CommerceHub (CHUB)

I. Introduction

In CommerceHub ("CHUB") there is something for every investor regardless of their investment style.

Do you love spin-offs? Well, we have one here. Are you a fan of John Malone's business and investment prowess? Are you willing to examine a "Dr. Malone style spin-off" with enough complexity and quirks that the rest will just throw the S-1 out of the window after reaching page 20? Well, you have this too as John Malone is behind CHUB.

Do you like "sexy" SaaS businesses and share Marc Andreessen's belief that "software is eating the world"[1]? CHUB fits the bill.

However, you are not a fan of a SaaS business which can be disrupted by another PhD (and we mean poor, hungry, and driven) coder from Silicon Valley (though they can happen to have Ph.D. as well) who invents a better mouse trap and instead want to focus your research efforts on SaaS businesses that are building a moat beyond switching costs and learning curve? Well, you are in for a treat.

Are you interested in companies that will experience massive secular tailwinds over the next 5 to 10 years (and probably beyond)? CHUB has plenty of these.

Do you like heavily incentivized CEO-Founders? CHUB has exactly this type of CEO who founded the company in 1997, left in 2006, and later returned to the CEO position. As part of the spin-off he received options that will make him a ~5% shareholder. His options are currently out of the money.

Do you request definite, identifiable catalysts in your investments that would make Mr. Market realize what he is missing now? CHUB has several.

Oh, and we haven't mentioned that CHUB is already generating substantial free cash flow while growing its top line ~20%.

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[1] Marc Andreesen Why Software Is Eating the World? / WSJ, August 20, 2011. http://www.wsj.com/articles/SB10001424053111903480904576512250915629460

Finally, CHUB trades at a very *significant 10x-15x turns of EBITDA discount* to peers; we will dive into the reasons why it is mispriced later.

Enough suspense; let's introduce CommerceHub and what it does.

Since this is a lengthy write up, we created a short executive summary which will give you enough flavor to decide whether you to want to read this entire investment memorandum. We believe you will.

II. Executive Summary

CommerceHub is a SaaS company that was spun off from Liberty Ventures in July 2016. Spin off dynamics, confusion about the true level of stock-based compensation due to arcane accounting conventions, and optically misleading financials due to development of a new business which lowers revenue growth and significantly dilutes margins are major reasons for why this opportunity exists. No sellside analyst covers the stock.

Today one can buy entire CommerceHub core at just ~12x 2017 EV/EBITDA minus SBC of its highly cash generative business, which is a striking contrast to SaaS peers that trade at 25x+ EV/EBITDA (before subtracting SBC!).

CommerceHub is capitalizing on secular tailwinds that include growth in e-commerce (12% - 14% a year growth if you exclude Amazon which is growing even faster), rapidly increasing use of virtual inventory and dropship solutions, and advent of new sales channels (marketplaces, search, social channels).

Virtual inventory and dropship present great benefits to retailers who can dramatically expand the assortment of goods and go from ~100K SKUs in a typical store to 1M+ without investing in warehouses. Virtual inventory also reduces working capital, and decreases delivery time. Suppliers benefit because it becomes easier for them to get "virtual" shelf space at retailers.

Thus, *dropship and virtual inventory create a bit more of level playing field between Amazon and other retailers*. Not surprisingly virtual inventory has been increasing its penetration within e-commerce over the past few years.

These secular tailwinds would allow CommerceHub to grow its revenue for many years at a high teen rate because CommerceHub provides retailers and suppliers with *mission critical*

software at a reasonable price that allows seamless integration and interactions that enable dropship.

CommerceHub makes money by charging retailers and suppliers a base subscription fee for its core dropship offering and usage fees based on the number of transactions / orders as opposed to order value. Combined usage fees paid by retailers and suppliers amount to ~0.50% of gross merchandise volume ("GMV") transacted through CommerceHub's platform. Combined base subscription fees and usage fees constitute *~0.75% of transacted GMV*. Since the retailer's alternative is not making that sale *at all* due to a missing SKU or longer delivery time, paying ~0.75% of the GMV (together with a supplier) is a compelling proposition.

The core moat of CommerceHub is based on the **network effect**. The software architecture is a true network which connects ~50 retailers and ~9,700 suppliers through a hub as opposed to a multitude of point-to-point connections which is the way how legacy, on-premise software solutions operate. The network effect serves as a *very significant barrier to entry* and *lowers customer acquisition costs* which is demonstrated by very low sales and marketing expenses that run at ~10% - 12% of revenue. This compares favorably to the vast majority of SaaS companies that spend 30%+ of revenue on sales and marketing. Another reason for extraordinary low sales and marketing expenses is that CommerceHub sells its software solutions to retailers who then bring their suppliers on the platform. It is obviously cheaper to sell to 50 clients as opposed to 9,700. *The fact that only very few retailers left CommerceHub platform over the years shows how sticky its SaaS offerings are*.

CommerceHub is already generating 60% Adjusted EBITDA margin in its core dropship business with another 10% of revenue spent on stock-based compensation. Incremental margins are even higher and run ~80%+.

In addition, CommerceHub is in ***early innings of developing another business called CommerceHub for Brands*** which is another SaaS solution that enables suppliers to sell their products through many more channels (marketplaces, search, social channels) than they currently do (retailers and their own websites). In the past suppliers had to fight to secure physical shelf space at retailers. Now that battle has shifted online and these days brands need to secure shelf space on Pinterests of the world. CommerceHub helps them with this.

CommerceHub for Brands business is currently ~10% - 12% of total revenue and is losing money. Thus, developing CommerceHub for Brands has negative "optical" effects on the Company: it lowers growth and dilutes margins. However, we expect that CommerceHub for

Brands has a great potential and would likely become an important contributor to CommerceHub's success.

CommerceHub is run by CEO Frank Poore who founded the company in 1997, left in 2006 and subsequently returned. As part of the spin off, he received options grants that would make him~5% shareholder. These options are currently out of the money.

The stock has upside of 50% - 80%% in 2 – 3 years based on 15x – 18x EV/2018 EBITDA of the core dropship business *after* SBC. However, our true time horizon is 5+ years as we think CommerceHub will be compounding its intrinsic value for many years at high rates and its shares hold a multi-bagger potential.

The catalysts include (1) clean 2017 financials that will show the "true" level of SBC, (2) increasing awareness of optical effects of developing CommerceHub for Brands on consolidated financials, and (3) sellside coverage.

The key risk to our investment thesis is overall financial health of retailers. If Amazon drives many retailers out of business, CommerceHub will lose customers and revenue.

Finally, we prefer Class C (ticker: CHUBK) shares which are non-voting and trade a small discount to Class A (1 vote per share; ticker: CHUBA). Given that Dr. Malone has ~33% of voting power, we do not think voting rights particularly matter.

III. Why Does This Opportunity Exist?

There are several reasons why this opportunity exists.

1. <u>CHUB Became Public through a Spin Off</u>

In typical Dr. John Malone fashion, CHUB has become public through a spin off from Liberty Ventures. The spin off was completed in July 2016. Close to 85% - 90% of LVNTA's NAV was attributed to LBRDK/Charter and Expedia. Anecdotally, many hedge funds that owned LVNTA held the stock because of Charter (and shorted EXPE) or sometimes because of both Charter and Expedia. They probably did not care much about CHUB, a company with a market cap of ~$600M. CHUB was less than 10% of LVNTA's NAV.

2. Messy and Misleading Accounting

What drives most investors nuts about high tech companies in general and SaaS companies in particular? You guessed it – massive stock-based compensation ("SBC"). Yes, we know that in order to attract tech talent you need to give them options. Yes, we get that. Still we share other investors' sentiment about excessive SBC. It also rubs us the wrong way when a tech company quotes high Adjusted EBITDA but after subtracting SBC EBITDA becomes almost zero or even negative.

So when one looks at 2015 CHUB's profitability metrics, this is exactly what investors see. Adjusted EBITDA before SBC was ~$43M while SBC was ~$42M which makes EBITDA after SBC negligible.

However, such a cursory look and surface-level analysis would lead you to the wrong conclusion. Until the completion of the spin off all equity awards that CommerceHub granted to its employees were cash-settled rather than share-settled. This difference is critical from a GAAP perspective. In the case of cash-settled awards, GAAP requires a company to estimate its share price and recalculate the value of previously granted equity-linked awards and record any increase in their values as an expense in the current period. So if a company granted equity awards to an employee in 2013 that were worth $100 and in 2014 the company estimated that because of its share price appreciation the value of that grant is $150 in 2014, the company must recognize this mark-to-market adjustments of $50 in 2014. A similar exercise will be done in 2015 with potentially more mark-to-market adjustments in 2015 on the same equity grants occurred in 2013. Does this sound a bit ridiculous? Well, give FASB a call some time.

CHUB explained this treatment in S-1 and disclosed incremental increases in mark-to-market adjustments of ~$12M in 2015 compared to 2014. However, it did not disclose the total mark-to-market adjustments. Furthermore, we doubt that everybody who read the S-1 realized that the S-1 talks about incremental as opposed to total mark-to-market adjustments. We had to discuss this with IR to confirm that S-1 indeed reports the total mark-to-market adjustments.

Is this complicated and misleading? Yes, but on the other hand – what else would you expect from a Liberty spin off?!

3. Two Different Business: While Integrated, They Have Different Profitability Profiles

If the spin off dynamics and complicated SBC accounting were not enough, there is another reason why analyzing CHUB is complicated.

CHUB has two businesses: a **core dropship business** and **CommerceHub for Brands**. We will explain what each business does later. What is important now is that while these businesses are integrated and it makes complete sense to have them under one roof, they are at different stages in their lifecycles.

The core dropship business is extremely profitable (~60% EBITDA margin before SBC) and still growing revenue 18% - 19% y-o-y. This business comprises approximately 88% of total revenue in 2015 and more than 100% of EBITDA.

CommerceHub for Brands business is still in the early innings of its lifecycle. In 2015 it generated ~$10.5M in revenue and lost money at the EBITDA level (the exact amount is not disclosed). This segment generated ~12% of total revenue in 2015. In 2016 this business still lost money.

CommerceHub for Brands makes the consolidated company results look worse than they are. If one skims the financial statements, they will see that revenue growth is decelerating and margins are contracting. However, this does not accurately represent the true state of CHUB's financial results.

IV. What CommerceHub Does: a 40,000 Foot View

CommerceHub provides software-as-a-service to companies in the retail eco-system: retailers and suppliers (we will sue three terms suppliers, brands, and vendors interchangeably throughout the write up) which allows these players to interact and complete transactions with each other seamlessly, and to grow online sales by delighting customers and reaching consumers through a broad range of channels.

CommerceHub has three broad solutions: Supply Solutions, Demand Solutions, and Delivery Solutions.

This is how CommerceHub describes Supply Solutions:

> "Through our **Supply Solutions**, ***retailers and online marketplaces gain the ability to sell a broad selection of products*** without the cost of buying, storing and shipping inventory from warehouses ***by leveraging our network of approximately 9,500 [9,700 as of 3Q 2016] dropship capable suppliers and third***

> ***party marketplace sellers*** that receive orders from demand channels and ship products directly to consumers." (See S-1).

In other words, Supply Solutions enable retailer and online marketplaces to increase their SKU assortment without taking possession of physical inventory.

This is how CommerceHub describes Demand Solutions:

> "Our **Demand Solutions** provide access and management capability for the largest and most important ecommerce channels in North America. ***CommerceHub's platform allows sellers such as consumer brands, distributors and manufacturers to sell through major retailers as well as leading online marketplaces, such as Amazon, eBay and Jet***." (See S-1).

In this case, a demand solution for a brand / supplier is a supply solution for a retailer.

Another element of Demand Solutions is direct-to-consumer sales by brands / suppliers. This is how CommerceHub describes this segment:

> "In addition, ***companies that sell directly to consumers through their own websites can use CommerceHub to place advertisements, list products for sale and promote awareness of their products on Google Shopping, Yahoo Shopping, Pinterest, Facebook, comparison shopping engines and other ecommerce marketing channels***."

Finally, this is how CommerceHub describes Delivery Solutions:

> "Our **Delivery Solutions** ***enable more rapid delivery through more efficient use of national, regional, local and specialty carriers***."
>
> "For example, our solution for enhanced delivery experience allows retailers to automatically and cost effectively adjust carrier service levels to meet consumer delivery promise dates."
>
> "To help reduce delivery times, our network of third party logistics partners helps retailers and sellers distribute inventory to locations that are closer to a wider distribution of consumers, thus reducing their delivery cost while simultaneously enabling consumers to receive their products quickly."

While the Company breaks down its solutions into Supply, Demand, and Delivery Solutions, ***we will be using different nomenclature throughout this investment memorandum***. The elements of the various solutions that enable and facilitate dropship, we call **core dropship**

solutions regardless of whether it is a supplier or a retailer using it. When a supplier engages in direct to consumer sales, we call it **CommerceHub for Brands** (which is the term that the Company started using after the spin-off was completed and, therefore, this term is not used in the S-1).

We will discuss what CommerceHub does and how it eliminates substantial pain points for its clients in greater detail later.

V. Multiple E-Commerce Trends Present Enormous Tailwinds for CommerceHub

We will discuss the e-commerce trends that are most relevant for CommerceHub and present enormous tailwinds for its business.

These trends are:

(1) Rapid and continuous growth of e-commerce and its increasing penetration in the U.S.
(2) U.S. e-commerce is showing similar dynamics even if you exclude Amazon.
(3) Amazon's Success shows what customers want: cheap prices, an extremely large assortment of goods, and the ability to deliver these goods quickly.
(4) AMZN's wide selection and speed of delivery have raised the bar for all other retailers; to stay relevant retailers MUST achieve comparable outcomes as Amazon did from a customer perspective through different means.
(5) Advent and continuous emphasis on omnichannel approach.
(6) Increasing role of "virtual" inventory as means for retailers to compete with Amazon.
(7) Dropship is a logical continuation to virtual inventory.
(8) Increasing importance of marketplaces.
(9) Increasing importance of direct sales and direct engagement by vendors / brands.

Let's address them one by one.

1. Rapid and Continuous Growth of E-Commerce and Its Increasing Penetration in the U.S.

U.S. e-commerce has grown every year since 1999. From 1998 to 2015, U.S. e-commerce grew from ~$5B million to ~$343B billion which is an astonishing growth of ~6,800% over 17 years. E-commerce even grew in 2008 and 2009 as the rest of the global economy melted down.

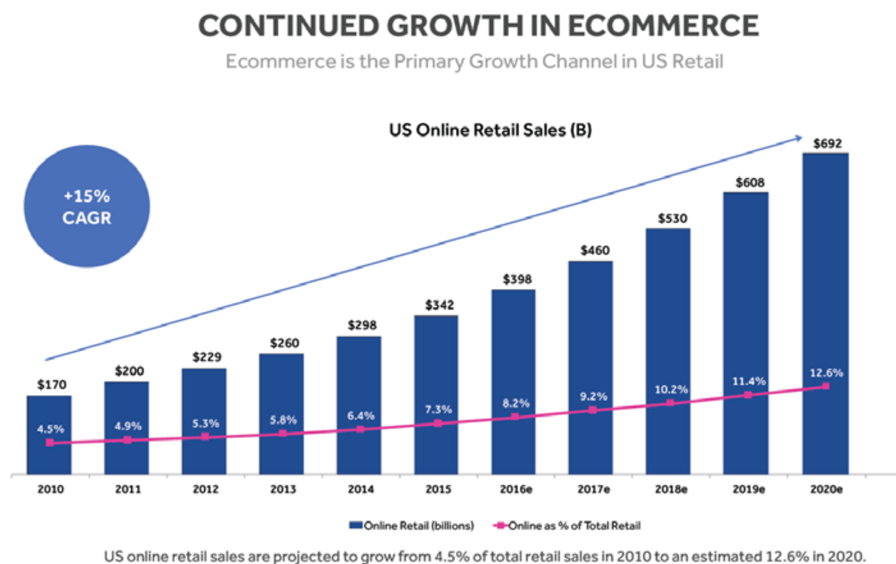
In the more recent period (2012 – 2015) U.S. e-commerce grew between 13.3% and 14.9% per year.

This should be compared with the U.S. total retail sales ex-gas which grew quite modestly over the same period of time. They grew ~79% from 1998 to 2015. In the more recent period (2012 – 2015) total U.S. retail ex-gas grew between ~4.3% and 5% per year.

The differences in growth rates have inevitably resulted in ***rapidly increasing e-commerce penetration*** (ex-gas) which went from 0.21% in 1998 to 8.02% in 2015. The penetration increased in every single year over the period.

Growing e-commerce in the U.S. and its increasing penetration mean that CommerceHub's total addressable market is increasing every single year and would allow ComerceHub grow its revenue ~15% - 20% a year for many years to come.

To illustrate trends #1 and #2, CHUB shows this slide.



2010 – 2015: US Department of Commerce.
2016 - 2020 estimates: June 2016 eMarketer, Inc.

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Source: 2016-11-10 Liberty Investor Day Presentation.

While this slide is impressive, it ignores the 800 pound gorilla called Amazon.

2. <u>Wait a Second! What About AMZN? U.S. E-Commerce Excluding AMZN Is Showing Similar Dynamics</u>

While Amazon is growing faster than the rest of e-commerce and is, therefore, gaining share, the rest of e-commerce is still growing well.

Below we present a data set from 1998 to 2015 that, in our view, tells a story that is more relevant for CHUB than their slide displayed above. The data below shows e-commerce growth and e-commerce penetration with and without Amazon.

The most important takeaways are:

(1) While Amazon is growing faster than the rest of e-commerce, the rest of e-commerce still has been growing substantially.
(2) From 1998 to 2015:
    a. Amazon sales (excluding AWS revenue) grew ~69x.
    b. E-commerce sales ex-Amazon grew ~56x.
(3) Over 2012 – 2015:
    a. Amazon sales were growing between 17.5% and 25% a year.
    b. E-commerce sales ex-Amazon were growing between 11% and 13.8%.
(4) E-commerce penetration ex-Amazon increased from 0.18% in 1998 to 6.70% in 2015. Importantly, the past few years demonstrated accelerating growth in penetration.

Year	Total U.S. Retail Trade	Total U.S. Retail Trade ex-gas	U.S. Retail Trade ex-Gas Y-o-Growth, %	E-commerce	U.S. E-Commerce Y-o-Y Growth, %	E-Commerce Penetration (ex-gas), p.p.	E-Commerce Penetration Increase, p.p.	Amazon revenue (ex-AWS)	AMZN revenue y-o-y growth, %	AMZN Share of U.S. Retail Ex-Gas, %	AMZN Penetration Increase, p.p.	E-commerce ex-AMZN	E-commerce ex-AMZN y-o-y growth, %	E-commerce Penetration ex-Amazon, %	E-Commerce Sales Ex-AMZN Penetration Increase, p.p.
1998	2,581,762	2,390,035		4,984		0.21%		610		0.03%		4,374		0.18%	
1999	2,803,090	2,590,566	8.39%	14,492	190.8%	0.56%	0.35%	1,640	168.91%	0.06%	0.04%	12,852	193.82%	0.50%	0.31%
2000	2,983,276	2,733,460	5.52%	27,614	90.5%	1.01%	0.45%	2,762	68.43%	0.10%	0.04%	24,852	93.37%	0.91%	0.41%
2001	3,062,268	2,810,885	2.83%	34,270	24.1%	1.22%	0.21%	3,122	13.05%	0.11%	0.01%	31,148	25.33%	1.11%	0.20%
2002	3,128,552	2,877,933	2.39%	44,640	30.3%	1.55%	0.33%	3,933	25.96%	0.14%	0.03%	40,707	30.69%	1.41%	0.31%
2003	3,262,731	2,987,544	3.81%	57,189	28.1%	1.91%	0.36%	5,264	33.84%	0.18%	0.04%	51,925	27.56%	1.74%	0.32%
2004	3,473,048	3,149,042	5.41%	72,655	27.0%	2.31%	0.39%	6,921	31.49%	0.22%	0.04%	65,734	26.59%	2.09%	0.35%
2005	3,689,283	3,310,360	5.12%	91,474	25.9%	2.76%	0.46%	8,490	22.67%	0.26%	0.04%	82,984	26.24%	2.51%	0.42%
2006	3,871,573	3,449,597	4.21%	113,458	24.0%	3.29%	0.53%	10,711	26.16%	0.31%	0.05%	102,747	23.82%	2.98%	0.47%
2007	3,995,182	3,543,360	2.72%	136,654	20.4%	3.86%	0.57%	14,835	38.50%	0.42%	0.11%	121,819	18.56%	3.44%	0.46%
2008	3,935,505	3,431,738	(3.15%)	141,942	3.9%	4.14%	0.28%	19,166	29.19%	0.56%	0.14%	122,776	0.79%	3.58%	0.14%
2009	3,612,947	3,221,409	(6.13%)	145,956	2.8%	4.53%	0.39%	24,509	27.88%	0.76%	0.20%	121,447	-1.08%	3.77%	0.19%
2010	3,818,841	3,370,032	4.61%	170,640	16.9%	5.06%	0.53%	33,704	37.52%	1.00%	0.24%	136,936	12.75%	4.06%	0.29%
2011	4,102,187	3,569,815	5.93%	200,623	17.6%	5.62%	0.56%	47,327	40.42%	1.33%	0.33%	153,296	11.95%	4.29%	0.23%
2012	4,302,229	3,746,810	4.96%	230,563	14.9%	6.15%	0.53%	59,254	25.20%	1.58%	0.26%	171,309	11.75%	4.57%	0.28%
2013	4,459,003	3,911,514	4.40%	261,206	13.3%	6.68%	0.52%	71,344	20.40%	1.82%	0.24%	189,862	10.83%	4.85%	0.28%
2014	4,636,345	4,101,675	4.86%	298,595	14.3%	7.28%	0.60%	84,344	18.22%	2.06%	0.23%	214,251	12.85%	5.22%	0.37%
2015	4,708,302	4,276,305	4.26%	342,961	14.9%	8.02%	0.74%	99,126	17.53%	2.32%	0.26%	243,835	13.81%	5.70%	0.48%

Thus, while tailwinds behinds CommerceHub may not quite as larger as the slide from CHUB's deck would indicate, they are still massive.

3. <u>Amazon's Success Shows What Customers Want: Cheap Prices, Extremely Large Assortment of Goods, and Ability to Deliver These Goods Quickly</u>

Amazon has built a compelling value proposition and showed what customers want: cheap prices, an extremely wide selection of goods, and the ability to deliver quickly. Thanks to these three ingredients Amazon was able to capitalize on the secular shift of retail online.

To assemble an extremely large number of SKUs and achieve speedy delivery times, AMZN has invested very substantial amounts of money in its infrastructure and has built massive scale. Other retailers cannot compete by building similar infrastructure for multiple reasons, including financial limitations.

The launch of the Amazon marketplace further increased the number of SKUs that customers can buy on Amazon.

4. <u>AMZN Wide Selection and Speed of Delivery Have Raised the Bar for All Other Retailers; To Stay Relevant Retailers MUST Achieve Comparable Outcomes as Amazon Did From a Customer Perspective Through Different Means</u>

Shopping on Amazon.com has made consumers expect more from other retailers as well. This applies both to the assortment of SKUs and speed of delivery. As CommerceHub CEO Frank Poore half-jokingly said at the Liberty Investor Day in November 2016, if a retailer shows a particular SKU on its website and then indicates that the delivery would be complete in 14 days, they may very well put a link to Amazon.com as the retailer will at least capture a referral fee. In other words, *a long delivery time while having the SKU is almost as bad as not having that SKU at all*.

As pointed out above, traditional retailers cannot achieve a comparably wide range of SKUs and speed of delivery by doing what AMZN has been doing for years – investing substantial sums of money into infrastructure. Thus, ***to stay relevant the retailer must achieve comparable outcomes through different means***.

5. <u>Advent and Continuous Emphasis on An Omnichannel Approach</u>

Everybody is talking about omnichannel and probably has their own ideas about what this means. Hence, we will define how we interpret this term.

An omnichannel approach gives customer more choices of where, when, and how to interact with retailers. Successful implementations of an omnichannel approach also mean that the consumer experience is consistent across various channels: in-store, online, mobile. Omnichannel also requires the interplay and interaction between channels to be extremely fluid. There are countless examples, so we will provide only one hypothetical example: a consumer can browse product offerings online, buy online and then return what is not necessary in store.

In effect, omnichannel repurposes physical stores from "once great assets / businesses that are generating falling sales and rapidly declining in value" to an integral component of retailers' business strategy. To quote CHUB's S-1:

> ***"An omnichannel strategy allows a retailer to position its physical storefront not as a balance sheet liability, but rather as part of a platform to provide consumers with a more consistent, convenient and effortless retail experience, regardless of how they choose to engage the retailer***. As a result of its success, we believe that omnichannel strategies now represent a more significant component of all retailers' revenue mix."

6. Increasing Role of "Virtual" Inventory as Means for Retailers to Compete with Amazon

As we pointed out above, traditional retailers building omnichannel platforms need to find creative ways (as opposed to investing hundreds of millions in their infrastructure) to make their SKU selection wider and more comparable to Amazon as well as improve delivery speed.

"Virtual" inventory and dropship present exactly that and, if executed properly, will create more of a level playing field between Amazon and retailers.

So what is virtual inventory? Virtual inventory are goods that a retailer offers to its customer on its website without actually carrying them in its own warehouse. In effect, a traditional retailer acts as a marketplace though with a very significant difference. When customers go to eBay, customers know they are not buying from eBay and in the case of a poor customer experience with a seller, they would probably not blame eBay. However, when a retailer uses virtual inventory, the goal is for a customer to not realize that the retailer does not have the inventory. This is a part of a well-built omnichannel.

What does virtual inventory allow a retailer to achieve? All of a sudden, *retailers can expand the number of SKUs carried in stores from ~100,000 per store location to millions on their website*. Importantly, as we discuss below, such a dramatic expansion of goods comes with *very minimal incremental investments* as opposed to building massive modern warehouses.

Thus, virtual inventory is addressing the first element of value proposition that Amazon provides to customers: an incredibly wide selection of SKUs.

7. <u>Dropship Is a Logical Continuation to Virtual Inventory</u>

So how goods find their way to a customer if a retailer uses virtual inventory? If a supplier / vendor ships goods to a retailer and then the retailer ships them to a customer, it will take quite some time before the customer gets what he/she wanted. It is also obvious that shipping and re-shipping are extremely inefficient. Hence, ***the dropship solution is a logical (and we want to say almost unavoidable) extension of virtual inventory***. In a dropship model once a customer completes a purchase on a retailer's website or a smartphone app, a supplier ships the purchased items from its own warehouse to the customer *directly*. Thus, purchased goods never enter the retailer's warehouse.

8. <u>Increasing Importance of Marketplaces</u>

Marketplaces have been gaining importance over the years and present another channel through which traditional retailers and vendors can engage customers and sell their goods to them. Examples include Amazon Marketplace, eBay, Jet.com (acquired by Wal-Mart), Wal-Mart Marketplace.

9. <u>Increasing Importance of Direct Sales and Direct Engagement by Brands</u>

Internet and social media have created more opportunities for vendors / brands to engage and sell directly to end consumer and skip retailers as intermediaries. Google's buy buttons would be a great example of this trend.

* * *

The great thing about CommerceHub is that it is capitalizing on all of these trends.

VI. Value Proposition of Virtual Inventory and Dropship

The major attraction of virtual inventory and dropship is that *they benefit everybody involved*.

1. Retailers Benefit from Wider Assortment of SKUs Without Carrying Inventory
As we mentioned before, retailers can radially expand its product offering without carrying more inventory which means less storage costs and tying up less working capital.

2. Customers Benefit from Wider Selection
It is quite obvious that retailers are not the only ones benefiting from offering a wider selection of goods. Consumers greatly benefit from this increased choice as well.

3. Customers Benefit from Getting Their Orders Faster
Since dropship replaces double shipping with only one shipment, customers receive their orders faster.

4. Retailers and Consumer Benefit from Less Shipping Costs
Single shipment instead of double shipment also means less shipping costs.

5. Supplier Benefits Because It Becomes Easier to Get "Shelf Space"
In a brick and mortar retail stores the shelf space is limited. Thus, getting on the shelf can be a challenge for suppliers. This dynamic totally changes when retailers and supplier deal with virtual inventory which can be almost unlimited.

VII. Virtual Inventory and Dropshiping Redefine Traditional Supply Chain

While the benefits outlined above all sound great, implementing virtual inventory and dropship strategy has its own substantial challenges. Execution on the supply chain front is not easy.

Increasing acceptance of virtual inventory and dropship create supply chain and distribution challenges because the traditional supply chain models do not work anymore. Under the traditional distribution model a retailer orders products from a manufacturer, the manufacturer delivers the product to the retailer's warehouse or distribution center, and then the

retailer sends goods to its physical stores and puts them on the shelves where the goods sit until consumers buy them.

When virtual inventory and dropship are involved, there are at least two new challenges.

First, it is necessary to ensure a prompt, direct shipment by supplier to consumer. This requires a very different logistical back-end to ensure a seamless customer experience. Creating such an experience ***requires substantially more collaboration and a higher level of integration between retailers and brands*** than was the case in a traditional distribution model. *Retailers need to have access to real-time inventory of their suppliers and clear visibility into stocking levels and confidence of when a supplier can deliver a product to a customer because a customer needs to know a promised delivery date*. Furthermore, the delivery box should have a retailer slip even though it never went through the retailer's warehouse (having retailers' branding, slip, etc. is necessary in order to engage customers and develop their loyalty).

Second, a retailer needs to have an attractive SKU description, specifications, and pictures on its website and all of them are supplied by the supplier.

VIII. Implementing Virtual Inventory and Dropship Strategy: Why Legacy Solutions Do Not Work Well

We discussed above the execution challenges which virtual inventory and dropship present. How can retailers and suppliers solve them?

Historically, these challenges and solutions did not exist. The ERP software and systems were on premise and were ***based on point-to-point connections***. In a case of point-to-point connections, a retailer integrates with each of its suppliers. It means that a retailer who works with 200 suppliers would have 200 point-to-point connections. Similarly, a supplier selling to 100 retailers will have 100 point-to-point connections. In the age of traditional supply chain ("please, ship 10,000 widgets to my warehouse next week") that was sufficient.

It is easy to see that this model is very cumbersome. Implementing any changes is time-consuming and inefficient because ***changes will have to be made to each point-to-point connection***.

This is exactly how legacy software works.

In addition to all these inconveniences, the legacy software was not built to handle dropship particularly well as implementing virtual inventory and a dropship strategy requires a very close integration between retailers and suppliers (for example, access to real time inventory levels and where inventory is located so that precise shipping time can be calculated).

IX. What Does CommerceHub Offer that Enables Virtual Inventory and Dropship Implementation?

We have already discussed at a high level what CommerceHub offers. Here we will provide more details and discuss a few features to demonstrate what a great product CommerceHub has.

First of all, CommerceHub makes onboarding of suppliers incredibly fast and seamless. Service around on-boarding suppliers is as valuable as the platform itself. On-boarding a supplier in-house can take between 2 and 6 months and will involve lots of work on retailer's employee part. Given that a large retailer can be adding between 20 and 40 suppliers a year, this creates lots of work. CommerceHub can on-board a new supplier in about two weeks with very little involvement from the retailer.

CommerceHub has built its own proprietary algorithms that know better than retailers where inventory is located among the various locations of a particular supplier. CommerceHub knows it by quantity and by location. This allows CommerceHub to decide from which location the product should be dropshipped to a customer. At that point CommerceHub's software has all necessary information: the location of the end customer, the delivery date that a retailer promised to a customer, when a customer made a purchase and inventory levels and locations.

On top of that, CommerceHub's software can look at carriers and determine the right transit times and choose the best cost while balancing it with the promised delivery date.

Another great feature is that CommerceHub is partnered with third-party logistics companies (3PLs) that are pre-integrated into CommerceHub. This feature helps retailers and suppliers achieve faster deliveries.

X. CommerceHub History: from Startup to Standalone Public Company via Spin Off

Now that we have covered industry trends, it is worth briefly reviewing CommerceHub's history.

CommerceHub was founded in 1997 by Frank Poore and Richard Jones. In August 2006 QK Holdings Inc. acquired CommerceHub. Liberty acquired CommerceHub in May 2010.

Immediately prior to the spin-off of CHUB in July 2016, CHUB was attributed to Liberty Ventures (ticker: LVNTA) tracking stock.

The turning point in CommerceHub was in 1999 – 2000 when a small start-up persuaded QVC to become a customer. Landing QVC as a customer made CommerceHub a viable enterprise and established a blueprint of its business model (modest subscription fee + usage fees that depend on volume).

XI. Reasons for Spin Off

The CommerceHub S-1 lists some boilerplate reasons for its spin off but also adds some colorful and potentially instructive language as to why LVNTA spun off CHUB.

Here are the reasons for the spin off:

1. Traditional asset-backed security will result in greater transparency for investors
    a. "The creation of a more traditional, asset-backed security in our common stock is expected to provide greater transparency for investors with respect to our business, resulting in more focus and attention by the investment community on our business and better highlighting our value." (See CommerceHub S-1).
2. Spin off would provide *flexibility and independence to management team*
    a. "The Spin- Off is expected to provide greater flexibility and independence for our management team to make quick and decisive commercial decisions that would benefit our company, as our company's management team is currently required to gain approval from Liberty for key strategic decisions."
3. Spin off would create a *more attractive equity currency for M&A opportunities*
    a. "The Spin-Off is expected to provide our company with a more attractive equity currency to use to fund strategic acquisitions and opportunities."
4. Spin off would allow CHUB stock to be *more efficiently valued*

   a. "We believe that our independent, publicly traded stock following the Spin-Off should be more efficiently valued as compared to the value the market currently assigns to our company as a subsidiary of Liberty."
5. Spin off would *reduce capital structure complexity* and create a *pure play* equity currency that would allow CommerceHub to make more attractive acquisition offers
   a. "Further, we believe that the reduced complexity of our capital structure following the Spin-Off, as compared to Liberty, as well as our ability to offer a pure play equity currency, will allow us to make more competitive acquisition offers, consisting of consideration that is more attractive to target stockholders."
6. Spin off would allow better incentivize management and employees which would also result in less dilution for shareholders
   a. "The Spin- Off is expected to enhance the ability of our company to *more effectively tailor our employee benefit plans and retention programs*, including by converting our cash-settled equity awards into stock-settled equity awards, which will allow us to preserve capital to grow our business and avoid liquidity issues."
   b. "In addition, we believe the issuance of our independent, publicly traded, and *more efficiently priced equity securities* following the Spin-Off will be *more attractive to our management and employees* and *less dilutive to our stockholders*."

XII. CommerceHub Service Offering in Dropship Space: Unit Economics and Revenue Streams

1. <u>Both Retailers and Suppliers Pay CommerceHub</u>

For its core dropship offering CommerceHub has two groups of *paying* customers: retailers and suppliers.

CHUB has ~50 large retailers and ~9,700 suppliers on its platform.

Below we provide available data about how customer count has evolved since the end of 2014.

CommerceHub Customer Count	2014	1Q 2015	2Q 2015	3Q 2015	4Q 2015	2015	1Q 2016	2Q 2016	3Q 2016
Cutomers	8,599	8,897	9,191	9,316	9,559	9,559	9,619	9,726	9,930
y-o-y growth, %						*11.2%*	*8.1%*	*5.8%*	*6.6%*

The Company does not disclose a breakdown between retailers and suppliers in each period. Furthermore, the numbers above include ex-Mercent / now CommerceHub for Brands customers.

Optically, the customer growth is slowing but one needs to keep two things in mind. First, 2015 vs. 2014 comparison benefitted from adding customers of Mercent that was acquired in January 2015. Second, in 2016 CommerceHub was churning ex-Mercent customers that were not good fit as we discuss this in more detail later.

2. Business Model: Three Revenue Streams

The Company derives three revenue streams:

(1) Base subscription revenue
(2) Usage revenue
(3) Set up and professional services revenue

(a) Subscription revenue (~25% – 27% of revenue)

Subscription revenue consists of flat subscription fees that do not depend on transactional activity and volumes. They typically vary between 25% and 27% of the Company's total annual revenue.

The subscription fee is *dependent on the number of "connected" treading partners*. For each additional retailer the subscription fee increases.

(b) Usage revenue (~68% of revenue)

Both retailers and suppliers pay usage fees for each order. The usage fees are per shipped order and *not dependent on the value of the order* which naturally *incentivizes retailers to dropship more expensive items.* Obviously, the benefit of not tying substantial working capital and the need to store larger, more expensive items also incentivize retailers to dropship larger,

more expensive items. At the end of each month, retailers receive volume based discounts / rebates while suppliers do not receive any discounts of a similar nature.

Usage revenue typically constitutes ~68% of total revenue on the annual basis.

The key question is how expensive it is for retailer and suppliers to use CommerceHub services. We think ***it is very affordable***. CHUB's usage revenue was only 0.51% of transacted GMV in 2014 and 2015. We would highlight that 0.51% number includes both usage fee paid by retailers and suppliers. So ***the combined extra cost is only 50 cents for every $100 of GMV***.

If we look at ***total CHUB revenue (includes base subscription revenue)*** as percent of transacted GMV, then the ratio will be ***~0.75% or 75 cents for every $100 of GMV***.

The retailer's alternative to paying ~0.75% of GMV is to potentially lose the entire sale to a customer because a retailer will not have an SKU in question or its delivery time will be too long.

(c) Set up and professional services revenue (5% – 7% of total revenue)

Set up and professional services revenues are mostly one-time in nature and cover revenues from set up, implementation, and onboarding services when customers get on CommerceHub's platform.

3. Usage Revenue Model Aligns CommerceHub's Success with Success of Its Customers

The beauty of CommerceHub's offering from a customer perspective is that ***CommerceHub will be successful only if its customers are successful***. As its customers generate more incremental revenue from goods that are dropshipped, CommerceHub will generate more revenue as well. ***Customers do not need to incur upfront CapEx or very expensive commitment fees***. We recognize that subscription fees exist but they are quite small.

4. Recurring Revenue Model

Similar to other SaaS companies, CommerceHub has a recurring revenue model. Subscription revenue is 100% recurring while usage revenue is recurring though it is subject to fluctuations in trading volume.

5. Revenue Per Customer

Revenue per customer is not the most insightful metric for CommerceHub because the Company does not disclose revenue from retailers and revenue from suppliers separately. Furthermore, revenue per customer metric is further distorted by ex-Mercent customers that CommerceHub is intentionally churning. We will discuss this in more detail later.

With these caveats, we provide the following:

CommerceHub Revenue Per Customer	2014	1Q 2015	2Q 2015	3Q 2015	4Q 2015	2015	1Q 2016	2Q 2016	3Q 2016
Revenue per customer	7,648	2,112	2,160	2,114	3,062	9,166	2,296	2,375	2,264
y-o-y growth, %						*19.9%*	*8.7%*	*9.9%*	*7.1%*

We want to emphasize again ***two important things about growth dynamics***. First, 2015 vs. 2014 comparisons are affected by the acquisition of Mercent in January 2015. Second, the decelerating growth in 2016 is mostly caused churning ex-Mercent customers as opposed to issues within the core dropship offering.

XIII. Growth Drivers for CommerceHub's Core Dropship Offering

Earlier we discussed the enormous tailwinds that CommerceHub will benefit from. Below we discuss specific growth drivers; many of them are linked to secular tailwinds.

These growth drivers include:

(1) Total e-commerce growth
(2) Increasing wallet share (*i.e.*, increasing penetration of virtual inventory and dropship among existing customers)
(3) Signing up additional retailers and suppliers

1. Growth Driver #1: E-Commerce Growth

As we discussed above, e-commerce ex-Amazon has been growing in the low teens range (11.8% in 2012, 10.8% in 2013, 12.8% in 2014 and 13.8% in 2015). We are excluding Amazon because CommerceHub's core dropship offering does not have exposure to Amazon growth.

We expect that this long-term trend that is secular in nature will continue. CommerceHub should benefit from continuous growth in total e-commerce.

2. Growth Driver #2: Increasing wallet share: increasing penetration of virtual inventory and dropship among existing customers

We expect that existing customers will continue to increase adoption of virtual inventory and dropship. While most recently e-commerce sales ex-Amazon have been growing in low teens, CommerceHub revenue was growing high teens which is driven by the increasing penetration of virtual inventory.

Qualitative commentary from CommerceHub management on this point is interesting.

On the 2Q 2016 Earnings Call CEO Frank Poore shared his assessment that CommerceHub is in the early stages of retailers expanding SKU assortment and supplier connections. As such expansion continues, CommerceHub will benefit from rapidly rising usage fees and more modestly rising subscription fees.

On the 3Q 2016 Earnings Call CEO Frank Poore provided more color on the wallet share / penetration rate. Not surprisingly, long-term customers who were among the first ones to recognize the benefit of virtual inventory have higher penetration and use CommerceHub capabilities to power between 30% and 50% of their online sales.

During the 2016 Liberty Investor Day (November 2016) CEO Frank Poore provided more qualitative color. According to the CEO, in the past, retailers used to view virtual inventory more from a purely operational perspective. For example, it is more efficient to request a supplier to dropship a bulk item such as a mattress to avoid double shipping. Recently retailers now consider virtual inventory and dropship "much more of a strategy" and use dropship for more and more SKUs that are not necessarily bulky. Naturally, this results in increasing wallet share.

While longer-term retail customers have a wallet share between 30% and 50%, many retailers have virtual inventory and dropship penetration of less than 10%. Thus, there is very substantial room for CommerceHub to increase revenue through increasing wallet share among such customers.

Needless to say, the underlying view at CommerceHub is that virtual inventory will increase its share within e-commerce. We agree with this given all the benefits of virtual inventory and dropship that we discussed above.

However, there is an alternative point of view. SPS Commerce, a company in the business of cloud-based supply chain management, believes that virtual inventory and dropship are unlikely to exceed 25%. According to SPS Commerce management, if a particular SKU sells really well (SPS Commerce CEO calls it "demonstrates strong sales velocity"), a retailer would bring this SKU into its warehouse to control the customer experience.

While we want to keep SPSC's point of view in mind and monitor this dynamic in the future, our research findings are different. First, retailers rarely bring well selling SKUs back into their own warehouse systems. It happens but rarely as long as dropship is working. Retailers will still not want to tie up their working capital and occupy limited warehouse space with potentially bulky items even the SKU sells really well. Second, the organizational designs of most retailers play in favor of CommerceHub because most retailers have separate teams managing in-house items and drop-ship items.

Obviously, both CommerceHub and SPS Commerce talk their own book. CommerceHub focuses on dropshipping while SPS Commerce's core focus is to provide SaaS to suppliers that enables them to seamlessly comply with the requirements of various retailers.

3. Growth Driver #3: Signing Up Additional Retailers and Suppliers

CommerceHub still has significant opportunity to sign up more retailers as its customers. Currently, CHUB has ~50 retail customers. CommerceHub's plan is to focus on top 500 retailers in the U.S. as they represent ~90% of e-commerce. We believe that CommerceHub has already signed up most of the largest retailers among the top 500 retailers. Thus, acquiring additional retailers will have a smaller impact because revenue per retailer is likely to be lower. However, the growth opportunity is still substantial.

This dynamic makes it unlikely that CommerceHub core dropship revenue would grow 30%+ as it used to. However, high teens growth that it is currently experiencing should be sustainable.

CommerceHub sells its dropship capabilities directly to senior level executives at retailers. As a result, sales and marketing expenses of signing up new retailers are fairly modest.

Similarly, CommerceHub will continue signing up new suppliers as existing retailers bring new suppliers or new retailers bring new suppliers. Signing up new suppliers is extremely inexpensive for CommerceHub as proven by sales and marketing expenses of ~10% - 12% as opposed to most other SaaS companies that spend 30% to 50% to acquire new customers.

4. Growth Leads to Very High Incremental Margins

Figuring incremental margins given Mercent acquisition in January 2015 is the not the most straightforward.

However, there are two data points. First, we can calculate incremental Adjusted EBITDA margins in 2012 – 2014:

CommerceHub	2012	2013	2014
Incremental Adjusted EBITDA margin, %	77.3%	69.2%	62.5%

Second, CommerceHub business seasonality and about 32% - 34% of revenue comes in 4Q 2016, which is driven by usage fees.

So comparing revenue growth and Adjusted EBITDA growth between 3Q 2015 and 4Q 2015 results in ~94% incremental Adjusted EBITDA margins. This is *extraordinary high.*

Putting these data points together, we think that the incremental EBITDA margins should be in 80% to 85% range.

XIV. CommerceHub Core Dropship Offering: Churn

Retailers are incredibly sticky and rarely leave CommerceHub's platform.

As for any SaaS business churn is a critical variable. In the case of CommerceHub churn should be viewed differently than in the case of most SaaS companies.

Churn of retailers is important. The good news is that during its entire existence the Company has lost very few retailer-clients (less than 5). CHUB lost Circuit City due to bankruptcy. It also lost Target and Walgreens a few years ago (as far as we understand

Walgreens decided to shut the dropship business altogether). CHUB also lost a couple of smaller retailers over the years.

Churn among suppliers is higher but this is natural because it is the retailers who bring the suppliers onto CHUB's platform and if retailers stop doing business with them, these suppliers will drop off the platform. Typically, it involves supplies that do not generate sufficient order and revenue volume for retailers who are dropped. However, retailers will bring new suppliers. They always do.

Supplier churn is not a problem and is actually beneficial to CommerceHub: seamlessly on-boarding new suppliers (with minimal retailer involvement) is CommerceHub's value proposition.

This is what the S-1 says about churn and customer longevity:

> "Because our solutions play a critical role in helping our customers manage a complex array of business relationships in a highly competitive retail environment, we have benefited from ***strong loyalty and enduring, long-term relationships with our customers***." (S-1)
>
> "In addition, we believe ***we are becoming <u>an increasingly strategic partner</u> to our overall set of trading partner customers as we become increasingly integrated into their systems and go to market efforts, as the amount of business conducted through our platform increases, and as more retailers and suppliers connect centrally into the CommerceHub platform***." (S-1)

XV. Building CommerceHub for Brands Offering Is Another Growth Driver

1. <u>What Is CommerceHub for Brands?</u>

In a nutshell, the CommerceHub for Brands is a SaaS solution that allows brands to engage with customers across channels and sell directly to consumers. In addition to selling their products through retailers and their own websites, CommerceHub for Brands enables brands to sell through marketplaces, search, and social channels.

We expect that CommerceHub for Brands offering will be another significant growth driver for CHUB.

2. <u>CommerceHub for Brands: A Brief History</u>

In January 2015 CommerceHub acquired Mercent for ~$20M. Mercent was providing a software solution for brands that would allow them to create one central product catalogue that would be linked to various websites, marketplaces, etc.

What pain point does Mercent solve? Let's use an example. Without such software solution a brand selling is products on Amazon Marketplace, eBay, and Jet.com will need to create *a separate catalogue for each of them* because each marketplace has its own unique requirements. Needless to say, creating a separate catalogue for each of these platforms consumes significant resources (people, time, money). Maintaining product listings would also be time consuming: if a product description needs to be updated, it will have to be updated for *each* of these platforms.

Mercent provides a compelling alternative to this labor intensive process by creating ***one master catalogue that seamlessly syncs*** with Amazon Marketplace, eBay, Jet.com and many other marketplaces and other channels. Hence, brands need to update the central catalogue *only once* and they are done.

Before the acquisition Mercent had its own customer base. Some customers were self-service customers (*i.e.*, Mercent provides its software solution and brands do everything themselves) which makes the business very scalable. Other customers were relying on Mercent's managed services team which would perform tasks on behalf of clients. Needless to say, there is a lot more handholding with the second group of customers which limits scalability.

CommerceHub acquired Mercent for its technology as opposed to its customer base. First, CommerceHub was not interested at all in Mercent clients that were relying on managed services team. Second, CommerceHub was not interested in smaller clients of Mercent.

In 2016 CommerceHub started *intentionally* churning those low value customers which has ***important implications for how its income statement looks now***. First, the consolidated revenue growth is weaker because the core dropship offering revenue is growing 18% - 19% while ex-Mercent revenue is falling (for example, it fell ~$800K in 3Q 2015). As a result, the consolidated revenue grew only ~14% in 3Q 2016 creating a false appearance of decelerating growth. Second, as we discussed earlier, revenue per customer metric also shows less favorable dynamics on the consolidated basis than it would have if the Company disclosed it for the core dropship business alone.

3. CommerceHub for Brands: Value Proposition and Which Pain Points It Solves

CommerceHub management believes that the process of brands going direct to consumer is in the early stages. To quote management, it is "in *the top of the first inning*". Management also drew a parallel with where retailers were years ago.

In the past, CommerceHub did not sell anything to brands because brands were effectively requested to become CommerceHub's customers by retailers they were supplying to. Now the situation is changing and ***for the first time CommerceHub is going to brands and selling directly to them***. The beauty of the current situation is that CommerceHub is not cold calling; instead, CommerceHub is going to *existing* customers who have been working with CommerceHub for years and is offering them a new service.

The value proposition of CommerceHub for Brands is very compelling. CommerceHub for Brands enables brands to reach many channels at the same time and not just sell on their own websites or through retailers. Such channels include (among others) marketplaces, search (Google, etc.) and social channels. But this is not the end. ***Selling directly to consumer presents brands with a whole new range of challenges on the supply chain and online presence fronts, an area where CommerceHub has extremely strong expertise***.

Managing product content, inventory, order integration and fulfillment, including the ability to connect to 3PLs and carriers, across multiple channels is difficult and is something that even major brands do not have expertise and capabilities in. CommerceHub for Brands empowers them to grow online sales without worrying about these issues.

What do brands gain when they become customers of CommerceHub for Brands? First of all, brands increase their outreach and can increase their revenue. Second, as the world becomes more and more digital and Internet dependent, brands *must secure digital & virtual shelf space*. It used to be the case that brands fought to get the best available shelf space at Nordstroms of the world. Now to stay relevant brands must get "shelf space" on Facebook, Google, and Pinterest (to name just a few). Their customers spend more and more time online and brands have no choice but to follow their customers. If they do not, someone else will.

To recap, CommerceHub for Brands SaaS offering allows brands to maintain one central catalog that brands would manage and that would be integrated with every channel where brands want to be present and brands will be able to accept orders and do fulfillment and logistics.

Despite being a very new offering in its current shape and form CommerceHub has disclosed some recent impressive wins that include Mattel and "major iconic multinational footwear manufacturer".

4. Strategic Importance of CommerceHub for Brands for the Company

CommerceHub for Brands is of high strategic importance for CHUB. Amazon, the largest online retailer, is not using CommerceHub dropship offering. Given that Amazon is growing faster than the rest of e-commerce industry, CommerceHub wanted to get some exposure to that growth. CommerceHub for Brands allows it to get that exposure through Amazon Marketplace. Our research findings indicate that Mercent has been one of Amazon's largest partners as far as onboarding of suppliers goes. From this perspective, acquiring Mercent was a very smart move by CommerceHub.

On top of that, CommerceHub would benefit from growth of other online marketplaces.

We highlight the risk of Amazon creating its own software solution and forcing all suppliers selling through Amazon Marketplace to use it.

XVI. Competition and Substitutes

Based on our research, no single company is providing the same range of service offerings as CommerceHub. However, each individual solution offered by CommerceHub overlaps with other players to some extent. Let's address them one by one.

1. CommerceHub Core Dropship Offering

a. Traditional Legacy On-Premise Solutions

CommerceHub core dropship offering is competing (or – a better way to say it – disrupting and replacing) legacy on-premise solutions.

On-premise licensed software usually links retailers and suppliers through the Electronic Data Interchange (EDI) protocol that enables the structured electronic transmission of data between organizations.

However, ***legacy on-premise software solutions have several drawbacks compared to CommerceHub***.

First, on-premise software solutions tend to focus on fulfillment automation within a single facility and among a small network of trading partners.

Second, such solutions are not most user friendly as they require significant time and technical expertise to configure, deploy and maintain.

Third, adding new trading partners is a time-consuming process that also required technical expertise.

Fourth, the architecture of legacy on-premise software is a multitude of point-to-point connections between retailers and suppliers instead of a network of connections that CommerceHub has built.

Fifth, because of the reasons listed above, the traditional software model is not well-suited for many retailers and suppliers, especially when trading relationships include suppliers with small IT budgets. Simply stated, on-premise legacy solutions can be prohibitively expensive for small suppliers.

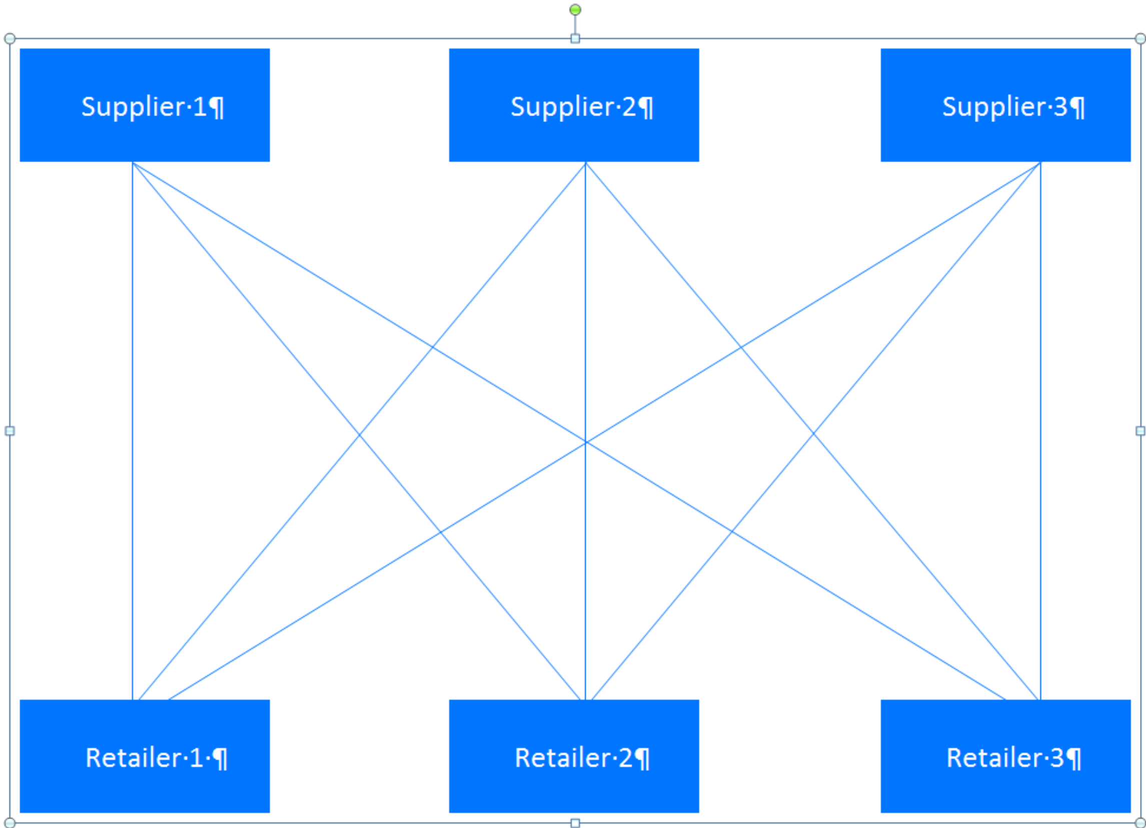
What is the technical disadvantage of point-to-point architecture? These multiple connections are inherently error-prone. They are also difficult to adapt to changing requirements and market circumstances. This is an example that CommerceHub has provided in S-1:

> "For instance, if there is a broad trend in the market that many members of a retailing segment would like to adopt, a supplier would be faced with a series of enhancements, on a one-by-one basis, to the collection of connections they have with their retailers." (See S-1).

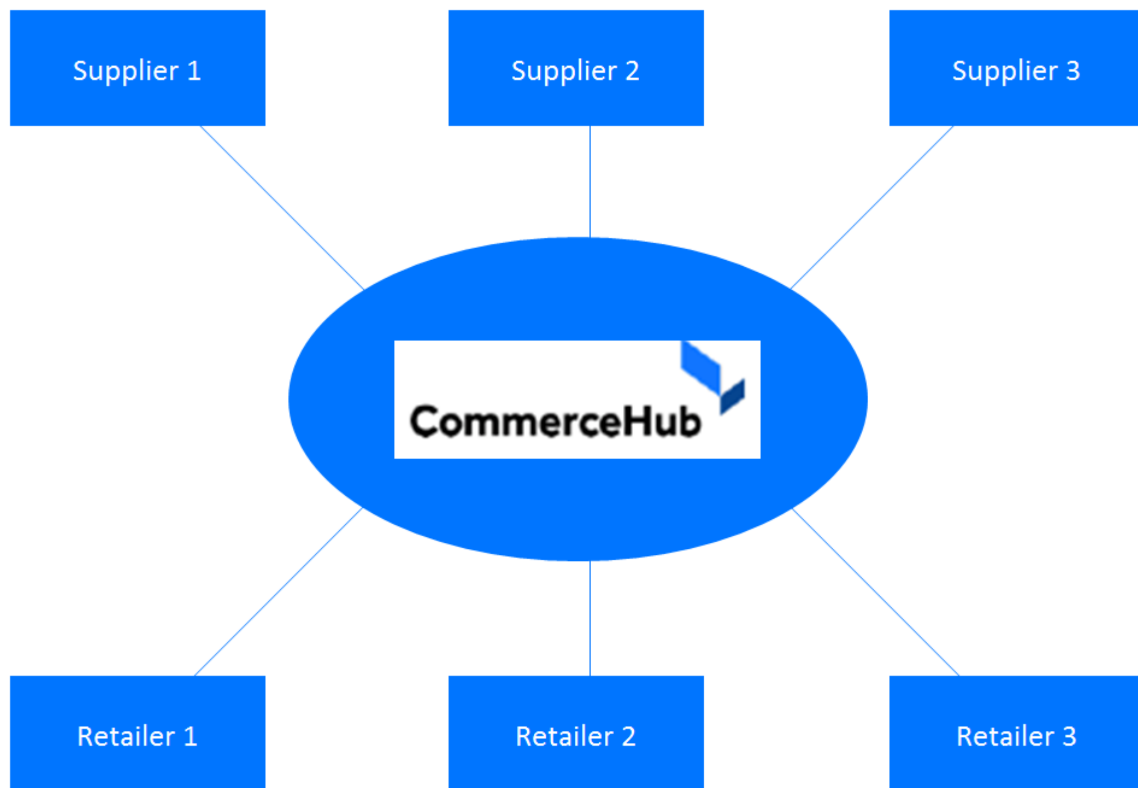
The ***important strategic implication*** of the point-to-point architecture is that it is significantly easier to disrupt than the network architecture. This is exactly why CommerceHub has had success at disrupting traditional on-premise software solutions (it obviously has a great product too).

Belwo we provide a graphic illustration of differences in architecture between legacy on-premise software and CommerceHub's offerings.

Legacy, On-Premise Software



CommerceHub SaaS Solutions



b. *Other SaaS Providers*

There are other SaaS providers whose offerings have something in common with CommerceHub's core dropship solution. The largest of them is SPS Commerce that we briefly mentioned earlier. In fact, SPSC is twice as large as CHUB when measured by revenue.

If one reads SPSC filings, they will see that SPCS offers dropship solutions and does billions of dollars in GMV that is dropshipped.

So is SPSC a serious direct competitor to CommerceHub? And is CommerceHub trying to catch up with SPCS? The answer is "no" because there are numerous differences between SPCS and CHUB both in terms of the business model and product.

c. *CHUB vs. SPSC: Not Director Competitors*

Let's start with the differences in the business model.

i. Who is the customer?

As we wrote, CHUB charges *both* retailers and suppliers and both retailers and suppliers use CommerceHub's software.

CommerceHub's approach is to partner with retailers and provide them with software that stay on top of EDI.

Only suppliers use SPCS's software while retailers do not. Hence, SPCS charges only suppliers for its SaaS. SPSC helps suppliers to map into EDI.

ii. Go-to-Market Strategy and Sales and Marketing Expenses

Having different customers results in substantial differences in go-to-market strategy. As we discussed earlier, CommerceHub markets to retailers. Since it has only ~50 very large retailers, its sales and marketing expenses are fairly small (10% of revenue or even less). How does CommerceHub get suppliers as paying customers? Retailers bring them to CommerceHub. A retailer who signs up with CommerceHub says to its supplier whom it wants to do dropship: "Mr. Supplier, we will do business with you through the CommerceHub platform. If you want to do business with me, you need to become a CommerceHub customer".

SPC Commerce sells only to suppliers and, thus, it needs to sell to each of them. SPCS has more than 20,000 suppliers as recurring revenue customers. Not surprisingly, its sales and marketing expenses run at ~30% - 35% of revenue.

iii. Products Are Different and They Are Complementary

CommerceHub and SPS Commerce's products are different. CommerceHub focuses *only* on dropshipping. SPCS' product first and foremost allows suppliers to ship goods to a warehouse / distribution center of a retailer. SPSC's product also enables a supplier to dropship. However, how would a retailer communicate "please dropship this product to a consumer directly"? If a retailer uses CommerceHub software, then its trading partner (*i.e.*, supplier) will be using CommerceHub software as well. Thus, the only situation where a supplier would rely on SPCS' product to fulfill dropship would be when a retailer is using non-CHUB software (for example, an in house solution).

What does it mean? It means that SPCS and CHUB are *actually not direct competitors and their products are complementary*.

At the Oppenheimer Conference on 08/10/2016 SPCS management shared with investors that most of SPCS customers are “blended” (*i.e.*, they also use CommerceHub offerings).

d. *SPCS and CHUB: Will They Compete Directly in the Future?*

The next logical question is whether SPCS and CHUB will expand their respective offerings and compete with each other head to head.

We do not think this is likely for two reasons.

First, the respective market that SPCS and CHUB target are extremely large and will be growing over the next several years (if not decades!). It is easier to disrupt and replace legacy, on-premise software providers than fight against another SaaS player.

Second, moving to each other’s market will be a significant stretch and departure from the original business model.

In order for SPSC to compete with CHUB’s dropship solution, it will need to spend tens of millions of dollars on R&D to build a comparable solution. Then SCPS would need to go and persuade 50 large retailers to switch from CHUB to SPSC which is very difficult to do.

In order for CHUB to compete with SPCS in their fulfillment solutions, CHUB will also need to build a similar product that will be cheaper than building a dropship software solution. Then CHUB would need to spend significant amount of money on sales and marketing this new fulfillment solution which will definitely push its sales and marketing expenses beyond current 10% of sales.

Our sense is that neither of two companies wants to do that.

e. *DIY / In-House Solutions*

Based on our research, the biggest competitor and substitute for CommerceHub dropship offerings are in-house solutions when retailers decide not to outsource this capability and build it internally.

2. <u>CommerceHub for Brands Offering</u>

CommerceHub for Brands allows brands to sell through marketplaces, search, and social channels.

The most direct competitor in this space is Channel Advisor (ticker: ECOM) which does pretty much the same. ECOM is significantly larger than CommerceHub for Brands. In 2015 Mercent (at that time) generated ~$10.5 of revenue while Channel Advisor generated ~$100M.

How is CommerceHub planning to compete with ECOM?

First of all, the market is still very young and the entire space is growing rapidly.

Second, ECOM has to go after new customers with whom it has no pre-existing relationship. As a result, ECOM is spending ~50% of its revenue on sales and marketing.

CHUB's approach is different. It has an installed base of ~9,700 supplier customers who already use CHUB's solutions for dropship. CHUB would be working on cross-selling its CommerceHub for Brands offering to them.

It is important to emphasize that CHUB is not going after ECOM's existing customers and urging them to switch. So potential customers will have three choices: (1) use nobody which will probably hurt them in the mid and long-term; (2) deepen their relationship with CommerceHub and use its software offerings for both dropship and direct sales; (3) use ECOM or one of the smaller competitors.

We expect that CommerceHub marketing expenses on its brand initiative will be lower than any other player (including ECOM) because of its preexisting relationships with suppliers.

XVII. Network Effect and Switching Costs Create a Strong Moat for CHUB Which Gets Stronger with Every New Customer

1. <u>How CommerceHub Is Different from a Typical SaaS Company</u>

A typical SaaS company has a relatively weak moat that relies almost exclusively on switching costs which are not always significant. If another disruptor comes up with a better mouse trap, the customer can leave.

CommerceHub is different from most SaaS companies because its moat is built upon its network effect (or demand side increasing returns as many academics like calling it).

2. Network Effect Is the Core Moat

The network effect is key to CommerceHub's longevity and sustainability. As mentioned above, CHUB has ~50 large retailers and ~9,700 suppliers in its network.

What's the beauty of it? Why would new customers care? Why would existing customers not want to leave? ***The major attraction of this network is that once you are integrated you can do business with any other counterparty that is on the network***.

Let's say you are a retailer and do business with 50 suppliers. If you leave CHUB and still want to dropship, you need to establish 50 point-to-point connections and integrate them. That's a lot of work.

Let's say you are a supplier and just started selling your products to a retailer who requested you to join the CommerceHub platform. Once you do it once, you are done. When any other retailer who is also the platform starts doing business with you, you will not need to do anything.

That's the power of the network and the network is exactly what legacy on-premise solutions did not have which allowed CHUB to replace them in many cases.

Needless to say, ***the value of CHUB's trading partner network continues to growth with each new partner added***. Thus, ***the network effect will get only stronger over time***.

3. Network Effect Also Helps Attracting New Customers and Keep Customer Acquisition Costs Low

The network effect also helps attracting new customers: new suppliers are attracted to CHUB's network because of its retailer and marketplace customers while new retailer and marketplace customers are attracted by CHUB's ability to facilitate their interaction with thousands of potential suppliers.

The network effect has also allowed CHUB to grow its business with low customer acquisition costs.

XVIII. Management: CEO-Founder with a Very large Options Package

1. Frank Poore: Background

As we mentioned before, CEO Frank Poore founded the Company in 1997, left in 2006 after the sale of the company, and then took position of Chief Strategist in January 2011 and finally became CEO again in January 2013.

2. CEO Executive Compensation

Below we provide a summary of the CEO compensation.

Summary Compensation Table

Name and Principal Position (as of 12/31/15)	Year	Salary ($)	Bonus ($)	Stock Awards ($)	Option Awards ($)(1)	Non-Equity Incentive Plan Compensation ($)	All Other Compensation ($)(2)(3)	Total ($)
Francis Poore	2015	369,048	—	—	—	165,973	15,951	550,972
President and Chief Executive Officer	2014	354,775	—	—	—	197,340	12,723	564,838
Bob Marro(4)	2015	248,968	—	—	1,224,000	99,499	15,951	1,588,418
Chief Financial Officer	2014	218,938	—	—	—	92,997	12,723	324,658
Eric Best	2015	224,170	—	—	587,520	68,738	12,075	892,503
Chief Strategy Officer	2014	—	—	—	—	—	—	—

(1) Reflects the grant date fair value of stock appreciation rights (SARs) awarded to Mr. Marro and Mr. Best, which have been computed in accordance with FASB ASC Topic 718, but (pursuant to SEC regulations) without reduction for estimated forfeitures. For a description of the assumptions applied in these calculations, see Note 3 of the Notes to our Consolidated Financial Statements for the year ended December 31, 2015 included in this prospectus.

(2) We are a participating employer in the Liberty Interactive 401(k) Savings Plan, which provides employees with an opportunity to save for retirement. The Liberty Interactive 401(k) Savings Plan participants may contribute up to 75% of their eligible compensation on a pre-tax basis to the plan (subject to specified maximums and IRS limits), and we contributed a matching contribution based on the participants' contributions as set forth in the plan. Participant contributions to the Liberty Interactive 401(k) Savings Plan are fully vested upon contribution.

Generally, participants acquire a vested right in our matching contributions as follows:

Years of Service	Vesting Percentage
Less than 1	0%
1 or more but fewer than 2	50%
2 or more	100%

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Source: CHUB S-1

Overall, we view CEO compensation as fairly reasonable.

3. Stock Options Grant

Shortly before the spin-off CEO received a very large SARS grant which were later converted into CHUB options. The net result of the grant is that CEO received ~2.3M options with the strike price of $16.34 (*i.e.*, they are currently out of the money).

This stock grant would make CEO ~5% owner of the Company.

Needless to say, this is a very compelling incentive for the CEO and we view it as a ***strong alignment between shareholders and management***.

We view some details of the SARS grant and their subsequent conversion into options as quite unusual.

Usually CEO receives options grants shortly *after* the spin-off and the strike price is set based on VWAP. In the case of CHUB, *both number of options and the strike price were set in advance of the spin-off transaction*. We also tend to think that the strike price was heavily negotiated between LVNA management and CEO Frank Poore. While we do not want infer too much from this, we tend to think that CEO Frank Poore believes that he will be able to growth CommerceHub's business and intrinsic value in such a way that his options would become very valuable.

XIX. Capital Structure

This is how CHUB's capital structure looks like.

CHUB: Capital Sturcture,, ths $	
Actual S/O	42,850
Dilutive impact from options (both exercisable and not exercisabe)	1,201
F/S S/O	44,051
Share price, $	$15.00
Market Cap	**660,765**
Debt	41,000
DE	0
Debt + DE	**41,000**
Cash	17,608
EV	**684,157**

XX. Valuation and Modelling

1. How to Approach CommerceHub Valuation Conceptually

CommerceHub is currently operating two businesses (though integrated) with very different margin profiles. One business is the dropship core business which is very large by revenue and is a cash generating machine. Another business is CommerceHub for brands which is currently losing money and is expected to continue doing so in 2017 and probably 2018. The company as a whole is generating very healthy cash flow.

So the most conceptually accurate way to value CHUB would be to ***value CHUB's dropship business separately from the CommerceHub for Brands business***. The latter is losing money at the EBITDA level. However, management has been clear that it is not their plan to run losses in CommerceHub for Brands for 5 years. It is our sense that in 2H 2018 or 2019 CommerceHub for Brands will start generating positive FCF and that FCF will grow rapidly.

As Yogi Berra once said, "In theory there is no difference between theory and practice. In practice there is." What we described above is great in theory but more difficult to implement given the lack of detailed information about Mercent and CommerceHub for Brands.

So we will do our best to value CHUB core dropship business separately and will then model the entire company for 2016 – 2019 assuming that CommerceHub for Brands would not reach break-even (though we think it will be FCF positive in 2019 or even earlier). The modelling exercise will be helpful in getting a sense of how financials would look like. However, we do not think that valuing the entire company on the consolidated basis based on 2019 EBITDA or FCF is the right approach.

2. Valuing CommerceHub Core Dropship Business

As we wrote above, CHUB acquired Mercent in early January 2015. Thus, 2014 was the last year when CHUB operated *only* its dropship business. Our due diligence also indicates that there were no meaningful changes in core dropship business in 2015 when compared to 2014.

Thus, comparing 2014 and 2015 will help us isolate the Mercent impact on the combined business.

In 2014 CHUB generated ~$65.7M in revenue. In 2015 CHUB (including the impact of Mercent) generated ~$87.6M in revenue, including $10.5M in revenue from Mercent. Thus, excluding Mercent, the core dropship business grew from $65.7M in 2014 to ~$77.1M in 2015 or 17.3%.

Adjusted EBITDA (before SBC) was $39.4M in 2014 (59.9% Adjusted EBITDA margin) and ~$43Min 2015 (49.1% Adjusted EBITDA margin). Given that there were no substantial changes in CHUB’s core dropship business, we attribute the entire increase in Adjusted EBITDA margin to Mercent. Furthermore, given that core dropship revenue grew ~17.3% in 2015, we would expect that Adjusted EBITDA grew more than (~21%) which resulted in Adjusted EBITDA margin of ~61.8%.

In 2016 the core dropship business grew~18% and we would think that EBITDA grew more than that (let’s use 21% growth again). This results in an Adjusted EBITDA margin of 63.3%.

However, in 2015 CHUB capitalized software development costs of ~$6.5M. We think that ~70% of those costs are attributable to Mercent / CommerceHub for brands. Thus, only ~$2M of capitalized software in 2015 was attributable to CHUB core dropshipping brand.

Let's assume that CHUB would spend roughly the same amount on capitalized software on its core dropship business in 2016.

Now we need to address SBC as it is a real economic expense. As we explained, CHUB's stock based compensation in its GAAP financials is next to meaningless given mark-to-market adjustments. What we do know, however, is that CHUB guided for $4M - $5M in SBC in 2H 2016 (see 2Q 2016 Earnings Call). Let's annualize the upper band of the range. We arrive to $10M in SBC per year at the normalized level.

Thus, "true economic EBITDA" which would be a fairly good proxy for unlevered, pre-tax free cash flow should be ~$45.6M in 2016.

If we extrapolate these trends to 2017 (16% revenue growth, Adjusted EBITDA growth of 20%), we would arrive to "true economic EBITDA" of ~$57.2M.

The current EV of CHUB (at $15 / share) on a fully dilute basis is ~$684M which translates into 15x 2016 "true economic EBITDA" and 12x 2017 "true economic EBITDA".

Is CHUB stock attractively priced? We believe so. Most SaaS companies trade at 20x+ EV/EBITDA. For example, SPCS trades at 30x+ EBITDA minus SBC. While SPCS is growing its top line faster (21% - 22% vs. very high teens in the case of CHUB), such growth comes with incredibly high sales and marketing expense (~30% - 35% of revenue). Thus, we do not think that SPCS deserves a significant (if any) premium over CHUB.

Below we provide the summary of our calculations.

CHUB: Core Dropship Business Valuation	2014	2015	2016	2017
Revenue	65,761	87,614		
- Core dropship business	65,761	77,114	90,995	105,554
Core dropship growth, %		*17.3%*	*18.0%*	*16.0%*
- Mercent business	0	10,500		
CHUB Gross margin, %	80.1%	74.4%		
CHUB Adjusted EBITDA	39,368	42,996		
growth y-o-y, %	*59.9%*	*49.1%*		
Core dropship Adjusted EBITDA	39,368	47,635	57,639	69,166
growth y-o-y, %		*21.0%*	*21.0%*	*20.0%*
Adjusted EBITDA margin, %	59.9%	61.8%	63.3%	65.5%
Capitalized Software		(6,484)		
- Core dropship		30%		
- Mercent		70%		
- Core dropship		(1,945)	(1,945)	(1,945)
- Mercent		(4,539)		
Normalized SBC			(10,000)	(10,000)
"True economic" EBITDA			45,693	57,221
Current EV (@ $15 / share)			684,157	684,157
EV/"True economic" EBITDA multiple			15.0x	12.0x

We want to emphasize that this exercise is inherently imprecise. We have made several assumptions that we (1) clearly stated above and (2) we believe are reasonable and most likely

conservative. However, one can make their assumptions about the key variables and see what those assumptions will imply.

3. <u>Valuing CommerceHub for Brands Business</u>

We will *not* value CommerceHub for Brands separately. If we do, our valuation exercise will likely be a "garbage in, garbage out" exercise because at this point the Company has disclosed very little about the revenue potential and margin profile. We know that currently this segment loses money (*i.e.*, is EBITDA negative). As we mentioned before, we expect that it will become FCF positive in 2019 or even 2H 2018. We also think that management will be disciplined and will shut it down in case the expectations are wrong and the business does not start generating FCF in a couple of years.

4. <u>Modelling Two Business Combined – 2017 – 2019 – With No Credit for CommerceHub for Brands Profitability or Growth</u>

a. Modeling Revenue

We model revenue by working with two key variables: the number of customers and revenue per customer. Given the differences between the core dropship business and CommerceHub for Brands, this is not perfect but should serve our goals. In effect, we are ignoring a likely strong growth of CommerceHub for Brands in starting late in 2017.

CHUB - Model	2014	1Q 2015	2Q 2015	3Q 2015	4Q 2015	2015	1Q 2016	2Q 2016	3Q 2016	4Q 2016	2016	2017	2018	2019
Customers	8,599	8,897	9,191	9,316	9,559	9,559	9,619	9,726	9,930	9,941	9,941	10,538	11,170	11,840
Growth, %						*11.2%*	*8.1%*	*5.8%*	*6.6%*	*4.0%*	*4.0%*	*6.0%*	*6.0%*	*6.0%*
Bear										3.00%		5.00%	5.00%	5.00%
Base										4.00%		6.00%	6.00%	6.00%
Bull										5.00%		8.00%	8.00%	8.00%
Revenue per customer	7,648	2,112	2,160	2,114	3,062	9,166	2,296	2,375	2,264	3,338	10,145	11,058	12,053	13,138
Growth, %						*19.9%*	*8.7%*	*9.9%*	*7.1%*	*9.0%*	*10.7%*	*9.0%*	*9.0%*	*9.0%*
Bear										7.00%		7.00%	7.00%	7.00%
Base										9.00%		9.00%	9.00%	9.00%
Bull										11.00%		12.00%	12.00%	12.00%
Revenue	**65,761**	**18,791**	**19,857**	**19,695**	**29,271**	**87,614**	**22,090**	**23,103**	**22,478**	**33,182**	**100,853**	**116,525**	**134,633**	**155,555**
% growth						*33.2%*	*17.6%*	*16.3%*	*14.1%*	*13.4%*	*15.1%*	*15.5%*	*15.5%*	*15.5%*

b. Modeling COGS and Gross Margin

Please note that we model COGS as well as other expense items net of any SBC. We do so because past SBC is extremely misleading.

CHUB - Model	2014	1Q 2015	2Q 2015	3Q 2015	4Q 2015	2015	1Q 2016	2Q 2016	3Q 2016	4Q 2016	2016	2017	2018	2019
Cost of revenue ex-any SBC	11,665	4,334	5,003	5,526	5,182	20,045	5,690	5,982	5,786	6,968	24,426	26,801	28,273	32,667
% growth						*71.8%*	*31.3%*	*19.6%*	*4.7%*	*34.5%*	*21.9%*	*9.7%*	*5.5%*	*15.5%*
Gross Profit	54,096	14,457	14,854	14,169	24,089	67,569	16,400	17,121	16,692	26,213	76,426	89,724	106,360	122,889
Gross profit margin, %	*82.3%*	*76.9%*	*74.8%*	*71.9%*	*82.3%*	*77.1%*	*74.2%*	*74.1%*	*74.3%*	*79.0%*	*75.8%*	*77.0%*	*79.0%*	*79.0%*
Bear										77.00%		75.00%	77.00%	77.00%
Base										79.00%		77.00%	79.00%	79.00%
Bull										81.00%		79.00%	81.00%	81.00%

c. *Modeling Sales and Marketing Expenses*

We increase sales and marketing expense mostly because of higher marketing spend at CommerceHub for Brands.

CHUB - Model	2014	1Q 2015	2Q 2015	3Q 2015	4Q 2015	2015	1Q 2016	2Q 2016	3Q 2016	4Q 2016	2016	2017	2018	2019
S&M ex-any SBC	3,688	1,719	1,712	1,938	2,275	7,644	2,605	2,767	2,920	3,071	11,363	13,181	15,027	16,830
% growth						*107.3%*	*51.5%*	*61.6%*	*50.7%*	*35.0%*	*48.7%*	*16.0%*	*14.0%*	*12.0%*
Bear										40.00%		20.00%	17.00%	15.00%
Base										35.00%		16.00%	14.00%	12.00%
Bull										30.00%		13.00%	11.00%	9.00%
S&M as % of revenue, %	*5.6%*	*9.1%*	*8.6%*	*9.8%*	*7.8%*	*8.7%*	*11.8%*	*12.0%*	*13.0%*	*9.3%*	*11.3%*	*11.3%*	*11.2%*	*10.8%*

d. *Modeling R&D Expenses*

While modeling it is important to keep in mind that in 3Q 2016 CHUB changed its accounting treatment of capitalized software. While it used to capitalize a significant portion of R&D, starting in 3Q 2016 CHUB started expensing ~90% of its "gross" R&D spend while capitalizing only 10%. While it does not change cash flow, it does change income statement line items. Hence, we are modelling a spike in R&D in 2017.

CHUB - Model	2014	1Q 2015	2Q 2015	3Q 2015	4Q 2015	2015	1Q 2016	2Q 2016	3Q 2016	4Q 2016	2016	2017	2018	2019
R&D ex-any SBC	5,717	2,034	2,472	2,163	2,406	9,075	3,010	4,191	4,493	4,571	16,265	19,518	20,885	22,138
% growth						*58.7%*	*48.0%*	*69.5%*	*107.7%*	*90.0%*	*79.2%*	*20.0%*	*7.0%*	*6.0%*
Bear										100.00%		25.00%	10.00%	7.00%
Base										90.00%		20.00%	7.00%	6.00%
Bull										80.00%		17.00%	5.00%	5.00%
R&D as % of revenue, %	*8.7%*	*10.8%*	*12.4%*	*11.0%*	*8.2%*	*10.4%*	*13.6%*	*18.1%*	*20.0%*	*13.8%*	*16.1%*	*16.8%*	*15.5%*	*14.2%*

e. *Modeling G&A*

Here we need to reflect an increase in G&A due to higher standalone company costs and decrease in G&A due to spin off expenses. The net impact is a slight increase in G&A in 2017 and beyond compared to 2016.

CHUB - Model	2014	1Q 2015	2Q 2015	3Q 2015	4Q 2015	2015	1Q 2016	2Q 2016	3Q 2016	4Q 2016	2016	2017	2018	2019
G&A ex-any SBC	9,740	4,150	4,293	3,385	3,820	15,648	3,774	6,360	6,453	4,966	21,553	22,415	23,088	23,549
% growth						*60.7%*	*(9.1%)*	*48.1%*	*90.6%*	*30.0%*	*37.7%*	*4.0%*	*3.0%*	*2.0%*
Bear										35.00%		5.00%	4.00%	3.00%
Base										30.00%		4.00%	3.00%	2.00%
Bull										25.00%		3.00%	2.00%	1.00%
2016 - 2018 CAGR G&A, %													*13.8%*	
G&A as % of revenue, %	*14.8%*	*22.1%*	*21.6%*	*17.2%*	*13.1%*	*17.9%*	*17.1%*	*27.5%*	*28.7%*	*15.0%*	*21.4%*	*19.2%*	*17.1%*	*15.1%*

f. EBIT, Adjusted EBITDA and EBITDA Minus SBC

In our **Base Case**, we arrive at the following results:

CHUB - Model	2014	1Q 2015	2Q 2015	3Q 2015	4Q 2015	2015	1Q 2016	2Q 2016	3Q 2016	4Q 2016	2016	2017	2018	2019
Operating income (loss) (ingoring All SBC)	**34,951**	**6,554**	**6,377**	**6,683**	**15,588**	**35,202**	**7,011**	**3,803**	**2,826**	**13,605**	**27,245**	**34,609**	**47,361**	**60,371**
growth, %						*0.7%*	*7.0%*	*(40.4%)*	*(57.7%)*	*(12.7%)*	*(22.6%)*	*27.0%*	*36.8%*	*27.5%*
	53.1%	*34.9%*	*32.1%*	*33.9%*	*53.3%*	*40.2%*	*31.7%*	*16.5%*	*12.6%*	*41.0%*	*27.0%*	*29.7%*	*35.2%*	*38.8%*
Adjustments														
Depreciation and amortization	4,417	1,801	1,922	1,992	2,079	7,794	2,323	2,539	2,453	2,489	9,804	7,574	4,712	3,889
growth, %						*76.5%*	*29.0%*	*32.1%*	*23.1%*	*19.7%*	*25.8%*	*(22.7%)*	*(37.8%)*	*(17.5%)*
D&A as % of revenue, %	*6.7%*	*9.6%*	*9.7%*	*10.1%*	*7.1%*	*8.9%*	*10.5%*	*11.0%*	*10.9%*	*7.50%*	*9.7%*	*6.50%*	*3.50%*	*2.50%*
EBITDA + All SBC	**39,368**	**8,355**	**8,299**	**8,675**	**17,667**	**42,996**	**9,334**	**6,342**	**5,279**	**16,093**	**37,048**	**42,183**	**52,073**	**64,260**
growth, %						*9.2%*	*11.7%*	*(24%)*	*(39%)*	*(9%)*	*(13.8%)*	*13.9%*	*23.4%*	*23.4%*
EBITDA + All SBC margin, %	*59.9%*	*44.5%*	*41.8%*	*44.0%*	*60.4%*	*49.1%*	*42.3%*	*27.5%*	*23.5%*	*48.5%*	*36.7%*	*36.2%*	*38.7%*	*41.3%*
SBC - Cost of Revenue (All)	1,432	191	386	806	978	2,361	504	(662)	(49)					
% growth						*64.9%*	*163.9%*	*(271.5%)*	*(106.1%)*	*(100.0%)*	*(100.0%)*			
SBC - S&M (All)	2,682	721	820	870	1,687	4,098	984	(383)	103					
% growth						*52.8%*	*36.5%*	*(146.7%)*	*(88.2%)*	*(100.0%)*	*(100.0%)*			
SBC - R&D (All)	4,249	1,575	1,557	1,215	2,882	7,229	1,860	(747)	584					
% growth						*70.1%*	*18.1%*	*(148.0%)*	*(51.9%)*	*(100.0%)*	*(100.0%)*			
SBC - G&A (All)	19,993	6,130	5,438	4,623	12,271	28,462	6,689	(1,685)	1,555					
% growth						*42.4%*	*9.1%*	*(131.0%)*	*(66.4%)*	*(100.0%)*	*(100.0%)*			
SBC - All	**28,356**	**8,617**	**8,201**	**7,514**	**17,818**	**42,150**	**10,037**	**(3,477)**	**2,193**	**3,000**	**11,753**	**10,000**	**10,500**	**11,000**
Bear												14,000	14,500	15,000
Base												10,000	10,500	11,000
Bull												9,000	9,500	10,000
% growth						*48.6%*	*16.5%*	*(142.4%)*	*(70.8%)*	*(83.2%)*	*(72.1%)*	*(14.9%)*	*5.0%*	*4.8%*
All SBC as % of revenue, %	*43.1%*	*45.9%*	*41.3%*	*38.2%*	*60.9%*	*48.1%*	*45.4%*	*(15.0%)*	*9.8%*	*9.0%*	*11.7%*	*8.6%*	*7.8%*	*7.1%*
Adjusted EBITDA minus SBC (GAAP)	11,012	(262)	98	1,161	(151)	846	(703)	9,819	3,086	13,093	25,295	32,183	41,573	53,260
growth, %						*(92.3%)*	*168.3%*	*9,919%*	*166%*	*(8,771%)*	*2,890%*	*27.2%*	*29.2%*	*28.1%*
2016 - 2018 CAGR EBITDA, %													*266.3%*	*28.2%*
EBITDA + All SBC margin, %	*16.7%*	*(1.4%)*	*0.5%*	*5.9%*	*(0.5%)*	*1.0%*	*(3.2%)*	*42.5%*	*13.7%*	*39.5%*	*25.1%*	*27.6%*	*30.9%*	*34.2%*

This is our **Bear Case**:

CHUB - Model	2014	1Q 2015	2Q 2015	3Q 2015	4Q 2015	2015	1Q 2016	2Q 2016	3Q 2016	4Q 2016	2016	2017	2018	2019
Operating income (loss) (ingoring All SBC)	**34,951**	**6,554**	**6,377**	**6,683**	**15,588**	**35,202**	**7,011**	**3,803**	**2,826**	**11,686**	**25,326**	**26,968**	**34,572**	**41,849**
growth, %						*0.7%*	*7.0%*	*(40.4%)*	*(57.7%)*	*(25.0%)*	*(28.1%)*	*6.5%*	*28.2%*	*21.0%*
	53.1%	*34.9%*	*32.1%*	*33.9%*	*53.3%*	*40.2%*	*31.7%*	*16.5%*	*12.6%*	*36.2%*	*25.3%*	*24.0%*	*27.4%*	*29.5%*
Adjustments														
Depreciation and amortization	4,417	1,801	1,922	1,992	2,079	7,794	2,323	2,539	2,453	2,419	9,734	7,298	4,415	3,543
growth, %						*76.5%*	*29.0%*	*32.1%*	*23.1%*	*16.4%*	*24.9%*	*(25.0%)*	*(39.5%)*	*(19.8%)*
D&A as % of revenue, %	*6.7%*	*9.6%*	*9.7%*	*10.1%*	*7.1%*	*8.9%*	*10.5%*	*11.0%*	*10.9%*	*7.50%*	*9.7%*	*6.50%*	*3.50%*	*2.50%*
EBITDA + All SBC	**39,368**	**8,355**	**8,299**	**8,675**	**17,667**	**42,996**	**9,334**	**6,342**	**5,279**	**14,105**	**35,060**	**34,266**	**38,987**	**45,392**
growth, %						*9.2%*	*11.7%*	*(24%)*	*(39%)*	*(20%)*	*(18.5%)*	*(2.3%)*	*13.8%*	*16.4%*
EBITDA + All SBC margin, %	*59.9%*	*44.5%*	*41.8%*	*44.0%*	*60.4%*	*49.1%*	*42.3%*	*27.5%*	*23.5%*	*43.7%*	*35.1%*	*30.5%*	*30.9%*	*32.0%*
SBC - Cost of Revenue (All)	1,432	191	386	806	978	2,361	504	(662)	(49)					
% growth						*64.9%*	*163.9%*	*(271.5%)*	*(106.1%)*	*(100.0%)*	*(100.0%)*			
SBC - S&M (All)	2,682	721	820	870	1,687	4,098	984	(383)	103					
% growth						*52.8%*	*36.5%*	*(146.7%)*	*(88.2%)*	*(100.0%)*	*(100.0%)*			
SBC - R&D (All)	4,249	1,575	1,557	1,215	2,882	7,229	1,860	(747)	584					
% growth						*70.1%*	*18.1%*	*(148.0%)*	*(51.9%)*	*(100.0%)*	*(100.0%)*			
SBC - G&A (All)	19,993	6,130	5,438	4,623	12,271	28,462	6,689	(1,685)	1,555					
% growth						*42.4%*	*9.1%*	*(131.0%)*	*(66.4%)*	*(100.0%)*	*(100.0%)*			
SBC - All	**28,356**	**8,617**	**8,201**	**7,514**	**17,818**	**42,150**	**10,037**	**(3,477)**	**2,193**	**3,000**	**11,753**	**14,000**	**14,500**	**15,000**
Bear												14,000	14,500	15,000
Base												10,000	10,500	11,000
Bull												9,000	9,500	10,000
% growth						*48.6%*	*16.5%*	*(142.4%)*	*(70.8%)*	*(83.2%)*	*(72.1%)*	*19.1%*	*3.6%*	*3.4%*
All SBC as % of revenue, %	*43.1%*	*45.9%*	*41.3%*	*38.2%*	*60.9%*	*48.1%*	*45.4%*	*(15.0%)*	*9.8%*	*9.3%*	*11.8%*	*12.5%*	*11.5%*	*10.6%*
Adjusted EBITDA minus SBC (GAAP)	11,012	(262)	98	1,161	(151)	846	(703)	9,819	3,086	11,105	23,307	20,266	24,487	30,392
growth, %						*(92.3%)*	*168.3%*	*9,919%*	*166%*	*(7,455%)*	*2,655%*	*(13.1%)*	*20.8%*	*24.1%*
2016 - 2018 CAGR EBITDA, %													*207.0%*	*9.3%*
EBITDA + All SBC margin, %	*16.7%*	*(1.4%)*	*0.5%*	*5.9%*	*(0.5%)*	*1.0%*	*(3.2%)*	*42.5%*	*13.7%*	*34.4%*	*23.3%*	*18.1%*	*19.4%*	*21.4%*

Finally, this is our **Bull Case**:

CHUB - Model	2014	1Q 2015	2Q 2015	3Q 2015	4Q 2015	2015	1Q 2016	2Q 2016	3Q 2016	4Q 2016	2016	2017	2018	2019
Operating income (loss) (ingoring All SBC)	**34,951**	**6,554**	**6,377**	**6,683**	**15,588**	**35,202**	**7,011**	**3,803**	**2,826**	**15,570**	**29,210**	**43,802**	**64,391**	**87,197**
growth, %						*0.7%*	*7.0%*	*(40.4%)*	*(57.7%)*	*(0.1%)*	*(17.0%)*	*50.0%*	*47.0%*	*35.4%*
	53.1%	*34.9%*	*32.1%*	*33.9%*	*53.3%*	*40.2%*	*31.7%*	*16.5%*	*12.6%*	*45.6%*	*28.7%*	*35.6%*	*43.2%*	*48.4%*
Adjustments														
Depreciation and amortization	4,417	1,801	1,922	1,992	2,079	7,794	2,323	2,539	2,453	2,559	9,874	8,003	5,212	4,504
growth, %						*76.5%*	*29.0%*	*32.1%*	*23.1%*	*23.1%*	*26.7%*	*(18.9%)*	*(34.9%)*	*(13.6%)*
D&A as % of revenue, %	*6.7%*	*9.6%*	*9.7%*	*10.1%*	*7.1%*	*8.9%*	*10.5%*	*11.0%*	*10.9%*	*7.50%*	*9.7%*	*6.50%*	*3.50%*	*2.50%*
EBITDA + All SBC	**39,368**	**8,355**	**8,299**	**8,675**	**17,667**	**42,996**	**9,334**	**6,342**	**5,279**	**18,129**	**39,084**	**51,804**	**69,604**	**91,700**
growth, %						*9.2%*	*11.7%*	*(24%)*	*(39%)*	*3%*	*(9.1%)*	*32.5%*	*34.4%*	*31.7%*
EBITDA + All SBC margin, %	*59.9%*	*44.5%*	*41.8%*	*44.0%*	*60.4%*	*49.1%*	*42.3%*	*27.5%*	*23.5%*	*53.1%*	*38.4%*	*42.1%*	*46.7%*	*50.9%*
SBC - Cost of Revenue (All)	1,432	191	386	806	978	2,361	504	(662)	(49)					
% growth						*64.9%*	*163.9%*	*(271.5%)*	*(106.1%)*	*(100.0%)*	*(100.0%)*			
SBC - S&M (All)	2,682	721	820	870	1,687	4,098	984	(383)	103					
% growth						*52.8%*	*36.5%*	*(146.7%)*	*(88.2%)*	*(100.0%)*	*(100.0%)*			
SBC - R&D (All)	4,249	1,575	1,557	1,215	2,882	7,229	1,860	(747)	584					
% growth						*70.1%*	*18.1%*	*(148.0%)*	*(51.9%)*	*(100.0%)*	*(100.0%)*			
SBC - G&A (All)	19,993	6,130	5,438	4,623	12,271	28,462	6,689	(1,685)	1,555					
% growth						*42.4%*	*9.1%*	*(131.0%)*	*(66.4%)*	*(100.0%)*	*(100.0%)*			
SBC - All	**28,356**	**8,617**	**8,201**	**7,514**	**17,818**	**42,150**	**10,037**	**(3,477)**	**2,193**	**3,000**	**11,753**	**9,000**	**9,500**	**10,000**
Bear												14,000	14,500	15,000
Base												10,000	10,500	11,000
Bull												9,000	9,500	10,000
% growth						*48.6%*	*16.5%*	*(142.4%)*	*(70.8%)*	*(83.2%)*	*(72.1%)*	*(23.4%)*	*5.6%*	*5.3%*
All SBC as % of revenue, %	*43.1%*	*45.9%*	*41.3%*	*38.2%*	*60.9%*	*48.1%*	*45.4%*	*(15.0%)*	*9.8%*	*8.8%*	*11.5%*	*7.3%*	*6.4%*	*5.6%*
Adjusted EBITDA minus SBC (GAAP)	11,012	(262)	98	1,161	(151)	846	(703)	9,819	3,086	15,129	27,331	42,804	60,104	81,700
growth, %						*(92.3%)*	*168.3%*	*9,919%*	*166%*	*(10,119%)*	*3,131%*	*56.6%*	*40.4%*	*35.9%*
2016 - 2018 CAGR EBITDA, %													*314.2%*	*44.1%*
EBITDA + All SBC margin, %	*16.7%*	*(1.4%)*	*0.5%*	*5.9%*	*(0.5%)*	*1.0%*	*(3.2%)*	*42.5%*	*13.7%*	*44.3%*	*26.9%*	*34.8%*	*40.4%*	*45.4%*

5. EV/EBITDA Multiple Valuation

While we think it is next to meaningless, optically CHUB trades at ~12.8x EV/2019 EBITDA minus SBC

XXI. Catalysts

CommerceHub investment case has hard, identifiable catalysts. We see 5 of them.

1. Clean SBC in 2017

First, during 2017 it will become clear what the "true" SBC is. We estimate it to be ~$10M / year. Our time frame on this is around 3Q 2017 as 3Q 2016, 4Q 2016, and first two quarters of 2017 will give LTM SBC that is "clean"

2. Return to Higher Top Line Growth and Potentially Accelerating Consolidated Revenue Growth When Mercent Headwinds Dissipate

Second, after CommerceHub finishes churning ex-Mercent customers that are not a good fit for its business strategy, the Company will start showing accelerating top line growth. We expect that churning of ex-Mercent customers will be over during 1H 2017.

3. Return to Expanding Consolidated Margins Once Mercent Headwinds Dissipate

Third, once investors get more familiar with the CommerceHub for Brands business, they will realize that margin contraction was only due to CommerceHub for Brands and in fact margins in the core dropship business have actually been expanding.

4. Investor Realization of Significant Differences between SPC Commerce and CommerceHub

Fourth, we think that investors do not realize that SPCS and CHUB do not compete head to head. We tend to think that many investors hear the word "dropship" from both CHUB and

SPCS and assume that they are providing the same services and solutions. As we discussed above, it cannot be further from the truth.

5. Sellside Coverage

We expect that at some point sellside will pick up coverage which will increase investor awareness.

XXII. Risk: Financial Health of Retailers

The key risk to our thesis is overall financial health of retailers and retail industry.

Customers of CommerceHub's core dropship solutions are competing with Amazon. This is not an easy task. While CommerceHub software helps retailers to compete, it does not guarantee success as the ultimate success depends on retailers' execution. If the financials conditions of retailers significantly deteriorate and some of them close as Circuit City did, CommerceHub can lose customers and revenue.

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