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# Strategic Audit of Proxibid

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Strategic Audit of Proxibid

An Undergraduate Honors Thesis  
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## **Abstract**

Proxibid is a platform for connecting buyers and sellers of high-value items. As part of their continued growth, they are running into issues with the categorization of their goods into their hierarchy since the classification of these items is becoming a monumental task that will become unreasonable for humans to do. They have dedicated employees to manually classify well over 10,000 incoming items into over 2000 categories every week. The bulk of those items come in the later half of the work week. This paper will focus on how to tackle this problem while remaining competitive and preventing future growth from overwhelming them. This is done by attempting to allocate company resources in the best way possible given internal and external factors through SWOT and PEST analysis.

**Key Words:** Strategic, Audit, Raikes, Proxibid

## Background

### Examining Relevant History and Building Context

Founded in 2001, Proxibid is a platform for connecting buyers and sellers of high-value items. Unlike Ebay, who focuses on allowing anyone to sell anything, Proxibid's niche is vetted, verified sellers selling rare, collectable, or otherwise valuable items. More than \$45 billion in inventory has passed through Proxibid's platform via live and timed auctions and buy now/make offer transactions. Proxibid's Marketplace supports 16 categories including heavy equipment; industrial machinery; real estate; fine art; antiques and collectibles, and more. Proxibid has their headquarters in Omaha, NE, offices in London, UK, and a remote development team in India. The Omaha office is the largest with about 150 employees. The company's Gross Merchandise Value (GMV) or the goods that flow through the company's platform have averaged more than \$5 billion per year, growing every year for the past five. The amount of which those goods sell online, in which they generate commissions and revenue from, has also increased in both nominal and percentage rate each year. Proxibid, being a privately held company, has not made exact finances public.

**Current Events:** Proxibid, as of January 2nd this year, announced its acquisition of Wavebid, the industry's leader in cloud-based auction management software. Proxibid and Wavebid have worked together since Wavebid's inception and wanted to strengthen their partnership by bringing the Wavebid team and product suite into the Proxibid platform. As a result of this acquisition, additional product development and customer support resources will be focused on further enhancing the Wavebid suite of products and customer experience. Wavebid will also serve as the foundation for seller tools functionality in Proxibid's Powered By offering, a solution which enables auction companies to leverage transaction, risk, payments, and inventory management technology within their own custom websites. (businesswire.com, 2019)

As of writing this, Proxibid also has an ongoing Design Studio project through the Raikes School, in an attempt to lighten the load on an important aspect of their services: the classification of their to-be-sold items.

## Internal Factors

### Assessing Strengths, Weaknesses, Opportunities and Threats

**Business Model:** Proxibid acts as a middleman for facilitating auctions. This can happen through two avenues: allowing users to sell online only, or by augmenting live auctions (such as estate sales, for example) by allowing users to place bids remotely. They provide innovative features to live auctions such as alerting the auctioneer when a online user is hovering over the “buy” button (letting the auctioneer know when to wait just a little longer before saying sold) and keeping track of what users are more likely to buy things based on having placed bids earlier. Proxibid takes a percentage of the sales that happen as a result of their services.

**Estimation of Finances:** While exact numbers cannot be determined since they don't make their finances public, it is known from an interview I conducted that the past year about \$5 Billion dollars worth of items have passed through their system. Assuming their percentage cut is between 5% and 10% (reasonable within the industry), gross revenue can be assumed to be between \$250 and \$500 Million. Proxibid, in total, employs over 200-300 employees worldwide (BusinessWire, 2019) which should account for a minor cost compared to even conservative estimates of their revenue. They don't have many offices, and only one remote team in India, so while building expenses won't be negligible necessarily, it can also be reasonably assumed they don't put a huge dent in the annual income.

**Current Issue:** Sorting items into Proxibid's hierarchy of 2000 categories is a job done almost entirely manually by an internal taxonomy team, whose job is almost entirely focused on this. Due to Proxibid's nature of supporting live auctions, which happen on a weekly schedule, there is a regular wave of un-classified, under-classified, or even mis-classified items on their website that can easily reach up to 11,000 in count. These items must all be classified before week's end by a team of about 5 workers. To aid in this monumental and ongoing task, there has been internal categorization tools developed (commonly called the "cat tool"), which collects all the items recently uploaded so that the taxonomy team may churn through the items sequentially and properly classify them. While this is currently working for them, this is not sustainable in the long term. Business is going well for Proxibid and with the recent acquisition they are clearly not making any efforts to slow down the amount of products they want to flow through their system. This indicates that the classification bottleneck will only become more exacerbated as time goes on.

This problem is important for several reasons: When a buyer uses Proxibid, they want and expect a streamlined experience for finding what they intend to buy, so leaving the classification without any intervention would not be an option. Especially since the average purchase price of an item on Proxibid is of higher value than on a platform like Ebay for example, care needs to be taken that items are easily accessible for buyers. A mis-classification would result in an expensive item not being shown to a buyer who might be interested, which would be a possible loss of sale, while also confusing another buyer interested in another category of goods that the item was classified into by mistake.

**Culture and Vision:** Proxibid's leadership has a strong "growth mindset," which they also look for in employees. While at first this seems obvious to want a business to grow, upon further

questioning growth doesn't just mean "expanding business and increasing sales" to the leadership there. To them, it means developing their employees to grow as people, learn new skills, and try to apply those skills to improve their offerings to gain an overall competitive advantage. They encourage employees to attend conferences, and give and observe talks on best practices. While any company can theoretically adopt this culture, there is a strong synergy between the seemingly great finances and the "growth mindset". If the company has the revenue to invest in its employees and to take risks in adopting new tech and trying to apply it in new experimental ways, failure is less of an issue, which allows for more meaningful innovation.

## External Factors

### Examining Political, Economic, Social, and Technological Influences

**Politically**, Proxibid's is not facing any special circumstances. Their primary competitors include Iron Planet, BidWrangler, or Sandhills Publishing partners like Auction Time, Auction Flex, Hi Bid, Bid Caller etc., all of whom operate under the same e-commerce laws that Proxibid would fall under. While implementing a sales tax on auctioned goods, for example, would do no favors to business online, it wouldn't hurt Proxibid comparatively.

**Economically**, Proxibid's tendency for high value goods is a double edged sword. A pro is that their user base would only visit the website expecting to spend a large amount of money. That kind of user-filtering happens naturally as a result of their niche in the marketplace. On the downside, collectables and expensive paraphernalia are luxury good that could easily be forsaken in an economic downturn, resulting in a hit on their revenue. Luckily, due to Proxibid dominant place in the auctioning of heavy machinery to farmers (a customer segment who relies heavily on auctions to acquire equipment they need in order to do their job), there will always be a segment of the market place they can rely on selling to.

**Socially**, Proxibid is subject to the trust of both their buyers and sellers. Reviews on SiteJabber have them rated at a 3.5/5 stars. These reviews include 98 5 star reviews and 57 1 star reviews with only 36 reviews in between. Based on this sample, it seems like they have a polarized user base but it should always be considered that unhappy people are more likely to review a company as bad than a happy user leaving a good review. In spite of that, they are at the mercy of their users so careful attention should be paid to their public image.

**Technologically**, great strides have been made in the field of image recognition, which can and has played a part in Proxibid solving their classification issue. Before their Raikes Design Studio project, Proxibid attempted to use independent contracting services from an external business to create image recognition software to automatically categorize their images without human input. This project ended up failing early, because the contractor deemed the problem too complex to achieve with technology at the time. The difference between then and now is a softening of the requirements (aiding humans instead of replacement) and applying new machine learning paradigms (Hierarchical Deep Convolutional Neural Networks). Regardless, the Design Studio project isn't a one time fix and will require ongoing efforts by Proxibid to maintain and improve to keep up with their own growth. At the time of writing it is clear that while the Design Studio efforts will deliver a product that works, it will not be the game changer they need to solve all their problems at the end of the allotted time. The project is set up to be able to match the goals, but the extra effort will need to happen on Proxibid's time.

## **Addressing the Issue**

A Framework for Selection, Examining Possible Solutions,  
Rationalizing the Choice, Implementation



**Framework for a Good Solution:** In the status quo, the method of solving the issue of classifying items does not allow the business to grow without significant drawbacks to how users could interact reliably with their website. A “good” solution should be able to scale with demand without sacrificing the user experience which might have been dodgy in the past as discussed earlier in this paper. Another qualification of a “good” solution is a solution that matches the ethos and the culture of the company. Proxibid’s “growth mindset” lends itself to a willingness to experiment, learn, and explore what might be pushing the limits a little. That being said, a “good” solution should be economically viable. Even though their finances as discussed seem excellent, this should not be a reason to spend money and time haphazardly.

**Option 1: Force users to classify their item upon uploading**

Proxibid already has a user interface in existence that would allow a seller to classify their items, this would not have to be created to make this solution work. The only change is forcing the users to do it.

**Option 2: Hire more Taxonomy employees in accordance to demand.**

The arguably obvious solution, it is always an option to expand the team doing the classification. They already have software to split up the work.

**Option 3: Continue developing the project started by Design Studio**

This option would involve adding the maintenance and further development of the software started by the design studio team to the current workload of their developers. In order to bring it to a state where it is able to keep up with demand.

**Option 4: Outsource development of a solution**

Have a dedicated team from a software contracting business create a dedicated solution, viewing the Design Studio project as a “Proof of Concept”. This would give the confidence that it would work while not requiring the same time investment by current proxibid employees.

**Choice:** I believe Option 3 to be the best fit, given the aforementioned criteria

**Rationale:** Option 1 is not ideal because it sacrifices too much of the user convenience that proxibid offers the users. It is frequently the case that the auctioneer using Proxibid’s service does not know enough about the item to make a proper classification. It is also the case that the auctioneer has 100’s of items up for auction and doesn’t have the time themselves to classify all the items even if they did know exactly what they all were. Option 1 would be a significant detriment to the user experience on proxibid and would inevitably lead to users leaving the platform.

Option 2 suffers on the sustainability criteria. It was evident from interacting with the taxonomy team that the images come in waves. Some days in the week are extremely busy, allowing them only enough time to shallowly classify them in the hierarchy, while early in the week their workload is manageable and they can afford to be more detailed. Hiring more people would be a blanket fix for a problem that varies greatly in severity across time. After implemented, Option 2 would leave many employees under occupied monday through wednesday, not having enough to do until thursday and friday. This wouldn’t be so bad if inevitably as the company grows they would need to repeat this again the next time they don’t have enough employees to make it through Thursday/Friday. Continuing use of Option 2 consistently has the labor either under or over allocated depending on what day it is.

Option 4 I would consider second best, but it loses to option 3 due to company values and culture. Option 4 would get them a product that solves the issue, but it wouldn’t improve the skills of current Proxibid employees, while simultaneously having a higher upfront cost.

Option 3 has drawbacks in the sense that it seems to meet many criteria of the “sunk cost” fallacy. While it’s good to be wary of it I don’t think it necessarily applies here. This is primarily because even in its current state, it provides value on the busy days where the Taxonomy team doesn’t have the time to deeply categorize the items. Sunk costs generally applies where the consideration is a detriment to the organization but they feel like they should use it because they already invested into it. In the Proxibid case, they could extract more value if they invest more effort into the project in the near future.

**Implementation:** Proxibid has already had ongoing contact with the Raikes Design Studio development team (called “The Vindicators” internally by Proxibid). However Option 3 really only takes effect after The Vindicators disband entirely. It will be up to Proxibid to invest the time and energy to further improve the foundation laid to extract the most value out of it. They have two options as far as implementation: Either invest in cloud computing temporarily to speed up the process of development on the project, or use existing proxibid machines over the course of months to achieve the same thing. Either options are valid, and either option has the other as a contingency plan if it proves to be suboptimal.

**Overall Contingency Plan:** If development doesn’t start soon after the official handoff, it’s easy for context to be lost which ultimately will cause the whole project to be abandoned. If this happens, a possible contingency plan would be Option 4 from above. Another option in that situation would be to have a Design Studio project in August continuing to work on development. This is relatively common since many project are simply too big in scope to finish in a year’s time. This plan would be slightly riskier while significantly cheaper than Option 4, while also allowing Proxibid’s employees to gain back some of the context and knowledge of the original project.

## Conclusion

Given the growth of the company, it was only a matter of time before the sheer number of items passing through their system would overwhelm their employees. In a way it's a good problem to have. The selected solution to their issue allows them to continue to invest in their employees, evening out the taxonomy workload during the week, without having to sacrifice the quality of life of their most active user.

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