThingLink in these classes would not require teachers to abandon their current
methods of teaching, but simply add an additional layer to the lesson plan.
Incorporating ThingLink into these courses would not only help students better learn the information, but it would allow for students to prove their knowledge of the material to the teacher. Students would be able to do this in a way that is best suited to their own learning styles and does not require added work on the teachers end.

Feasibility / design assessment

Professor Julie Feldman was interviewed, who teaches Psychology 150. Initially, our group targeted the lecture classes, namely Physiology and Psychology, because both use many pictures and charts to teach students, and are also used in the practice of both of these departments. Professor Feldman’s feedback was beneficial and generally positive, because she provided a new way for our group to look at the product. She suggested switching our focus from large lecture classes, where ThingLink is less likely to be adopted, to online classes, where the use of ThingLink as part of the curriculum and study materials is likely to ensue. She was interested in the technology, but not for her class, as she has already determined what she thinks is the best way to teach her Psychology 150 class. We still think this platform would strongly serve as supplementary material to a lecture class, but understand that it is better suited to an online course. ThingLink is especially marketable to educators seeking to provide their students with a modern technological approach to their studies.

Simply put, ThingLink is incredibly easy to access. The only necessary requirement is an internet connection. There is an application on Apple’s app store, and
the Google Play Store for Androids, for students who possibly do not have computer access, but do have smartphones.

ThingLink has been designed to create user friendly experiences for even the least internet savvy individuals. There are only three easy steps needed to create an image!

Before even creating a picture, ThingLink has video tutorials to help! These tutorials can help answer any questions users may have.

1) Upload image to the website
2) Begin adding tags and links to the picture

3) Once finished with the tags, save the image!
There is no cost to use ThingLink on a basic level, although there are costs for more advanced plans.

ThingLink allows users to have a 14-day trial period with a specific plan, and of course users may terminate that plan at any time if not satisfied.

The odds that ThingLink will suddenly shut down their app and website is next to none, however there are alternatives in case something goes horrifically wrong. The links attached to the photos can still be used to achieve the same educational goals whether the website exists or shuts down. The only difference is that instead of being embedded directly into the picture (as the use of ThingLink allows), the links used would have to be placed in a separate document or otherwise.

The only information ThingLink needs is sign-in information, which includes an email and password! No student information is necessary to use ThingLink unless the
student would like to use their university email to login to the website. If acquiring a Premium account, additional billing information would be needed as well. But for the basic account, users need only supply basic sign-in information.

As with many applications visual abilities are necessary for using the application properly. The premise of ThingLink is inherently visual representation of an idea or multiple ideas rolled into a single picture. Thus if someone had visual impairments this would make ThingLink hard to use unless they were helped by another individual who could explain the pictures and links.

ThingLink does not disclose personal information (Name, Phone Number, Address, etc.) to third parties, however they do store the data and use said data to improve their site using analytics analysis. Essentially ThingLink will never sell data, as they recognize their users’ privacy rights are incredibly important to both the individual and the company.

Next steps / future work

Based on the interview with Dr. Julie Feldman, our team discovered that this program is best suited for an online curriculum, where students often lack the interactivity of an in-person class; ThingLink can provide students with that sense of interactivity. By implementing this link-embedding platform into an online class, the students would benefit from the added element of hand-picked links and information specifically tailored for their specific class needs. In order to establish this product as a part of an online class, or any class for that matter, the first order of business would
have to be educating faculty on how to integrate ThingLink into their teaching regime, as well as how to use ThingLink in a productive and innovative way, so that they aren’t wasting their precious time. This could be accomplished by somehow providing short informational sessions for faculty to attend, where they can feel free to ask questions - whether about ThingLink’s website overall or the specific application to their class. It would be helpful to inform faculty about the capabilities of this technology, as well as expose them to the impact that it could have on the way students are able to learn within their class.

Conclusions

ThingLink is an innovative tagging platform that enables users to develop interactive images using hyperlinks, allowing viewers to have an in-depth experience with the image. This product is important because it replaces a typical hyperlink with an easy and innovative way to streamline the learning process by combining pictures or videos with aesthetically pleasing links. The idea behind ThingLink is that multiple hyperlinks can be condensed into one place, therefore allowing students to utilize it as a hub for information. ThingLink will improve instructional learning at the University of Arizona by allowing faculty to streamline links and display them in a more innovative way. This program appeals to a variety of learning styles and preferences and is therefore more engaging than a traditional list of hyperlinks. By pairing a link with an element from a picture or video, the student is taking an extra step to help them learn the content - an option that wasn’t available before.
Bibliography


Appendix

Summary of Faculty Interview / Feedback

Our group interviewed Dr. Julie Feldman of the Psychology Department. Dr. Feldman listened to the business pitch created for ThingLink, proceeded to ask a few questions, then supplied the group with feedback. The questions she asked were 1) can ThingLink be embedded onto a PowerPoint or other document? and 2) why use ThingLink instead of PowerPoint? Unfortunately, ThingLink images cannot be embedded into other documents; however, because the website is still young, there are hopes that this will become possible in the near future. To answer her second question, our group said that ThingLink, while it can be used in replacement, serves a stronger purpose as a supplemental tool.

Her feedback to our group was to suggest implementation in an online classroom rather than an in-person class. Many professors and instructors already have their class content created, and aren’t looking to add additional materials. For an online class, where interaction with instructors is limited to videos and postings, ThingLink provides a means of interaction with content. Dr. Feldman introduced this concept to our group, and it has become the basis for our target market. She told us that our group presented the information about our technology well, and that our business pitch was strong because it was quick and to-the-point. The interview with Dr. Feldman was very informative and useful for our project.