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How Do Sharing Economy Companies Grow? A Comparison of Internal and External Growth Patterns of Airbnb and Uber

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I. Abstract

When the term "sharing economy" is mentioned in the news and in recent academic papers, Airbnb and Uber are mentioned in the same breath. In 2016, these two firms are arguably the most popular and fastest-growing peer-to-peer companies in the world. This study examines the ways in which the two companies have grown since their founding. Growth is examined both externally (in terms of domestic and international market expansion) and internally (hiring for primary and support functions). Specifically, archived job postings are used to analyze how human capital requirements have changed over time, by both location and function. This research identifies the pattern and content of this growth throughout these sharing economy firms.

II. Introduction

The sharing economy has undoubtedly become an integral part of the U.S. economy due to its ability to match supply and demand seamlessly; its popularity can be seen in the explosion of venture capital investment over the last few years. The sharing economy has received $15 billion in funding, which is more than Facebook, Twitter, and SnapChat combined (Koetsier). A sharing economy company arranges the transaction of goods or services for money between two people. For example, eBay is technically a sharing economy company because it is a platform where buyers and sellers come together to exchange money for products. Whereas eBay focuses on the exchange of goods, Airbnb and Uber specialize in services, specifically the hospitality and transportation sectors.

Airbnb was founded in 2008 as a hotel alternative; users visit the website or download the application on their phone in order to browse other people's listed homes to stay during a vacation. Airbnb allows guests to stay in an assortment of accommodations for a fraction of the

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price of a hotel; the company boasts treehouses, penthouses, and castles as international vacation spots. As of January 2016, Airbnb has over 2 million total listings in the 190 countries in which it operates (Airbnb.com).

Uber was founded in 2009 as an alternative to taxi rides; it also uses a mobile app to interact with the counterparty, in this case, the driver. The rider simply types in his/her current location and destination, and the closest driver in the area is matched. Uber now offers customized ride options, such as luxury vehicles, motorcycles, and even supercars. Uber's popularity exploded due to its easy-to-use interface and low fares; in 2014, the app was arranging 1 million rides per day in 382 cities globally (Huet).

Airbnb and Uber are mentioned alongside each other in numerous news articles. For example, the following are recent articles that identify similarities between Airbnb and Uber: "Who's Liable When an Airbnb Stay or Uber Ride Ends Badly?" (Fortune Magazine), "Are Uber, Airbnb and Other Sharing Economy Businesses Good for America?" (Forbes Magazine), "Airbnb and Uber Mobilize Vast User Base to Sway Policy," (The New York Times), and "Startups Uber and Airbnb Court Business Travelers" (The Wall Street Journal). The media is constantly juxtaposing these two companies, leading readers to believe they operate in the same manner.

There has been little research completed in the area of "sharing-economy" firms such as Uber, Airbnb, TaskRabbit, and other recent peer-to-peer startups. In fact, most information about these firms is presented in news articles, which provide insight into the consumer and competitor aspects of these businesses, hostile or frightening incidents during a stay or ride, and protests from hotels and taxi companies. However, there has been little systematic investigation into their growth, especially their pattern of hiring and market expansion.

In order to research the hiring and expansion patterns of these two startups, I analyzed archived job postings. The use of archival data is common in academic research, but the use of archival job postings to spot growth trends in peer-to-peer startups is a novel data source. Although there have been studies analyzing job postings, none have compared two similar companies' internal and external growth patterns using this methodology. My research paints a holistic picture of the expansions of Airbnb and Uber by exploring historical hiring department and location data.

III.   Literature Review

In this section, I trace key academic studies and models related to growth, especially of nascent organizations, such as Airbnb and Uber. Because both are startup companies with no successful sharing economy predecessor in their industries before them, I researched how other industries have expanded internally by staffing requirements and externally by geographic expansion.

Larry Greiner describes an early internal growth model of organizations in his study "Evolution and Revolution as Organizations Grow." This research creates a basis for the growth models of new businesses, such as sharing-economy firms. Airbnb and Uber are considered young companies in high-growth industries. Greiner's paper focuses on the need for managers to change their management styles at each of the five growth stages: creativity, direction, delegation, coordination, and collaboration. This adaptation technique is needed to keep the business alive and thriving through revolutions. Airbnb and Uber appear to be in periods of delegation and coordination, in which we would expect hiring more lower-level managers, creating a more formal, tiered system of management. "Managers in decentralized organizations, who have greater authority and incentives, are able to penetrate larger markets, respond faster to

customers, and develop new products" (Greiner 5). This quote describes Airbnb and Uber's

current methods for penetrating their respective market. I find it appropriate to compare Airbnb

an Uber in this study due to their parallel stages of growth according to Greiner's model.

The academic article that sparked my interest in a "timeline" approach of research is

"Organizational Emergence: The Origin and Transformation of Branson, Missouri's Musical

Theaters" by Chiles, Meyer, and Hench. This study uses complexity theory to depict the

emergence and growth of Branson, Missouri's entertainment industry over the course of 100

years. The authors use archival data, such as newspapers, books, magazines, and television

transcripts as one source of data. The other sources come from interviews and questionnaires.

Using these primary and secondary sources, the authors are able to construct a chronological

display of significant events from 1895 to 1995. Four "eras" emerged from the timeline; these

eras are separated by a discontinuity and given a distinct name. Although I am only examining

three years of each company's data, I am open to possible discontinuities in the timelines of each

in regard to hiring practices.

Chung, Chen, and Hsieh's academic paper titled "First Geographic Expansion of Startup

Firms: Initial Size and Entry Timing Effects" examines the particular events that spark a

startup's geographic expansion overseas. The authors found that "larger firms are more likely to

initiate first geographic expansions and late entrants face stronger competitive pressure to

expand, making them more likely to initiate first geographic expansions" (Chung, Chen, and

Hsieh 390). This statement reflects the idea that late entrants must add value to new markets in

order to compete with existing overseas competitors. Like Greiner's research, Chung, Chen, and

Hsieh's study supports my decision to compare Uber and Airbnb; both companies have

expanded internationally to capture market share from competitors.

Johanson and Wiedersheim-Paul's study on "psychic distance" provides a glimpse into the psychology behind international expansion and the typical strategies of domestic firms wishing to expand overseas. The authors found that firms tend to internationalize slowly and to geographic locations that have similar customs, language, and business practices as the home country. "Psychic distance" is a term used to describe the obstacles that firms face when doing business in a foreign country, such as different cultural environments and political systems. Johanson and Wiedersheim-Paul's research supports the idea that companies want to do business with similar countries; however, these researchers found that two of the companies they studied had strategic motives that went against the idea of avoiding psychic distance in order to penetrate new, unfamiliar markets. This study opens the possibility that contemporary firms may not follow a path of similar country but instead opportunities.

Thus, the academic literature reveals that I should find similar patterns in growth between Airbnb and Uber. Both are startup companies in the sharing economy sector and are first to market in their respective fields. Their geographic expansion should parallel each other given that they were both founded in the U.S. and the role "psychic distance" plays in companies' overseas strategies. Also, Airbnb and Uber are in the same stage of early growth, meaning they should require similar human capital needs in order to operate successfully.

IV.   Research Questions

Are Airbnb and Uber's growth patterns the same over the early years of their respective operations? Specifically, I investigate:

a. How have the job function categories (operations, legal, etc.) grown over time?

b. Are more primary or support functions needed in the early stages of growth?

c. Where have the job positions expanded geographically, and in what order?

Given the literature pertaining to growth, I expect that Uber and Airbnb have grown in the same fashion, both in terms of hiring categories and geographic locations. I expect more primary functions are needed in the early stages of growth because functions such as sales and operations keep firms alive during the delicate startup phase; primary functions are the jobs that increase a company's top line growth, which is critical for any startup wishing to grow rapidly (Sullivan). As well, I expect patterns of geographic growth to represent a transition from initial entry in the most developed regions then movement to the least developed. I anticipate Europe will be the first international region after North America is saturated, and the other regions will follows. Overall, I predict that both firms will share more similarities than differences due to their peer-to-peer nature, comparable stages of growth, and time frames of expansion.

V.   Methods

I selected an exploratory case study methodology using archival data. Because both Airbnb and Uber are privately-owned, financial statements and company structure information are not publicly released. It was necessary to gather my own data using a web archiving service in order to study job postings over a three-year period. Similar studies, such as Pooley and Dunn's "A Longitudinal Study of Purchasing Positions: 1960-1989," use a similar archival methodology. Pooley and Dunn's study examines job ads from *The Wall Street Journal* to observe how the positions evolved over a period of three decades. The study applies a statistical test to determine how the positions changed. Although Pooley and Dunn did not find any statistically significant data to conclude the number of positions had changed over time, they found that more technical positions were needed in later years as technology advanced. Like the authors of this study, I will use a statistical test (chi-square) to compare various ratios of Uber and Airbnb in order to determine if they have grown in the same fashion. If the chi-square test is

not statistically significant, the results support the idea that Uber and Airbnb have similar growth patterns.

I collected my data from www.web.archive.org. This archival database uses "captures," or archived screenshots, to reflect how websites have changed over a period time. One of the drawbacks of this data source is there are fewer captures of www.airbnb.com/jobs and www.uber.com/jobs/list during the first few months of rapid growth. Although this information would be useful, there is an adequate number of recent captures to depict the growth patterns of both companies

Figure 1 shows a sample of the data that I have collected. The first four columns list the job posting date, position, category, and location. The last three columns (Region, Country, and Aggregated Category) were created from the previous columns in order to create uniformity between Airbnb and Uber. In order to make the location more standardized, I grouped the countries and cities listed into six regions: North America, Europe, Latin America, Asia, Australia/New Zealand, and Africa. Aggregating the cities into countries and regions was an objective process—I simply placed each in the appropriate region.

In order to create uniformity between the companies' categories, I aggregated the listed categories into eight over-arching categories, which can be broken down further into Primary and Support functions. To substantiate my ordering decisions, I asked my thesis advisor to sort the 30 listed categories into the 8 aggregate ones I created, (**Figure 2**) and we compared decisions. Of the 30 total categories, we disagreed on one Uber and two Airbnb categories; however we agreed on all Primary and Support functions, which is the focus of my thesis. After analyzing the categories in question (those with an asterisk in Figure 2), we agreed upon an aggregate category for each. Because I have standard categories (function and location), my data can be used to spot

patterns. With the aim of identifying comparison categories to differentiate job positions, I built upon Porter's value chain concept.

In Michael Porter's book "Competitive Advantage: Creating and Sustaining Superior Performance," he separates a firm's functions into primary and secondary activities, placing them onto a "Value Chain" diagram. I have overlaid my 8 aggregate categories onto Porter's Value Chain to create a customized Sharing Economy Value Chain. (**Figure 3**) His paper focuses on a manufacturing firm, but I have taken the key principles and applied it to a sharing economy firm. I chose the primary activities to consist of Operations, Sales/Marketing and Analytics, and Engineering/Design. The support activities are Human Resources, Finance/Accounting, Legal, Customer Support, and Other. Each activity creates "value" within the firm, meaning that primary and support functions craft a firm's competitive advantage. In the next section, I discuss the outcomes from the statistical tests and compare the results to my initial research questions.

VI.   Results and Discussion

Uber's growth of job postings reveals Engineering/Design, Operations, and Sales/Marketing were the most frequent offering during the 25-month period. **Figure 4** and **Figure 5** show clustered column graphs of Uber and Airbnb's job posting count by date. **Table 1** and **Table 2** list the total number of postings over Uber and Airbnb's respective periods by category. The top three categories of Uber are all primary activities, and the top four Airbnb positions are Customer Support, Engineering/Design, Operations, and Sales/Marketing. All of these except Customer Support are primary activities. So, it appears that a focus on internal primary functions is a priority for both Uber and Airbnb in the early stages of growth, and Customer Support should be considered a primary function in this model. For example, perhaps

the Airbnb Customer Support category had more employment opportunities because the lodging industry by its nature requires a higher customer service level than the transportation industry. A guest staying in someone's home will have several interactions with the host and needs more accommodations, such as a bed, shower, and parking. Airbnb would logically need more Customer Support positions to handle complaints, questions, and concerns about users' visits.

Airbnb and Uber are pioneers of their respective sharing economy fields, therefore it is not surprising that both have operations in nearly every country. They beat their competitors to the international stage, giving them a competitive advantage. Chung, Chen, and Hsieh's study sets a basis for competitors, such as Lyft, another U.S. ride sharing company. Lyft's CEO stated in March 2015, "As we go international, we look to add something unique to the market" (Heine). In order to maintain their competitive advantages, Airbnb and Uber must constantly be one step ahead of their competition in regards to expansion strategies.

Both companies were founded in San Francisco, California, so it is not surprising that the highest count of job postings is in North America. **Figure 6** and **Figure 7** show Uber and Airbnb's respective growths by region in the form of line graphs with the date as the horizontal axis. As demonstrated in **Table 3**, Uber and Airbnb have the same rankings for all regions except Europe and Asia. Airbnb expanded job positions into Europe more heavily than Asia (**Figure 7**). One possible explanation for this difference is European hotel prices are higher on average than Asia, thus affording Airbnb a good fit for growth in Europe. The MasterCard Global Destinations Cities Index provides a ranking of the 132 most visited cities around the world in terms of international overnight visitors. The Hotel Price Index lists average hotel room prices by star rating during 2012. I have combined the data (**Table 4**) to show the top tourist destinations in Europe are more expensive than those in Asia, as far as two-star accommodations are

concerned. The average price for a top European destination is £67, whereas the average price for a top Asian destination is £49 ("Average Room Prices by Star Rating"). Their expansion strategies could fit with the outliers of Johanson and Wiedersheim-Paul's in that each firm moved where it strategically made sense, not fitting with an overarching theory of "psychic distance" expansion.

Uber's hiring growth has been regularly recorded on www.web.archive.org from October 2013 until November 2015, and Airbnb's growth has been recorded from April 2012 until July 2014. Uber had 12,245 listings, and Airbnb had 1,571 listings during their respective time periods. Readers should keep in mind that Uber is valued at $62.5 billion (Newcomer) and Airbnb is valued at $24.0 billion (Newcomer), which could reflect some of the disparity between the numbers of listings.

In order to identify patterns statistically, I used a chi-square test to compare the ratios of job postings. All chi-square tests are listed in **Table 5**. "Statistically Significant" results mean Airbnb and Uber have not grown in the same manner, whereas "Not Statistically Significant" results mean Airbnb and Uber have grown in the same manner. In order to support my expectation that Airbnb and Uber are more similar as sharing economy firms than different, I am looking for Not Statistically Significant results.

The first chi-square test I completed is a comparison of Airbnb and Uber's job function count. The test shows that the proportion of primary to support functions between both companies is statistically significant. This means that although Uber and Airbnb each have a higher number of primary functional positions compared to support functions, their job postings have not grown in the same manner by function. The second chi-square test compares Airbnb and Uber's expansion in North America to the rest of the regions. This test also proved to be

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statistically significant, meaning Airbnb and Uber have expanded differently in regard to their North American-to-Overseas job postings.

Because my main chi-square tests were statistically significant, I can conclude that Airbnb and Uber are not as similar as people think. I was expecting to find a similar pattern in order to create an expansion model for other sharing economy startups, such as TaskRabbit and Lyft. However, Airbnb and Uber's growth patterns reveal two separate expansion strategies, meaning there is limited connection between sharing economy firms in diverse sectors, other than their peer-to-peer quality. The expansions of Airbnb and Uber by job function and geography are more different than similar, contrary to signals in academic research and my expectations.

I thought perhaps the large Airbnb Customer Support category was distorting the chi-square job function test, so I treated it as a primary function rather than a support function. The results were still statistically significant. As one more attempt to find a comparison between the two companies, I compared the previous metrics, but using only a shared time frame between the two firms (October 2013-July 2014). The only test that was statistically insignificant was North America versus Other Regions. This means that Airbnb and Uber were hiring the same ratio of domestic and overseas workers during this time period.

VII.   Limitations

One limitation of this research is the lack of consistent data on the web archiving site. Although I was able to analyze job postings roughly every two months over a three-year time period, my research would have been more comprehensive if I had access to the initial postings. Because my research is focused on the growth of these companies, I would have preferred to see

exactly which continent Airbnb and Uber spread to after North America. Instead, I was only able to gather information after both companies spread to multiple continents.

Another limitation is my use of the "count" method to determine how many positions were listed each month. A more accurate way to measure growth would have been to analyze how many positions were actually filled. For example, if there were 5 Legal positions open in January and all were filled in February, in March there would be 0 listings; on the other hand, if none were filled, there would still be 5 positions open in March. The total Legal count would be higher in the second scenario because none were filled. Due to dynamic job titles, I was unable to measure which jobs had been occupied or delisted. Determining job placement rates would have made my research more accurate; however, the count method is still adequate when comparing both companies' growths.

VIII.   Future Research and Final Thoughts

Although Airbnb and Uber are both sharing economy companies, they operate in different sectors of the economy, hospitality and transportation. Each company's popularity should be examined within the context of other sharing economy firms in the respective industry instead of being compared across industries. My research is important for startup sharing economy companies' managers that may make the mistake of thinking all sharing economy companies grow in the same manner. This study has given more insight into this fascinating and growing part of the world's economy; more studies will likely be completed in the coming years when more information is available, leading to a greater understand of the sharing economy.

It is important to remember when reviewing my research that I am only examining job postings, not the number of Airbnb hosts or Uber drivers. Naturally, the office positions would open in countries where Airbnb and Uber operate; however, there could be some discrepancies.

Because Airbnb and Uber are still private firms, this was the only information available to me. Future research could involve analyzing new data of Airbnb and Uber, such as public information if either company has an IPO, or a study on a different sharing economy company.

An interesting future study to complement mine would be an analysis of news sentiment on Airbnb and Uber. For example, I predict that when negative articles are published, such as an Uber driver attack or an Airbnb sexual assault, the companies increase their postings for Legal or Customer Support. Perhaps as competitors, such as Lyft or HomeAway work to increase their market share, Uber or Airbnb will increase its Sales/Marketing postings. A statistical test to correlate job postings with major events would show how reactive these sharing economy firms are to customers, competitors, and regulatory agencies.

Because I discovered that Airbnb and Uber have not followed similar expansion paths, a future study could be completed comparing Lyft job openings to Uber. These companies are in the same industry and are major competitors. Because Lyft is a newer company, it would be interesting to see if it is replicating Uber's approach to expansion or if it is taking a route of its own because of Uber's strong early mover advantages.

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Table 1: Uber Category Rankings from October 2013 to November 2015

Ranking	Category	Functional Area	Number of Positions
1	OPERATIONS	Primary	5,818
2	SALES/MARKETING	Primary	1,915
3	ENGINEERING/DESIGN	Primary	1,769
4	HUMAN RESOURCES	Support	822
5	CUSTOMER SUPPORT	Support	674
6	ACCOUNTING/FINANCE	Support	650
7	LEGAL	Support	320
8	OTHER	Support	277

Table 2: Airbnb Category Rankings from April 2012 to July 2014

Ranking	Category	Functional Area	Number of Positions
1	ENGINEERING/DESIGN	Primary	458
2	CUSTOMER SUPPORT	Support	348
3	SALES/MARKETING	Primary	276
4	OPERATIONS	Primary	235
5	ACCOUNTING/FINANCE	Support	103
6	HUMAN RESOURCES	Support	89
7	LEGAL	Support	51
8	OTHER	Support	11

Table 3: Uber and Airbnb Geographic Rankings (Uber from October 2013-November 2015) (Airbnb from April 2012 to July 2014)

Region	Uber Ranking	Number of Uber Positions	Airbnb Ranking	Number of Airbnb Positions
North America	1	5,352	1	816
Europe	3	1,575	2	400
Asia	2	4,054	3	248
Latin America	4	546	4	51
Australia/New Zealand	5	529	5	12
Africa	6	152	6	0

Table 4: Average 2-Star Hotel Prices in Europe and Asia in 2015

Top Europe Destinations	Average price of hotel (in £)	Top Asia Destinations	Average price of hotel (in £)
London	72	Bangkok	24
Paris	74	Singapore	61
Istanbul	49	Kuala Lumpur	N/A
Barcelona	65	Seoul	54
Amsterdam	75	Hong Kong	50
Rome	68	Tokyo	55
Average:	**67**	**Average:**	**49**

Data collected from http://www.cnbc.com/2015/06/03/most-popular-cities-for-tourists-in-2015.html and http://gb.hotels.com/hotel-price-index/7-average-room-prices-by-star-rating.html

Table 5: Chi-Square Tests

Job Function Base Test

	Primary Function	Support Function
Airbnb	969	602
Uber	9502	2743
Chi^2 Statistic	192.2829	
Statistically Significant		

North America vs. Other Base Test

	NORAM	Other Regions
Airbnb	816	711
Uber	5352	6856
Chi^2 Statistic	50.5366	
Statistically Significant		

Job Function Test Using Airbnb Customer Support as Primary Function

	Primary Function	Support Function
Airbnb	1317	254
Uber	9502	2743
Chi^2 Statistic	32.4362	
Statistically Significant		

Job Function Test Using Same Time Frame

	Primary Function	Support Function
Airbnb	510	441
Uber	1058	466
Chi^2 Statistic	62.924	
Statistically Significant		

Job Function Test Using Same Time Frame and Airbnb Customer Support as Primary Function

	Primary Function	Support Function
Airbnb	794	157
Uber	1058	466
Chi^2 Statistic	61.5328	
Statistically Significant		

North America vs. Other Regions Using Same Time Frame

	NORAM	Other Regions
Airbnb	485	448
Uber	737	761
Chi^2 Statistic	1.7824	
Not Statistically Significant		

Statistically Significant means Airbnb and Uber have not grown in the same manner.
Not Statistically Significant means Airbnb and Uber have grown in the same manner.

Figure 1: Sample Data Collection: Excerpt from Uber Data

Date	Position	Stated Category	City	Region	Country	Aggregated Category
10/19/2014	SOFTWARE ENGINEER - FULL STACK	ENGINEERING	SAN FRANCISCO	NORAM	UNITED STATES	ENGINEERING/DESIGN
10/19/2014	SOFTWARE ENGINEER - GROWTH	ENGINEERING	SAN FRANCISCO	NORAM	UNITED STATES	ENGINEERING/DESIGN
10/19/2014	SOFTWARE ENGINEER - INFRASTRUCTURE	ENGINEERING	SAN FRANCISCO	NORAM	UNITED STATES	ENGINEERING/DESIGN
10/19/2014	SOFTWARE ENGINEER - INFRASTRUCTURE (LITHUANIA)	ENGINEERING	VILNIUS	EUROPE	LITHUANIA	ENGINEERING/DESIGN
10/19/2014	SOFTWARE ENGINEER - IOS	ENGINEERING	SAN FRANCISCO	NORAM	UNITED STATES	ENGINEERING/DESIGN
10/19/2014	SOFTWARE ENGINEER - LOGISTICS ALGORITHMS	ENGINEERING	SAN FRANCISCO	NORAM	UNITED STATES	ENGINEERING/DESIGN
10/19/2014	SOFTWARE ENGINEER - LOGISTICS DATA ENGINEER	ENGINEERING	SAN FRANCISCO	NORAM	UNITED STATES	ENGINEERING/DESIGN
10/19/2014	SOFTWARE ENGINEER - MACHINE LEARNING	ENGINEERING	SAN FRANCISCO	NORAM	UNITED STATES	ENGINEERING/DESIGN
10/19/2014	SOFTWARE ENGINEER - PAYMENTS/REVENUE	ENGINEERING	SAN FRANCISCO	NORAM	UNITED STATES	ENGINEERING/DESIGN
10/19/2014	SOFTWARE ENGINEER - PLATFORM SECURITY	ENGINEERING	SAN FRANCISCO	NORAM	UNITED STATES	ENGINEERING/DESIGN
10/19/2014	SOFTWARE ENGINEER - REALTIME INFRASTRUCTURE	ENGINEERING	SAN FRANCISCO	NORAM	UNITED STATES	ENGINEERING/DESIGN
10/19/2014	GENERAL MANAGER - RIO DE JANEIRO	OPERATIONS	RIO DE JANEIRO	LATAM	BRAZIL	OPERATIONS
10/19/2014	SOFTWARE ENGINEER - UNIVERSITY 2015	ENGINEERING	SAN FRANCISCO	NORAM	UNITED STATES	ENGINEERING/DESIGN
10/19/2014	SR. HR BUSINESS PARTNER, EAST COAST	PEOPLE OPERATIONS	WASHINGTON	NORAM	UNITED STATES	HUMAN RESOURCES
10/19/2014	SR. HR BUSINESS PARTNER, G&A	PEOPLE OPERATIONS	SAN FRANCISCO	NORAM	UNITED STATES	HUMAN RESOURCES
10/19/2014	STAFF REVENUE ACCOUNTANT	FINANCE AND ACCOUNTING	SAN FRANCISCO	NORAM	UNITED STATES	ACCOUNTING/FINANCE
10/19/2014	STAKEHOLDER ENGAGEMENT, APAC	PUBLIC POLICY AND COMMUNI	HONG KONG	ASIA	CHINA	CUSTOMER SUPPORT
10/19/2014	STAKEHOLDER ENGAGEMENT, LATAM	PUBLIC POLICY AND COMMUNI	MEXICO CITY	NORAM	MEXICO	CUSTOMER SUPPORT
10/19/2014	STRATEGIC FINANCE MANAGER	FINANCE AND ACCOUNTING	AMSTERDAM	EUROPE	THE NETHERLANDS	ACCOUNTING/FINANCE
10/19/2014	STRATEGIC FINANCE MANAGER	FINANCE AND ACCOUNTING	BANGALORE	ASIA	INDIA	ACCOUNTING/FINANCE
10/19/2014	STRATEGIC FINANCE MANAGER	FINANCE AND ACCOUNTING	MUMBAI	ASIA	INDIA	ACCOUNTING/FINANCE
10/19/2014	STRATEGIC FINANCE MANAGER	FINANCE AND ACCOUNTING	NEW DELHI	ASIA	INDIA	ACCOUNTING/FINANCE
10/19/2014	STRATEGIC FINANCE, BUSINESS INSIGHTS LEAD	FINANCE AND ACCOUNTING	SAN FRANCISCO	NORAM	UNITED STATES	ACCOUNTING/FINANCE
10/19/2014	STRATEGIC OPERATIONS MANAGER	BUSINESS	CHICAGO	NORAM	UNITED STATES	OPERATIONS
10/19/2014	STRATEGIC OPERATIONS MANAGER	OPERATIONS	AMSTERDAM	EUROPE	THE NETHERLANDS	OPERATIONS
10/19/2014	STRATEGIC OPERATIONS MANAGER	OPERATIONS	JOHANNESBURG	AFRICA	SOUTH AFRICA	OPERATIONS
10/19/2014	STRATEGIC PLANNING & PRICING ASSOCIATE	FINANCE AND ACCOUNTING	SAN FRANCISCO	NORAM	UNITED STATES	ACCOUNTING/FINANCE
10/19/2014	TAX & REPORTING COMPLIANCE SPECIALIST	FINANCE AND ACCOUNTING	AMSTERDAM	EUROPE	THE NETHERLANDS	ACCOUNTING/FINANCE
10/19/2014	TAX ANALYST	FINANCE AND ACCOUNTING	SAN FRANCISCO	NORAM	UNITED STATES	ACCOUNTING/FINANCE
10/19/2014	TECH OPS - NETWORK ENGINEER	ENGINEERING	SAN FRANCISCO	NORAM	UNITED STATES	ENGINEERING/DESIGN
10/19/2014	TECH OPS - SYSTEMS ENGINEER	ENGINEERING	SAN FRANCISCO	NORAM	UNITED STATES	ENGINEERING/DESIGN
10/19/2014	TECH SERVICES - ORACLE APPLICATIONS DEVELOPER	ENGINEERING	HYDERABAD	ASIA	INDIA	ENGINEERING/DESIGN
10/19/2014	TECH SERVICES - SOFTWARE ENGINEER	ENGINEERING	SAN FRANCISCO	NORAM	UNITED STATES	ENGINEERING/DESIGN

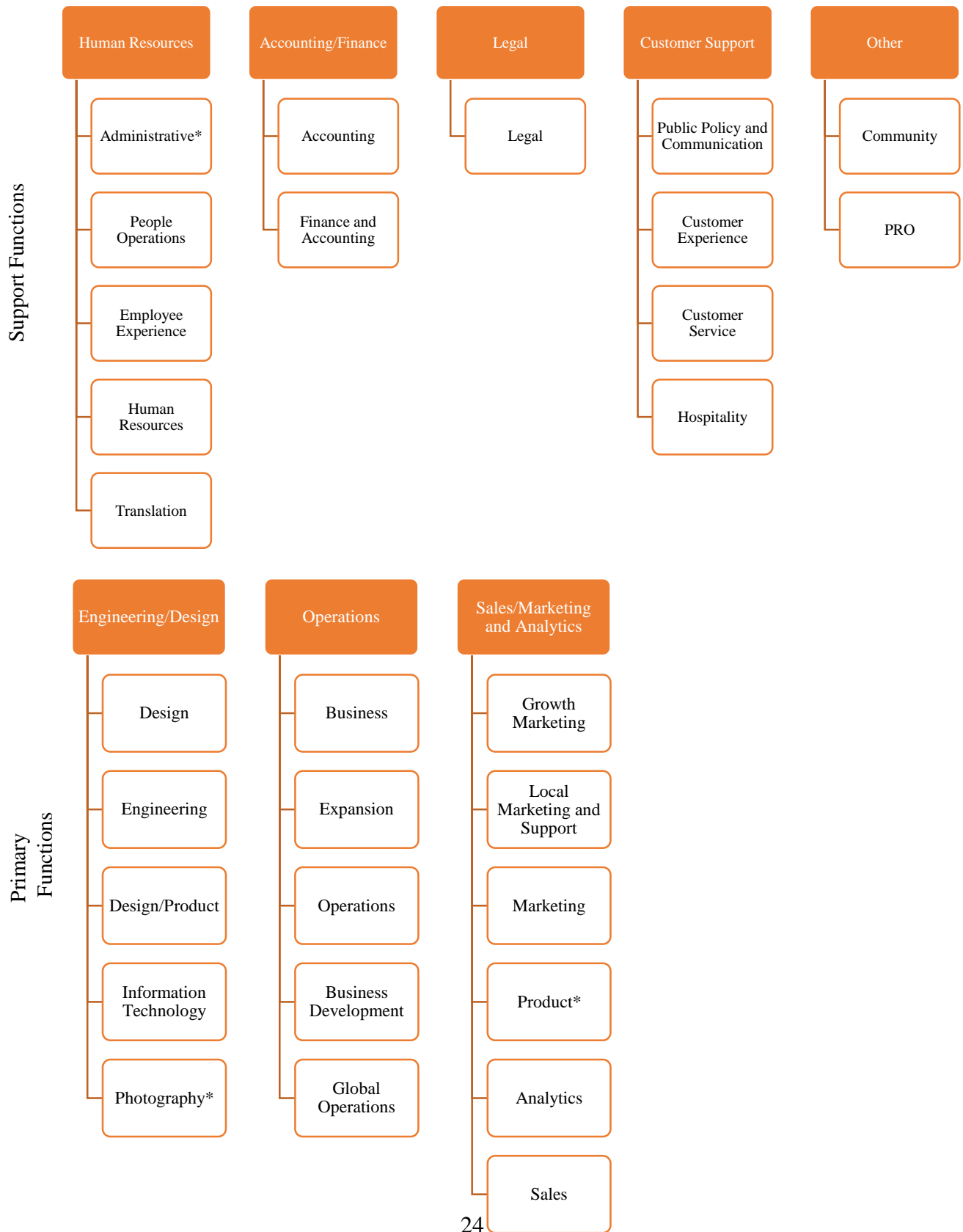**Figure 2: Aggregation of Support and Primary Functional Categories**

Support Functions

Human Resources
- Administrative*
- People Operations
- Employee Experience
- Human Resources
- Translation

Accounting/Finance
- Accounting
- Finance and Accounting

Legal
- Legal

Customer Support
- Public Policy and Communication
- Customer Experience
- Customer Service
- Hospitality

Other
- Community
- PRO

Primary Functions

Engineering/Design
- Design
- Engineering
- Design/Product
- Information Technology
- Photography*

Operations
- Business
- Expansion
- Operations
- Business Development
- Global Operations

Sales/Marketing and Analytics
- Growth Marketing
- Local Marketing and Support
- Marketing
- Product*
- Analytics
- Sales

Figure 3: Sharing Economy Value Chain
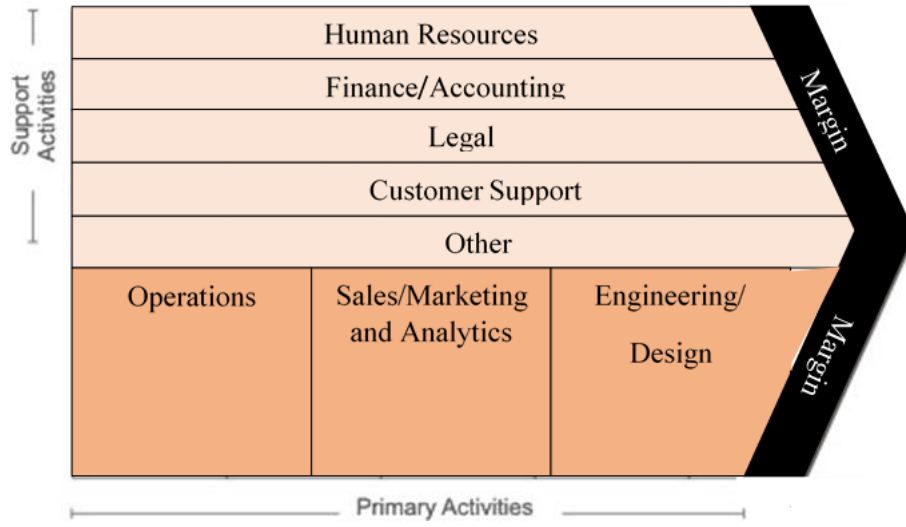
Figure 4: Uber Job Postings by Category

Uber Job Postings from Oct. 2013-Nov.2015

Legend:
- 10/10/2013
- 1/22/2014
- 4/4/2014
- 5/26/2014
- 7/1/2014
- 8/27/2014
- 10/19/2014
- 11/22/2014
- 12/28/2014
- 2/9/2015
- 3/15/2015
- 4/5/2015
- 6/27/2015
- 7/3/2015
- 8/11/2015
- 9/5/2015
- 11/4/2015

X-axis (Aggregated Category): ACCOUNTING/FINANCE, CUSTOMER SUPPORT, ENGINEERING/DESIGN, HUMAN RESOURCES, LEGAL, OPERATIONS, OTHER, SALES/MARKETING
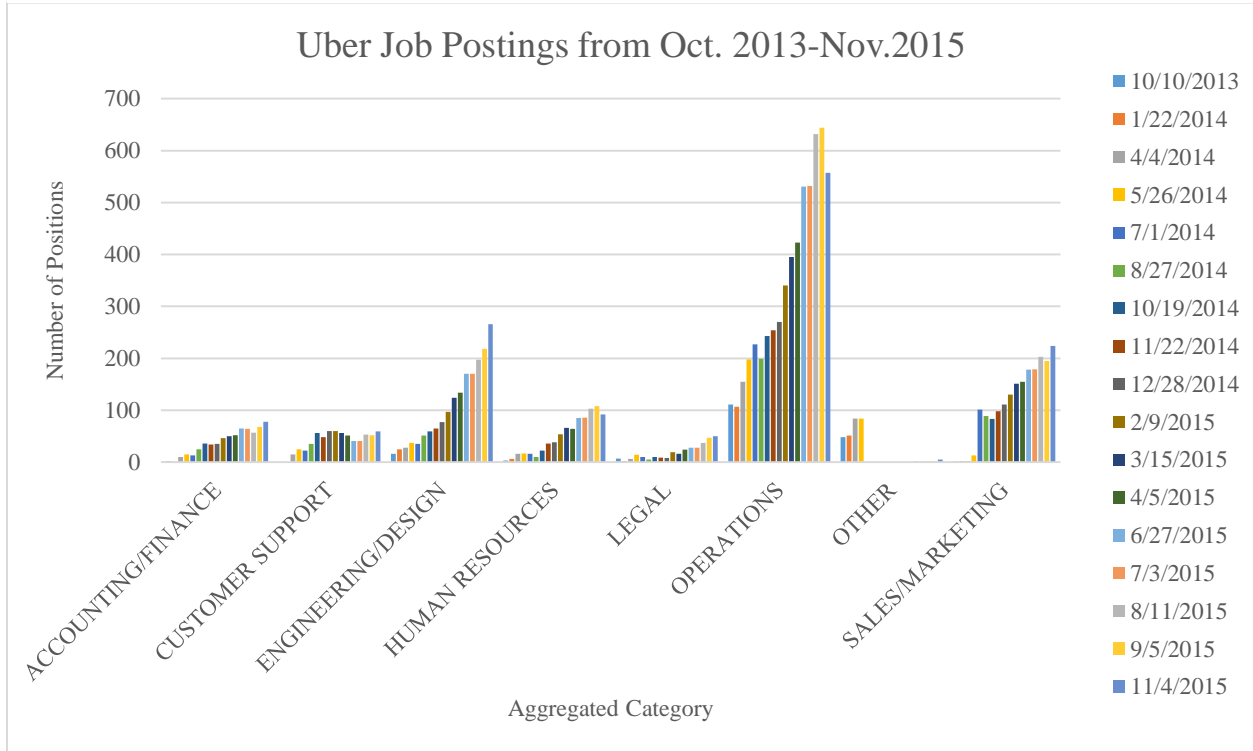
Y-axis: Number of Positions

Figure 5: Airbnb Job Postings by Category

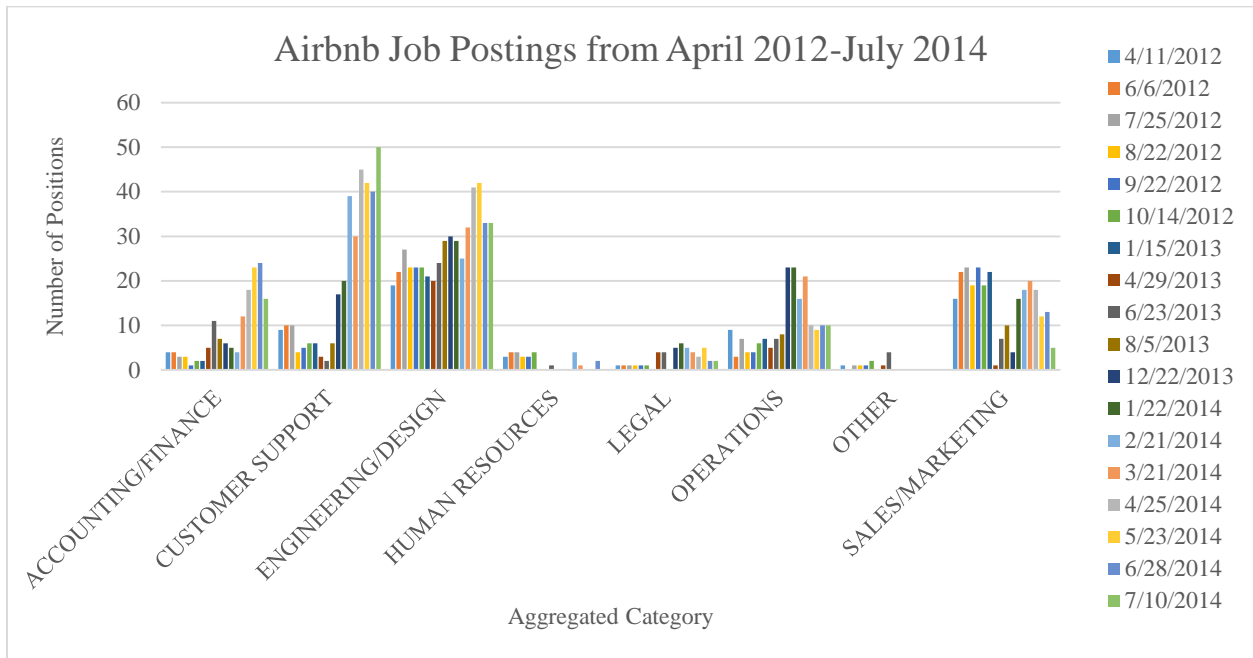**Figure 6: Uber Geographic Expansion**
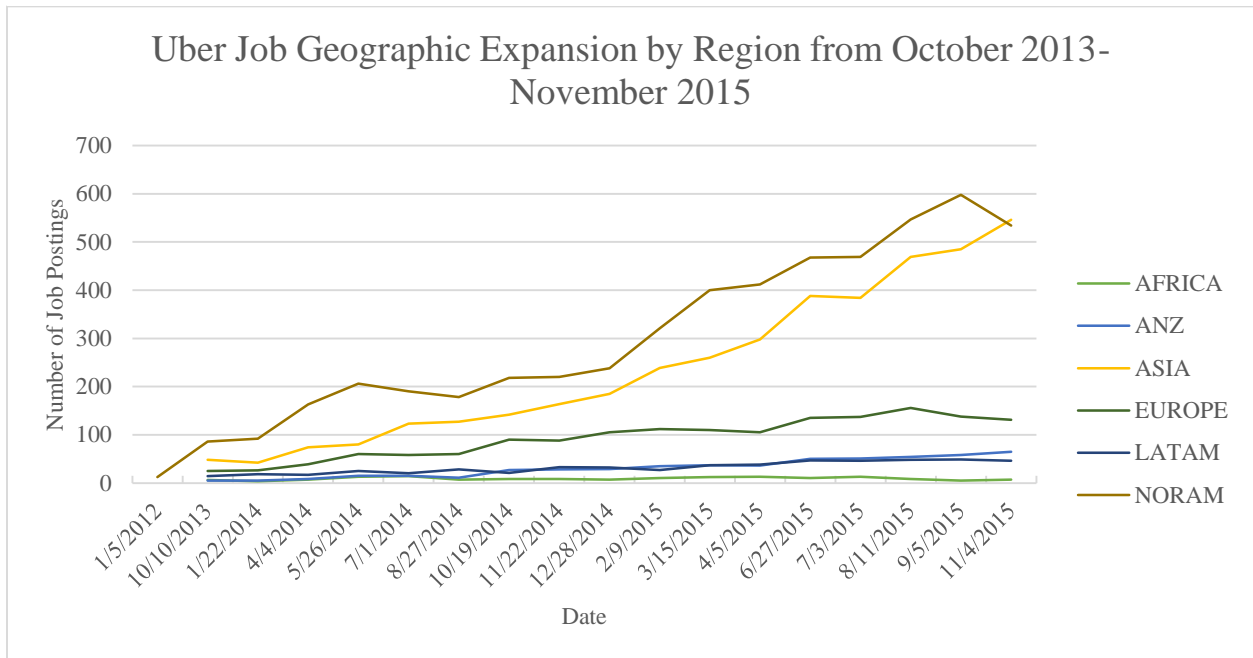

Uber Job Geographic Expansion by Region from October 2013-November 2015

Figure 7: Airbnb Geographic Expansion

Airbnb Job Geographic Expansion by Region from April 2012-July 2014