

A COMPREHENSIVE REVIEW OF



Welcome to the first of what will hopefully be many Business Intelligence documents about the digital trading card game industry. I am Andrea Shubert, a twenty-year veteran of the games industry. I was a competitive player in Chron X, the original digital TCG, before I joined its team in its second year. Ever since, I've tried to play every single English-language game in the genre, and I try to take lessons from every game I play. This document is not unbiased – but I do aim to be fair. My opinions are my own. With that in mind, here are my thoughts on *SolForge*.

OVERVIEW

[SolForge](#) is a digital card game, released by [Stone Blade Entertainment](#) on August 13, 2013. Its first expansion, "Rise of the Forgeborn," was released on March 22, 2014. The game is available on PC, iOS, and Android. (The Android version was released just as this document was finalized and is not featured in this document.)

The game is a head-to-head creature battle set in an epic fantasy-meets-tech setting. The gameplay is light and quick; players' decisions matter but they will only have a couple of them to make each turn. You can play untimed (with notifications when it is your turn, on iOS) or timed (with 20-minute "chess clocks" for each person).

SolForge uses a free-to-play business model, but purchases are basically-required for serious tournament play. All cards acquired are tied to a player's account across all platforms, so you can buy on a PC and play on your iPad against other players, and vice-versa.

[There is a story to SolForge](#), about the world of Solis and the four factions that fight for sport these days (the technical *Alloyin*, fiery *Tempys*, earthy *Uterra*, and underworldly *Nekrium*). There is some concern about a foreboding evil lurking beneath the frozen ice... but really the story is basically irrelevant at this point. Players cannot impact it, and player actions don't feel like one is telling a story through play. Players aren't coming to SolForge for the creative aspects, in my opinion.

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GAMEPLAY

SolForge is turn-based, featuring creatures battling against each other in the tradition of *Yu-Gi-Oh* and *Magic the Gathering*. Unlike those games, where combat is very free-wheeling (with attacks, blocks, surprises, and spells midcombat), SolForge features a structured playspace. Creatures are played into one of five lanes, and each turn they will battle with the opponent's creature in that lane. If there isn't one there, they attack the opposing player instead. Players start at 100 Health; reduce your opponent to 0 and you win the game.

There are only two types of cards in SolForge:

- Creatures, which battle
- Spells, which impact creatures and players

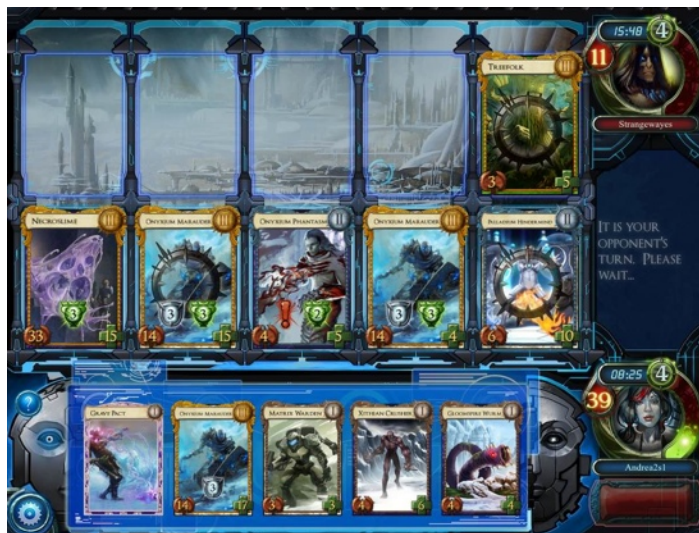
Creatures in this game feature much more permanence than in other TCGs:

- Damage on creatures doesn't go away each turn.
- Spells that boost stats and grant abilities are not "enchantments" or similar that can later be removed.
 - Compare to Magic the Gathering, where Creature Enchantments are extremely risky plays because of the destroy-two-cards-with-one-in-response problem. Since you can't play cards during your opponent's turn, you are certain to get at least *some* value out of your spell before the creature dies.
 - EXAMPLE: [Jet Pack](#) gives a combat bonus and some mobility. It looks like "equipment" but it really is just a spell in this game.

DECKBUILDING

Because there are no resource cards in this game, deck building is relatively easy at first. Pick cards you like that might go well together, and go. There are a few restrictions:

- The deck must contain exactly 30 cards, with no more than 3 copies of any one card.
- The deck can't have more than two factions (colors) of cards in the deck.
 - Since there are no land or energy cards in the game, this is the easiest way to enforce some separation of abilities and powers.
 - Generally, players play with 16 to 22 creatures and 8 to 14 spells.



GAME FLOW

At the start of the game, each player draws five cards. The turn sequence is pretty simple:

START

- “Start of turn” effects happen, including “defensive” creatures no longer being “defensive.”

MAIN - in any order

- You may play a card. (See “When You Play A Card”, below)
- You may play a second card, unless you are the first player and it is your first turn.
- You may use the “Activate” ability on any of your creatures, but not if they are “defensive.”
- Initiate Battle.
 - Each creature that is not “defensive” attacks the opposing creature in the same lane.
 - If a creature is attacked, it deals damage back to the opposing creature. (Even the defensive ones.)
 - Damage on creatures carries over from turn to turn, giving your small creatures a chance to whittle away at large opposing enemies.
 - If there isn’t one there, they attack the opposing player instead.

END

- “End of turn” effects happen.
- Discard your hand.
- Every fourth turn you “level up,” reshuffling your deck and discard pile into a new deck. (See below.)
- Draw five cards.
 - Because your deck is 30 cards and you see five cards a turn, you are very likely to see the cards you need during the course of the game.

WHEN YOU PLAY A CARD

If you play a creature, it starts “on the defensive.” That means it won’t attack when you or your opponent click the Battle button. However, if something attacks into it (for instance, an opponent’s creature played on a prior turn) then your creature will still fight back.

If you play a spell, you pay whatever costs and select whatever targets are necessary, then the spell’s effect happens. While there aren’t mana costs in SolForge, some powerful spells require something extra. (For instance, destroying one of your own creatures to destroy one of your opponent’s creatures.)

UPGRADE SYSTEM





After a card is played an upgraded version of that card is put into your discard pile. In this way, the cards you play early “level up” so when you draw them again on a future turn they will be stronger than before. This is a major innovation, something that gives a ton of gameplay depth and complexity while not requiring land cards or mana costs. (See “Card Keywords and Sample Cards” below for examples.)

SAMPLE GAMEPLAY

- [This video by Stone Blade Entertainment](#) shows the basics of gameplay. (3 minutes)
- [This video by a tournament player](#) shows a complex game. (20 minutes)

CARD KEYWORDS AND SAMPLE CARDS

There are seven keywords that quickly encapsulate many things that can be done to and with creatures. Every keyword is hotlinked for details during game play, but once you get the hang of it things all intermingle quickly and easily.

<p>Armor # prevents the first # damage each turn. Generally found on Alloyin creatures (Forge Guardian Beta) and directly countered by some Nekrium cards through their use of stat reduction.</p>	
<p>Mobility # allows a creature to move once during its owner's turn, turn up to # slots away. Generally found on Tempys (Everflame Phoenix) and Nekrium creatures (Soul Drinker). There are not any direct counters to mobility, other than playing creatures who can block and survive.</p>	
<p>Aggressive allows a creature to attack right away, skipping the Defensive state entirely. Generally found on Tempys creatures (Lightning Wyrms), and they usually don't have much health. A smart answer is to play with cards that spawn additional creatures, even small ones -- Uterra has many ways to do this.</p>	
<p>Regenerate # allows a creature to regain # health at the start of each turn. (Both players, including at the start of opponent's turns.) This ability is usually found on Uterra creatures, which also has ways to boost stats over time. Regen creatures are stopped by Nekrium, who has the ability to kill-on-any-damage (Blight Walker) or kill-with-spell (Dreadbolt, Cull the Weak, Death Current)</p>	

Breakthrough creatures ([Deepbranch Prowler](#)) deal damage to creatures that block them, and then deal damage to the player equal to the amount of extra damage. There aren't many direct counters to this strategy, other than playing creatures with lots of health (some of the Tempys ones) or cards that reduce power (Nekrium).



Poison # deals # damage to a creature at the start of each turn. (Importantly, regeneration happens first.) This is a negative-keyword, given to opponent's creatures through your card effects ([Cadaverous Thicket](#)). At first, this was a relatively-minor keyword as its effects are usually too slow to matter much, but there have been many cards released that key off of Poison ([Dissolve](#)).



Defender creatures ([Glacial Colossus](#)) never initiate combat. While they will battle an opposing creature that attacks it, it won't start that fight. This means it can't ever attack the opposing player, either. Defenders are not generally worth countering directly, though Tempys has the tools to do so. (And in draft, it is an effective strategy to give your opponent's creatures the Defender keyword with some cards, which then make those removal spells very efficient!)



SWOT ANALYSIS FOR GAMEPLAY

STRENGTHS

Smart play is rewarded, while not required to begin playing.

The basic structure of a turn is dead-simple. Play two cards, battle when you want, end the turn. However, knowing what to play and when to play it is discovered through play over time. Knowing when to put creatures in the way to fight -- and when to choose one card over another for its second- and third-level versions are key.

You see your whole deck.

Because you discard your hand and draw 5 cards every turn, and because you reshuffle every four turns, players will see 66% of their deck within the first four turns of the game and 96% of the deck within length of an average game (12 turns). While you see your whole deck throughout the game, you might not see the cards when you need them most...

Sideboarding happens while you play.

In many trading card games, players build a deck to play and an additional side deck called a "sideboard." Players swap cards between their main deck and sideboard between games in a tournament match. Sideboards allow players to have answers to deal with problematic cards in the game, while not diluting their main deck too much.

You can put a "counter card" into your deck to stop a strategy while not watering down your own plan. In theory, for a wider array of strategies to develop because players can bring counter cards to beat down the top decks while still pushing their own strategies. In practice, there weren't many cards in existence for this sort of metagame plan on the game's release... but they have been adding them over time.

Simple and intuitive keyword icon system.

Simple keywords used in interesting ways makes for creatures with small amounts of rules text hiding layers of complexity and depth.

Creatures attack every turn - the game feels fast.

Creatures battle. Other than the turn you play them and your opponent's turn after that, every creature attacks every turn. This game is about creatures battling, and there isn't much that happens away from that.

The combination of keywords and stats, and how they change per level, make for interesting designs.

Commons and uncommons (which this game calls "rare") are generally boring in most TCGs, mostly to keep complexity down for players' first experience. By adding the depth of levels and the breadth of the keywords, and with smart design in each of the four colors, there is a wide array of creatures to learn and explore without a large amount of work per card. Most TCGs do not manage to make so many things so interesting with so few moving parts.

WEAKNESSES

Not a lot of “game space.”

The strength of the creatures in the beginning also becomes a weakness in card design long term. There are creatures, and there are spells that impact those creatures. There are extremely few effects that go beyond that. There are a few cards that let you level up a card even though you haven't played it, and a few cards that make other cards “free” (i.e. you can play it as an additional card beyond your first two) -- but that's about it. In addition, you can't interact with your opponent's turn at all -- this is a weakness for “interactivity” (while also being a strength for “simplicity”). The game's limited scope is a potential problem in the medium- and long-term for development.

Winning usually happens by drawing and playing the highest-level cards the most.

While this is not all of it -- smart decisions and good deckbuilding both matter -- drawing and playing your level 2 and level 3 cards more than your opponent usually means you will win. Since you only see two-thirds of your deck each time you shuffle, and since you can't be assured of an even distribution of those higher-powered cards throughout the game, luck plays a large role in determining the outcome. Smartly, the luck is hidden behind very skill-intensive game design, but the luck is still very present.

This phenomenon is very present in their “draft” format. There are many cards, particularly spells, that mitigate the issues around underleveling. If you don't see them in your draft, you can't include them, and that makes the problem very present. [This article by Chad Ellis](#) describes the problem, and some ways to mitigate it.

OPPORTUNITIES

There are many potential inspirations for SolForge cards. Since the game mythos is unique yet familiar, and since the gameplay features progression in a way that mirrors that of good storytelling, almost any form of mass media could be used as an inspiration for SolForge cards. In fact, a skin of the game could be quickly created to work with existing IPs. (The initial design of Marvel Universe-SolForge almost writes itself.)

THREATS

None. (There are no external threats to gameplay, almost by definition.)

QUESTIONS TO ASK

Because of the nature of the gameplay, SolForge has the opportunity to track and query player behavior to determine game balance and favored card designs:

- Which cards, when played, have the highest chance of leading that player to victory?
- Which cards are included in decks but are played the least?
- What is the percentage chance that a card is played when it is drawn? (In other words, how often is it chosen to be played over other cards?)
- Which cards aren't played in constructed tournaments?
- Which cards are picked in a draft tournament but never (or rarely) played?
- What is the average turn a game ends per card? (For instance, in games with decks containing Dreadbolt, when does the game normally end? What about those with both Dreadbolt and Grimgaunt Predator?)

GAMEPLAY SCORE: B+

The core game design is outstanding, but its flaws do show up through repeated play. This game takes about two minutes to learn, which is an outstanding quality for a TCG to have. I believe that the “underleveling” problem is one that should be addressed through card design. It could also be addressed with rules changes to mitigate the damage of an underleveled hand. (Compare to “mulligans” in Magic when you have a bad opening hand. Something similar could happen for bad “level two” hands.)

BUSINESS MODEL

SolForge is a “free to play” strategy card game. Most of the standard f2p financial mechanics are present, but how they interact with the cards is interesting and novel but not fully realized.

First, a word about SolForge’s use of the word “Rare.” The cards they call “Rare” are not actually rare. Using a scale similar to those found in the twenty-year history of trading card games, they are more properly called *uncommon*. This document will use their words, but I will draw the distinction when necessary. SolForge is not the only game to do this; Hearthstone uses the word “Rare” in place of “Uncommon” as well.

Card Rarity Structure

Common	“Rare”	Heroic	Legendary	
68	40	44	32	Set 1 on release
8	8	4	4	Set 1 “Tarsus” Update
76	48	48	36	Set 1 final
35	28	20	12	Set 2 on release
8	4	4	4	Set 2.1
43	32	24	16	Set 2 as of June 2014

There has been a lot of work done to reverse-engineer the rarity structure of SolForge, since SBE doesn’t publish the rate at which each rarity will appear in a pack. The exact breakdown of the rarity structure and its financial implications are beyond the scope of this document -- indeed, it would be its own 20-page report! Here are some highlights from the community’s work:

SolForge user **jermbug** has a [fantastic spreadsheet](#) filled with information about his collection and card acquisition. From his data, he describes several rates of booster pack odds:

Common	“Rare”	Heroic	Legendary
71.3%	23.3%	4.5%	0.8%

Assuming that Heroic is 5% and Legendary is 1% (which is giving the benefit of the doubt to SBE in terms of this match), it would take 5200 packs to get one of each Legendary or 15600 packs for a complete playset. Since a pack costs \$0.71 on average (see below), a complete playset of the first two sets would cost over \$11,000 if paid in cash alone. Of course, due to login bonuses prizes for tournament play, and the ability to get cards using silver, I assume no one has chosen to pay five-digits just so they can build every possible deck.

There is another [“pack tracker” spreadsheet](#) that has been posted by another member in the community, with similar results.

Resource Units

Gold is purchased with real money, either through in-app purchases through Steam (for PC) or the App Store (iOS). You can also purchase through the game's website. Prices are identical across platforms, and anything you buy on one platform is accessible through the others.

Silver is earned through login daily bonuses, and for winning games. With the exception of a special two-week event in May 2014, it cannot be purchased. Silver is also earned through “deconstructing” (selling) cards through the “forging system.”

Event Tickets are purchased with gold or silver, and are required for entry into tournaments. In addition to buying them, players earn an event ticket through their first online win each day.

Resource Units Analysis

This is a simple system. Unfortunately, the real-money-to-gold calculation is needlessly complex. Purchasing them for \$5, you get about 260 gold per dollar. If you spend \$100, you get 300 gold per dollar. Based on how they price their items, it appears they are treating the average gold to be worth 280 per dollar. This was likely done to follow the “obfuscation leads to incorrect choices” model of f2p monetization, but this seems like a relic of 2011 product design.

Items For Sale

Event Tickets are used for events. They can be purchased with gold and silver, and are also earned by logging in and winning an online game (once each day). One ticket costs 30000 silver or 200 gold (about \$0.71), while a bundle of 10 can be had for 1800 gold (\$6.45)

Booster Packs contain randomized collections of cards. There are several different types of packs available, some of which can only be won in events. The default booster, which current contains cards from both sets, costs 5000 silver or 200 gold (\$0.71). The Rise of the Forgeborn booster cannot be purchased with Silver, and costs 560 Gold (\$2).



Figure 1: Event Tickets being used

Skins change the look of the game interface. These are purchased with 15000 Silver or 280 Gold (\$1). Unlike “skins” in many games (like League of Legends), these purchases only impact what the purchaser sees. This doesn’t change anything their opponent sees.

Decks help players get started by providing a deck (rather than requiring players to build a deck to begin). These cost 3600 Gold (\$12.85) and in my opinion are not a good value at all.

Chests are “super boosters.” The Legendary Chest (2500 Gold - \$8.90) contains 10 cards including 1 Legendary, 3 Heroic and 3 Rare cards. Interestingly there is a Rise of the Forgeborn chest for only 1750 Gold (\$6.25) -- usually the Rise content is sold at a premium.

Single Cards are also sold. There is a “card of the day” available for some gold; these are usually not a good value. They also sell Alternate-Art cards, which are also gold-only and give the player a chance to show off their “bling.” Their prices vary and seem to be based on their rarity. You can also purchase (“forge”) cards using Silver from inside the Deck Builder.

Items For Sale Analysis

SolForge goes beyond the simple “cards and decks” that most digital TCGs offer. The only improvement I would suggest is a way for users to express themselves through purchases, either by making their battlefield skins appear to their opponents (maybe just on their side of the screen) or by giving user the ability to enhance / upgrade their player profile picture and frame.

Forging (the thing SolForge does that isn’t trading)



Figure 2: Using the forging feature in the deck builder

It is difficult to call SolForge a trading card game, because you literally cannot trade the cards between players. You can “deconstruct” cards, deleting them from your account, in exchange for silver. You can turn around and use that silver in the store, or in the deck builder to acquire (“forge”) individual cards. In theory, this is a nifty way to bridge the gap between “having no way to get individual cards” and “letting players create a marketplace through trades.” In practice, there are many problems with the feature.

Exchange Rates

The rates of return for selling cards for silver and turning that around into new cards is very, very painful. Obviously trading at a rate of one to one would be too generous, but the chart on the next page shows how cost-prohibitive this system is...

Rarity	Silver from selling	Silver cost to buy	Ratio
Common	5	150	1:30
Rare (uncommon)	50	1400	1:28
Heroic (actually rare)	3550	32500	1:9.15
Legendary (very rare)	32500	142500	1:4.38

The rates for the common and uncommon (“rare”) are mostly ignorable -- players get a couple of thousand silver each day by logging in and winning games online. Trading four *legendaries* for one new one is very steep -- and that steepness is compounded by the fact that you are not allowed to deconstruct a card until you own at least four copies of it.

Can’t Sell Until You Have Four

You must have more than the maximum amount you need for a deck (a “play set”) before you are allowed to cash any in. This is a strange decision -- if I don’t want them, I don’t want any of them. Obviously being able to sell “my extras” is a common, and useful, aspect of trading card games. But by forcing me to keep cards I don’t want I feel like SolForge is going out of its way to make it more expensive to create the decks I want to build. Is this good business? I doubt it, though obviously they have the numbers to see. No trading card game has ever worked like this before, and my instinct tells me the money lost by the number of customers turned away by this decision is greater than the money gained by making them wait.

Can’t Easily Sell Your Extras

There is no way to sell (“deconstruct”) all of your extras at once. You need to go into each individual card to do this. With hundreds of commons and uncommons (“rares”), this is a chore. And to do this after each drafting session is an additional chore.

Some Cards Are “Account-Bound” In Nonobvious Fashion

There are other aspects that do not make obvious sense: “Account-Bound” is not adequately explained in the app at all. You need to poke around on the website to learn that cards you get through drafting are “Account-Bound” if you get them through drafts paid for by event tickets which you earned through logging in (and not purchasing). Is that clear? It... really isn’t clear at all. There is no distinction between “gold tickets” (purchased with money) and “silver tickets” (earned through play). This is just some background accounting that Stoneblade is doing, and exposing just a small piece of it through the user interface.

And does any of that Account-Bound stuff matter right now? Not really -- it only will matter once trading comes to the game, and while that is scheduled for later this year there are never any guarantees.

Players Are Made To Wait To Forge Cards From New Sets

Players were not allowed to forge cards from the Forgeborn set until about seven weeks after the set had debuted. This meant that players could only get the individual cards they needed by opening packs and/or through their draft format. This made certain high-rarity cards nearly impossible to get without spending large piles of actual money, thereby heightening the “constructed is for big spenders only” problem.

Forging Analysis:

The entire forging system appears to have been added in as a reaction to Hearthstone’s forging system. It has many deficiencies in its implementation and its monetization model. The fact that it exists at all is a good thing, but it feels like SBE is leaving lots on the table.

SWOT ANALYSIS FOR BUSINESS MODEL

STRENGTHS

Entry into the system is free and easy.

The client costs \$0, and players can get some cards just through playing.

Many varied options for purchases.

This part of the business model should inspire other products' designs. I think it can even still have more options (see "Weaknesses").

Purchases are tied to a player and not to a platform.

I have purchased through Steam at my desktop, and have played with the same decks and cards on my iPad. Compared to *Magic Online* and its complete disconnect from *Duels of the Planeswalkers*, SolForge gets this right.

There is a system to acquire individual cards.

The forging system has many flaws, in my opinion, but it is better than nothing.

Players have the ability to spend a lot of money.

Epic-spenders have a large collection of cards to collect, and new expansion releases makes this an unending quest for some.

"One free draft each week" gives people incentive to keep logging in and to try out the draft format.

By giving an event ticket for a user's first online win, users are incentivized to return each day and play. If they do this for a week, they have enough to play in the draft format. It is a way for zero-spenders to be competitive in a format that does not reward owning a large collection.

Draft is also a great way for users to play with cards they don't already own. Once I drafted my first [Grimgaunt Predator](#) I knew I wanted to build a serious Nekrium-based constructed deck...

WEAKNESSES

The costs of making a competitive deck are immense.

There is a fair amount of chatter about this problem on the game's forums, and it is surprising that this has not been addressed. Adding the forging system helps, but it isn't enough -- and it absolutely is not enough given the way forging has been hamstrung.

Forging is hamstrung.

I detailed the limitations around forging earlier in this section. It would be difficult for me to envision more restrictions and complexities for what should be a relatively-simple system.

There are large gaps in the process for converting a zero-spender into a dedicated player and customer.

There are no constructed formats that reward players for spending \$10, for instance. While you can spend money to draft more often, this does nothing to address those who are not good at (or do not enjoy) drafting. SBE should investigate and implement formats that are geared towards those who cannot (or will not) spend \$100 or more. Examples:

- a "Unheroic" format without expensive cards (meaning: no "Legendary" or "Heroic" cards).
- a "Champion" format with a limited number of expensive cards
- a "Salary Cap" format where players have 50 points to spend on cards in their decks, with commons costing 0, "rares" costing 1, Heroics costing 3 and Legendaries costing 7. (Those numbers are untested, of course.)

The store does not react to the user's performance.

Many social games give financial incentives to those who are about to leave to stick around a little bit longer. SolForge can do this. For instance, when a user goes 0-4 or 1-3 in a draft, SBE can give them the option to enter again for only 5 tickets right away (instead of taking a consolation prize).

Users cannot express themselves through purchases.

There is no way for the user to purchase anything, other than alternate-art cards, that allow them to express themselves such that other players can see. Most free-to-play games release ways for users to express themselves through purchases, and release new options often.

OPPORTUNITIES

SolForge's engine could be the basis of several licensed card games.

As I mentioned in the Gameplay section, I feel there is a business opportunity for SBE with this engine. Almost any IP with large action and dramatic effects -- comic books and the like -- could lend itself to a quickly-developed game.

THREATS

Among digital TCGs, Hearthstone's business model is much more attractive (for hardcore play).

Blizzard's TCG based on World of Warcraft, Hearthstone, is relatively-inexpensive to play. Players can earn a free arena play (similar to a "draft") about once every three days, as opposed to once per seven in SolForge. The cards are also relatively cheaper and the highest rarity does not seem to be as difficult to obtain either in packs or through forging. Blizzard can afford to not make as much money on their product as SBE must, as SBE is a tiny company in comparison. Still, this is a major threat that can't be ignored.

Among digital strategy card games, *Duels of the Planeswalkers* is a better value (for casual play).

If you are going to spend \$10 on a digital card game, you would get much more value out of the *Magic* iPad app than you would out of SolForge. *Duels of the Planeswalkers* is a complete game (which can be expanded) while in SolForge a \$10 purchase is only the beginning. While digital Magic products have stumbled over the past decade, *Duels* still stands out as the better value.

QUESTIONS TO ASK

The standard questions about revenue (ARPU, ARPPU and similar) and user acquisition, conversion, and retention (MAU, DAU, and similar) should be asked. There are specific questions that are SolForge-specific:

- If a user receives a Legendary in a booster, are they statistically more-likely to buy more?
- If a user doesn't receive a Legendary in their first 1-3-5-10-20 boosters, are they more-likely to quit and never spend again? (Or never return again?)
- Are rarities ever skewed on purpose? (Meaning: players are certain to see a Legendary in their first 4 packs, for instance.) If so, why, and does that have an impact on player retention and/or spending?

BUSINESS MODEL SCORE: C-

There are too many ways for people to fall "out of love" with the game as a result of the business model. While the gameplay is quick, fast, clean, and easily-understood, the business model is almost the opposite of that. I don't have access to SBE's numbers, but it really feels like most players either spend a ton or nothing at all. While "whales" can drive a product, TCGs that survive only on the whales do not tend to last. Will that be different in digital trading card games? The jury is still out.

The reason I give a C- instead of a D is hope. There are many players that hope to see a change, and there have been some changes over the past six months. (Tickets were never given away initially. Forging didn't exist at launch.) The fact that there are still many players that are waiting and even more that would return if given a reason to do so gives this game a chance to thrive.

SOFTWARE and USER INTERFACE

MAIN SCREEN



Figure 3: The main screen on iOS.

There are many aspects to this screen that appear to have been haphazardly-placed. The indication that you are “online” looks like it was placed as an afterthought, as does the question mark in the upper-left corner. (That button gives an overlay of the entire screen, showing you what each part of the interface does.)

My largest concern for this screen is that most buttons do not respond like buttons normally do on iOS - with a “touched” state and some visual cue to show that I’ve touched it. This is particularly noticeable when the app first begins, seemingly with some race condition between me wanting to start a game and the server sending existing data to the client.

Notably missing is any way for SBE to communicate to its users. There isn't even a list of articles on the website, nevermind a real, curated “front page” main menu. There are many interesting articles and discussions, tournaments, and sales that happen that are easily missed unless one already knows where to look.

PLAY

By default, the Main Menu starts in the Play menu. Options that appear to the right show the games you are playing and it contains an option to start a game. The flow of actually starting a game involves several steps that aren't intuitive; the header at the top becomes a "start button" even though it doesn't look like any other button in the app.

STORE



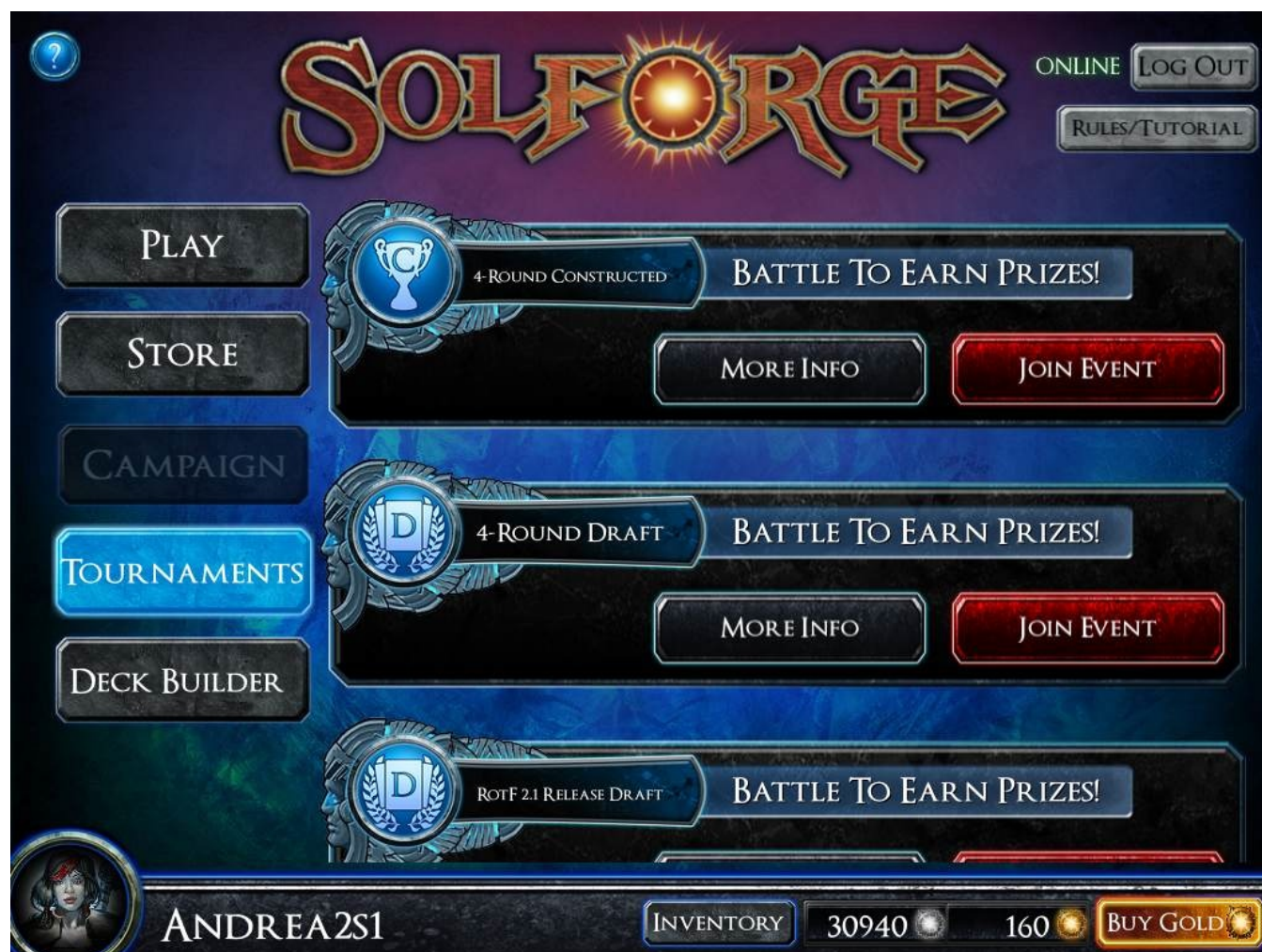
The Store also takes place in the Main Menu and not in its own separate page. While this makes checking today's deals pretty quick, it does mean that the store needs to only take the same amount of space as the Play menu does. I believe this is a major mistake for several reasons: mainly, it makes the store look like an unsorted mess.

The store has several things to purchase -- packs, chests, decks, event tickets, alternate art cards, playmats -- but they are presented in one seemingly-unsorted list. As an example, the default booster pack appears near the top, while the Forgeborn boosters appear much later, after several unrelated options. Even if the Store wasn't its own screen, it would still make sense to have the various items appear in a sorted fashion, ideally with quickly-accessible shortcuts for each option.

INVENTORY

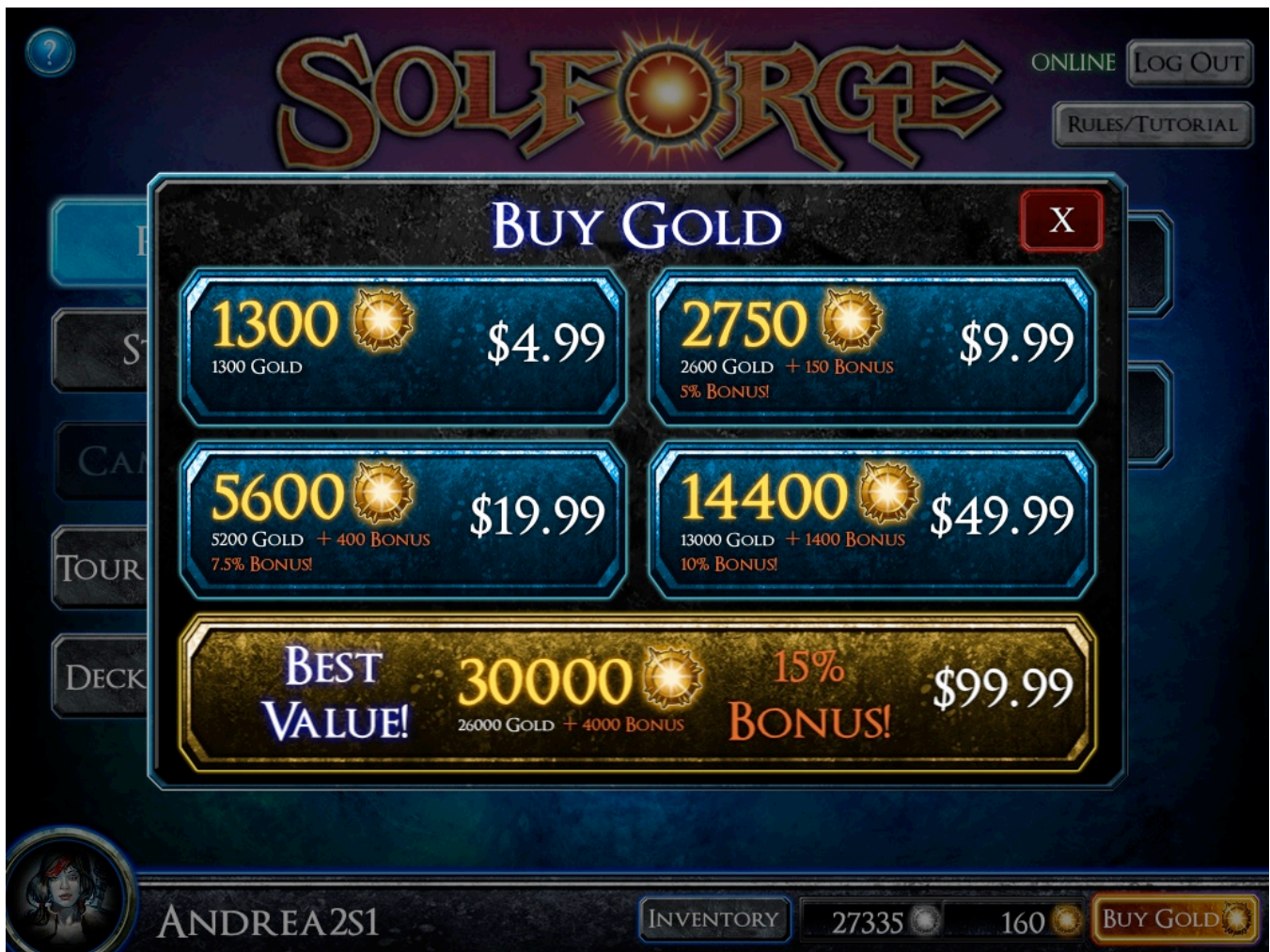
Inventory is related to the Store. It contains a list of everything you've purchased and have unlocked for your account that you haven't used up. (Your "deck slots" and "skins" last forever, while your boosters are obviously there waiting to be opened and turned into cards.) Not much to do here; it does its job well.

TOURNAMENTS



The tournaments screen is outstanding. It shows the events you have entered and can enter, their prizes and costs, and your current standings in each in one simple intuitive interface. (Details about the Tournaments are found in the Organized Play chapter.)

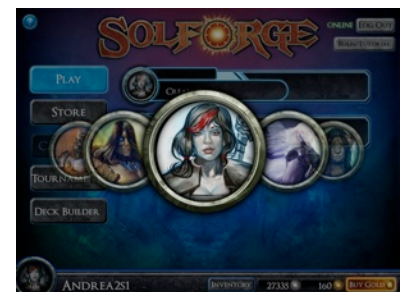
BUY GOLD



Gold is the main currency for purchases. The prices for gold are identical across platforms, and the bonuses are also identical. Unlike the Store, which appears very disorganized, the Buy Gold popup appears hand-crafted and gets it all right. It shows the amount of gold you are getting, the bonuses you get for higher purchases (including a percentage bonus too -- a smart addition). It makes the biggest button the most-expensive purchase, and highlights it with a “Best Value!” bit of text added in. What happens when you click or tap depends on the platform - on iOS you get the standard In-App Purchases popup, on Windows you are taken to the Steam Store.

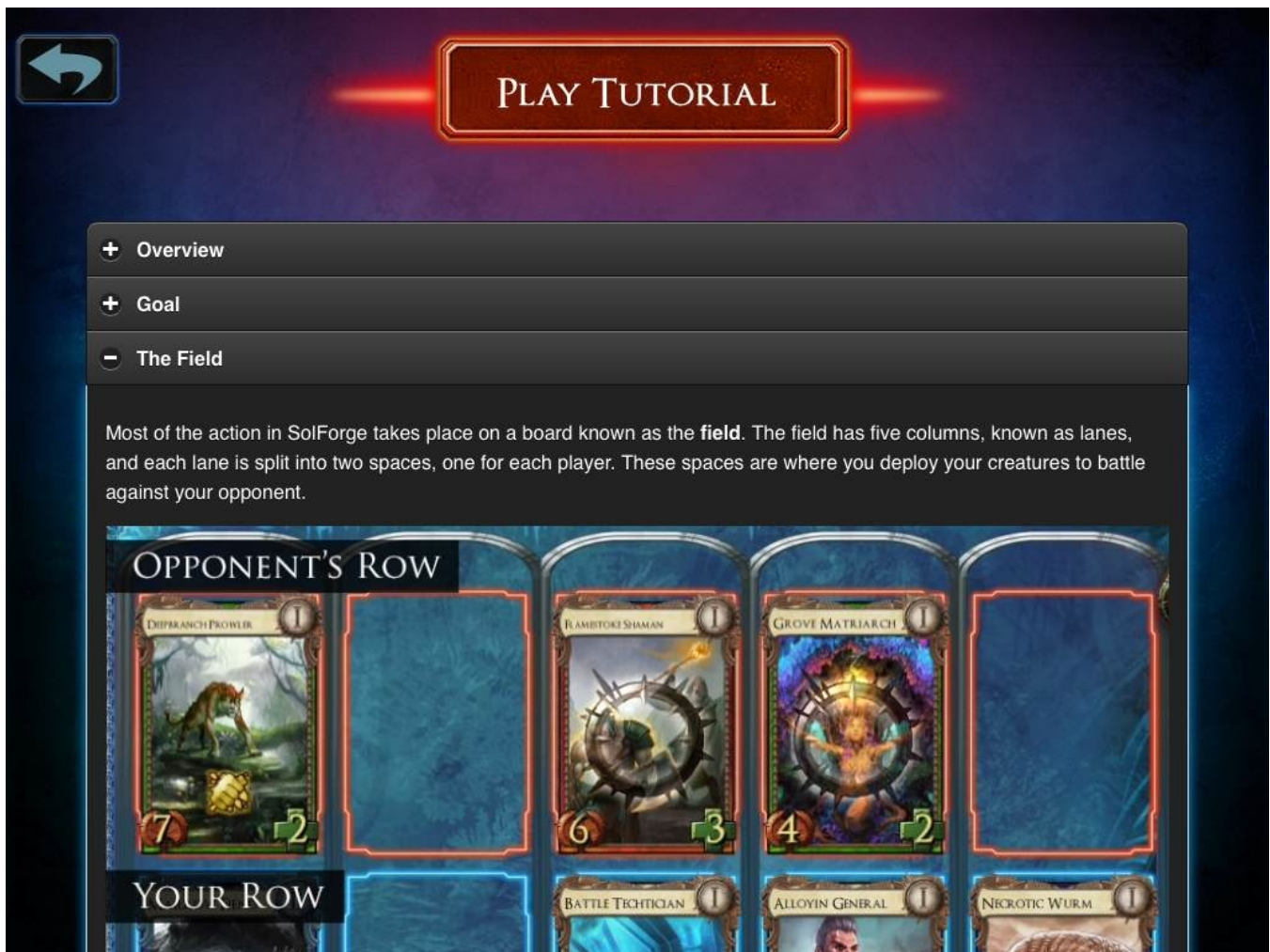
USER ICON

Tapping the user icon in the lower-left corner brings up an overlay of several icons to choose from. However, unlike many other similar popups, this one neither has an “X” to close it nor can you close it by tapping away from the icons. You must always choose an icon to dismiss this overlay, and that is counter-intuitive.



Also, scrolling between icons on iOS is counter-intuitive: swiping to the left or right will scroll the list exactly one icon, regardless as to how far you scroll with your finger. It treats this list as if they were pages in a book to be flipped through, but the visual metaphor does not indicate that sort of user action at all.

TUTORIAL



The bottom part of the screen is similar to the how-to-play section of the SolForge website. The “Play Tutorial” button on the top of the screen isn’t obvious that it is a button, in my opinion. Tapping or clicking it will take you into the game with a popup-driven tutorial game. My complaint about the size of the popups apply here. They are all too small and use too-small of a font.

DECK BUILDER

QTY	NAME	FACTION	RARITY	ATK	HLTH	TEXT	
8	SWAMPMOSS LURKER	UTERRA		8	4		ADD 1
4	BYZERAK DRAKE	NEKRIUM		4	6	REGENERATE 1 ALLIED TEMPYS - MOBILITY L...	ADD 1
6	CONTAGION SURGE	NEKRIUM				TARGET CREATURE GETS -1 ATTACK AND -1 HEALTH...	ADD 1
8	GRAVE GHOST	NEKRIUM		7	4		ADD 1
3	LIGHTBRINGER CLERIC	UTERRA		5	5	AT THE START OF YOUR TURN, YOU GET +1 TO +4 HEALTH...	ADD 1
15	LIGHTNING SPARK	TEMPYS				DEAL 5 DAMAGE TO TARGET CREATURE OR PLAYER....	ADD 1

NEW LOAD SAVE U/N Teppin control 3 DECK COUNT: 29/30

The deck builder interface is critical to get correct, and it is the most-difficult. SolForge does a decent job overcoming the iPad's limitations, but does so at the expense of having a very cramped interface. The interface seems overly tied to the Magic Online model of deckbuilding. The current UI conceit for complex menus is to hide them in a side menu under a "hamburger" icon, and I can imagine a major improvement from moving the menu to the side.

The interface for the PC version has even fewer options than the iPad version, which is something of a shock. I can't toggle the card levels, which makes deck building with cards I don't have memorized a bit more difficult.

FORGING

The forging system is accessed through the deck builder, which only makes sense if you have played Heartstone. There is no way to "find" forging in the app at all, other than double-tapping on a card. On a PC, you single-click instead. These differences don't make any sense to me - if you are going to have a different input sequence for the PC, why not use the right-click?

There should be main-menu access to a feature to quickly forge and construct cards. The feature, as it is currently implemented, is barely functional.

GAMEPLAY SCREEN

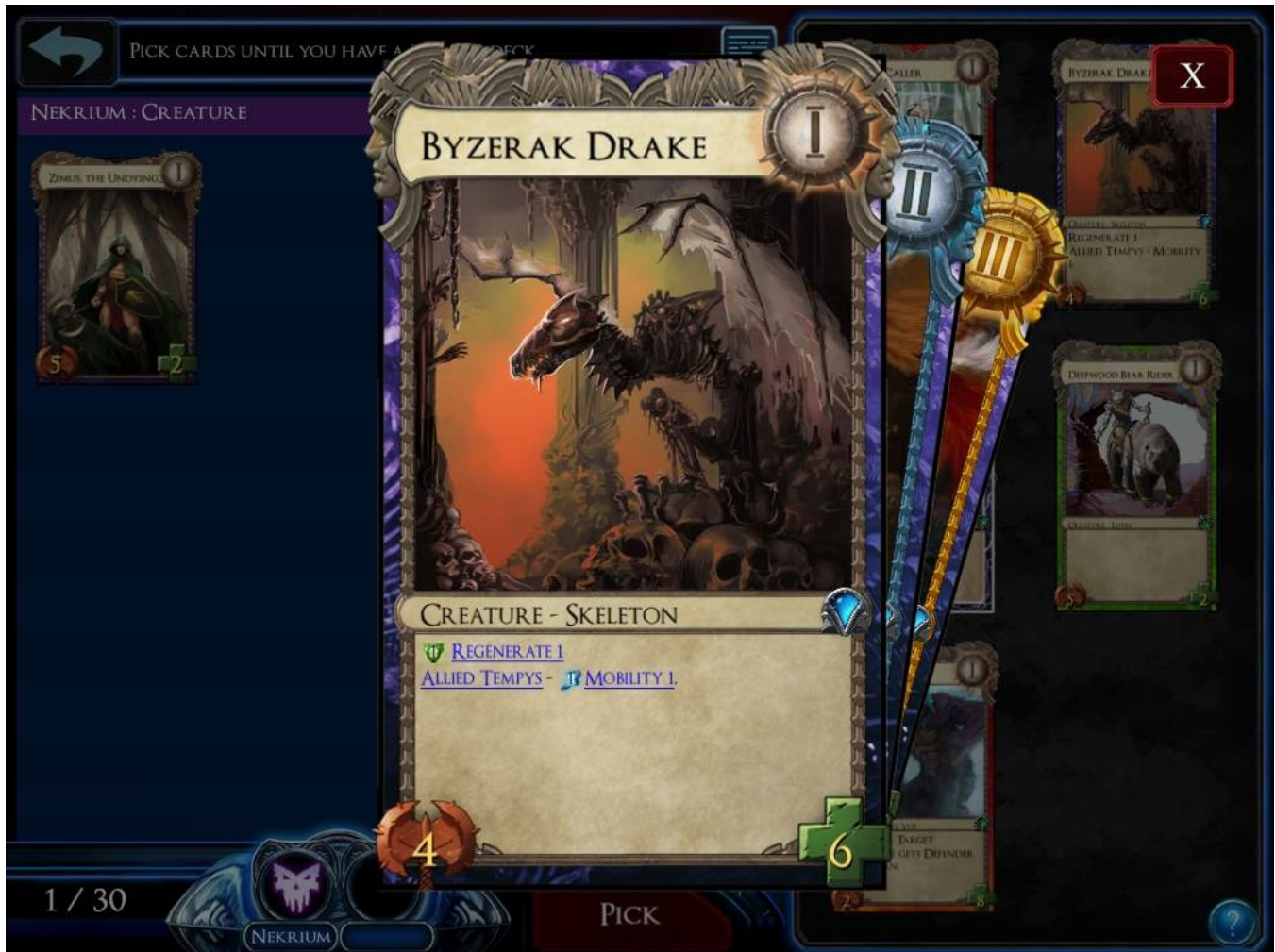


The gameplay screen is very economical in its layout, giving high priority to the cards and the battlefield, but this comes at the expense of hiding key features.

This screenshot shows an advanced game state. I have five creatures in play, each with their own effects. Armor looks like a shield, regeneration is the green circled-triangle, the red exclamation point indicates a special ability. The large SolForge symbol on the two creatures on the right side of the screen indicates that those creatures are on the Defensive, and won't fight this turn. On the bottom of the screen is my hand of cards. On the right is my hit points (39, which means I am in trouble but winning anyways) and my player level (4, which means I can play cards of level 4 or below).

The question mark brings up an overlay describing what things do on the screen. I don't see this as a useful feature beyond its first or second use; I'd rather a dedicated "game log" button was there instead. The "gear" button in the lower-left of the screen brings up a settings menu and a link to the game log. The gear is flavorful but it barely looks like a button to click or tap.

DRAFTING



Draft tournaments are a great test of skill with an emphasis on someone's ability to assemble a great deck through strategic choices, rather than through acquiring the cards for a deck from the store. Players select one of the cards from the right and drag it or double-click it to add it to their draft deck. Those six cards disappear and are replaced with five new ones. Repeat until you have drafted five cards, and then a new collection of six cards to pick appear. Repeat until you have a deck of 30 cards, then you go into tournament games. The interface for drafting is a bit plain but it gets the job done.

SWOT ANALYSIS FOR USER INTERFACE

STRENGTHS

The gameplay interface is outstanding for new users.

If there is a card you can play, it is highlighted. When you click or tap it, the valid targets become highlighted instead. Multi-target spells work intuitively. Everything is explained using only a few words. And when you might possibly make a mistake (such as, destroying your own creature with a spell) the game asks if you are "absolutely sure you want to hit your own creature with a negative effect?" For the new-user experience, the gameplay interface is the very best in the industry right now.

The top level of the menu structure is clean and obvious.

There are several options from the main menu, with large buttons that are easy to find and click or tap.

The user interface has a consistent, unique, approachable style.

Most of the buttons have a "SolForge" feel to them. The few exceptions really stick out, however. Overall the interface feels consistent... as if you were using some software from within that world, while still able to find what you want in this one.

WEAKNESSES

There is no "News" screen.

The lack of communication between the players and SBE from within the app is a critical mistake, one that can easily get fixed in an upcoming version. There is a lot of time and money being spent on content and promotions that are certainly being missed by many players because of this missing feature.

The game-start process sticks out as a sloppy design.

Creating a game involves clicking several things in several positions on the screen, with no flow from one button to the next. In addition, many labels look like buttons, and many buttons are improperly aligned. This problem isn't likely to cost SBE too many customers or too much money, but it is possibly hurting them in the conversion of trial users into dedicated users. (Once you are a dedicated user, this problem is probably ignorable.)

Many advanced aspects of the gameplay interface are buried.

Of particular note is the Log feature. It is sometimes critically important to know which cards have been played while you were away or in another match. To find this, you need to click a gear in the lower-left corner of the screen, then click the Log button, then scroll down to the last turn, then after you are done you need to exit the log, then exit the settings screen. Too many taps or click to do a simple thing.

The deck builder interface is very cluttered.

Hearthstone does a remarkable job maximizing available screen space. While I wouldn't advocate copying its deck building screen, there are important lessons to take from it. Namely - if a card is in a deck, it is assumed the player knows what the card is (and therefore that can take less space on the screen).

OPPORTUNITIES

n/a

THREATS

SolForge is no longer the only iPad-focused digital TCG. Hearthstone has shipped with a great launch, and others are on the way. What was “good enough” last year will seem tired next year (look at *Magic Online* and compare it to almost any digital TCG for PC since its release)...

QUESTIONS TO ASK

Heat map tracking of player taps and clicks can be implemented to determine which aspects of the interfaces are used the least and the most. The results should guide future development.

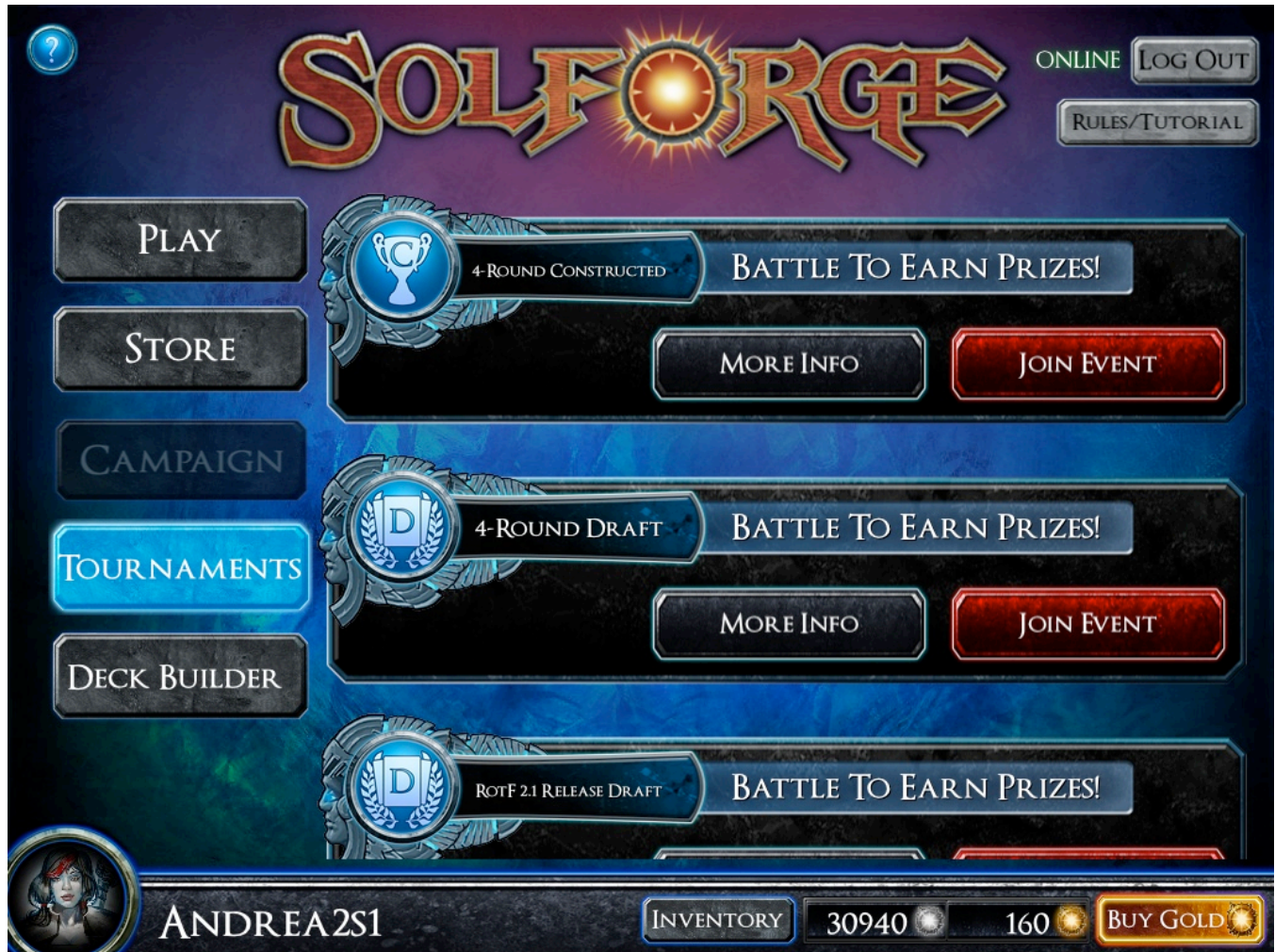
INTERFACE SCORE: C+ (windows), C (ipad)

The Windows version gets a slight bump for interface buttons that are more responsive to clicks than the iPad version is to touches, especially in the main menu.

ORGANIZED PLAY

SolForge has a fantastic screen for their tournaments, but their organized play structure is lacking several key components. Lets start with what they have implemented, which is great stuff.

ON-DEMAND TOURNAMENTS



The interface for joining tournaments is clean and simple. You can join a Constructed tournament or a “Draft” tournament. Constructed events cost 3 tickets, “draft” costs 7 tickets; both events have four rounds. A record of 3-1 will give you your entry fee back plus a prize, going 4-0 will give you even more tickets than you used to enter AND a larger prize. No matter what, you will win something -- even a 0-4 record gets you a booster pack to keep. In a nifty innovation, you can play each round of the tournament whenever you like, and the system will *generally* pair you with players with the same win-loss record. All tournament games are played with a 20-minutes-per-player chess clock.

Constructed

Constructed tournaments are relatively straightforward. Build a deck, play against other people, play four times, better record means better prizes. Unlike *Magic Online*, there is only one queue for Constructed tournaments, with one format, price structure, and prize structure. While this is easy to understand and lends itself to a fantastic-looking interface, it does cause problems for newer players in my experience.

There are no “low-level” Constructed event with low entry fees and low prizes. This means that it really is incorrect for players to even attempt Constructed tournaments unless they have a “high value” deck with many expensive cards. I think they game could add a “Common and Rares” only format (again, “Rares” in SolForge are uncommons and easy to get), charge silver to enter, and pay out in a booster pack. (This is one example -- there are many prize structures one could generate for this format, of course.)



“Draft”

“Draft” tournaments are played with new cards that you get to keep, meaning you don’t need to have a collection of cards or a great deck to enter. I put the word “draft” in quotes because SolForge uses this word in a way no other TCG has ever used it before. Drafts have consisted of multiple people queueing to draft booster packs. Once you have (usually) eight players, they all open a booster pack, choosing one card and passing the others to the left and receiving unselected cards from the person on their right, and repeating this process until there aren’t any cards left in that booster. Some drafts

featured three packs, some more, with players alternating direction between packs. For more than fifteen years, this has been what booster drafts have been.

In SolForge, you “draft” with yourself. [Quoting their FAQ:](#)

In a draft tournament, you use a new deck that you build as you go by picking cards from random selections. In SolForge draft, you will first see a pack of six heroic cards and will choose one of them. After that, you will see packs of progressively smaller size – five cards, then four, then three, then two, before again seeing a pack of six cards. You will pick one card from each selection until you have a deck of thirty cards. Once you pick cards from two separate factions, you will no longer see cards from the other factions. Once you have finished picking your draft deck of thirty cards, you will be able to start playing your matches.

Drafting in SolForge is a solo activity. You don’t have to wait on other players to make their picks, and you can draft at any time of day without waiting for an event to fill up. However, other players’ picks still influence what you see in a draft. Every pack in draft is generated with six cards, and then cards are removed from it based on an algorithm that takes into account how frequently players take those cards. If you identify an undervalued card amongst the community at large, you can benefit by knowing there is a good chance you will see that card late in a draft.

This process is similar to booster drafts with a new booster being opened, but it is important to note that these aren’t boosters being opened. Heroics and Legendaries generally only appear in the first group of cards, as opposed to “one rare per booster” in traditional drafts in other games. Their description of certain cards appearing later in the draft than others appears true -- you will sometimes see low-power Heroics appear in packs four or five.

MAJOR EVENTS

There are no “major events” in SolForge. There are no Pro Tour Qualifier-level events (from *Magic Online*) or any other large events for the community to build towards and look forward to. While there are events [listed in a forum](#) on their website, none of them are directly supported in the app. They are a fan-driven retrofit of what should be a Version One feature. This is a missed opportunity on several levels.

- Live-streaming of major events would drive awareness of the game
- Live-streaming of major events would also drive user retention (c.f. *League of Legends* pro play)
- By publishing winning decks, players can learn from existing decks (thus driving card sales)
- By rewarding champions, players can aspire to greatness (thus driving retention and conversion)

RATINGS AND RANKINGS

As far as a user can easily tell, there are no ratings and rankings for SolForge. Whatever rating you have is not displayed in the app at all. Again, [from the FAQ](#):

How do random online matches work? Won't I just lose to more experienced players if I just started playing?

SolForge uses a matchmaking algorithm to pair you against opponents of similar skill level. When you're just starting out, you'll usually get paired with other relatively new players.

This is, in all honesty, an unsatisfying experience. Even a thin rating ladder, similar to one seen in *Hearthstone*, would be better than “nothing.” There is no climb, no quest, and no goal to reach. You win, you lose, whatever. The games don't have meaning beyond itself, and I view that to be a missed opportunity.

SWOT ANALYSIS FOR ORGANIZED PLAY

STRENGTHS

Tournaments are one click or tap away, and they are on the user's schedule. The on-demand, at-your-pace nature of these events were revolutionary when they launched and the industry is following up.

The prizes seem in-line with expectation. Going 3-1 or 4-0 to get a free entry plus an additional prize is a pay rate above those found in *Magic Online*, for instance. The prizes are pretty nifty too.

“Draft” is fun. I have clearly taken issue with the name of the format, but whatever they choose to call it the important thing is the fun. Drafting is fun, and you keep what you draft. Win and win.

WEAKNESSES

There is no ongoing league format for Constructed play.

Because of this, players are trapped losing to high-value decks again and again, and those decks don't ascend to a rating away from low-spending players. And since that is true, I would guess that the Constructed format is relatively unfun for the majority of players in the game.

There is no public-facing rating or ranking structure.

The lack of "level" for the player means there is no progression and there is no goal to achieve. This probably hurts player retention.

The lack of major events is confusing.

Given the number of Magic Pro Tour Champions involved with SolForge's design or development, it is surprising to me that there is no competitive dream for players to chase.

OPPORTUNITIES

None at this time, though in the future partnering with external groups for major events (Major League Gaming?) might help boost brand awareness.

THREATS

Hearthstone has [announced](#) a \$250,000 World Championship event.

If I was a competitive online TCG player and I was wondering where to put my time and effort, that amount of money would grab my attention. In fact, it *has* grabbed my attention, and I am not really competitive in Hearthstone. (Yet.)

QUESTIONS TO ASK

- What is the correlation, if any, between someone's performance in the Draft format and how often they return?
- What is the correlation, if any, between someone's performance in the Constructed format and how often they return?
- What is the median / mean number of cards a user must own before they go 3-1 in a Constructed tournament?
- What is the median / mean amount of silver earned a user must own before they go 3-1 in a Constructed tournament?
- What is the median / mean amount of money spent by a user before they go 3-1 in a Constructed tournament?

ORGANIZED PLAY SCORE: C+

The tournaments that have been implemented are outstanding. But there are so many other important aspects to organized play completely unimplemented that what begins as an A+ is dragged all the way down to a C+... and I might be generous.

FINAL SCORE: C+

SolForge is an outstanding product for the parts that have been implemented, and a frustrating product for those that have not. Other than the forging system and some main menu interface issues, SolForge gets so many things so very right. It is an impressive bit of software for such a small group. However, the market doesn't generally grade on the curve — and certainly not for a game that asks so much, financially, from its users.

Overall, **SolForge gets a C+** from me but I have hope for its future. I have seen its improvements over the past nine months, and I believe they can continue to improve. I was worried that the new version of the Ascension deck building game, which Stone Blade Entertainment was developing themselves, would distract them from continued improvements to SolForge... but that has now [been handed over to PlayDek](#). How will the new [Android version of SolForge](#), recently released, impact the bottom line? Only time will tell. SBE appears to be in good shape, and doesn't seem to be reaching too-far-too-soon.

CLOSING THOUGHTS

Special Thanks go to Shawn Broderick, Ian Schreiber, David Davis, and Jay Treat for their help and support in this (my first public) Comprehensive Review. And, of course, to those whose financial support continues to help make these possible.

And now, the required list of places to find me:

- andreashubert.com is my website.
- blog.andreashubert.com is where most of my writing first appears, along with random content about all aspects of the games industry.
- hire.andreashubert.com is where you should go to do just that.
- [My linkedin page](#) has what you would expect on a linkedin page.
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