

# UPS Resume Analysis

We downloaded 172,008 resumes from where candidate worked for UPS/United Parcel Service.

2011	4,893
2012	11,271
2013	18,661
2014	23,754
2015	50,868
2016	62,561
	172,008

Many resumes are basically XML written into HTML pages:

```

class="work_company"><span class="bold">UPS</span> <div class="separator-hyphen"></div> <div
class="inline-block"><span>Indianapolis, IN</span></div></div><div class="separator-hyphen"></div><p
class="work_dates">April 2014 to March 2016 (1 year, 11 months)</p><p
class="work_description">Responsibilities&nbsp;<br>Unload all trailers of boxes until all trailers are
empty. &nbsp;<br>&nbsp;<br>Accomplishments&nbsp;<br><br>
    
```

Each section of the resume has its own container. This means no parsing is needed.

Header	Work Experience	Awards	Military
additional_information	app_id	award	branch
app_id	resume_id	date	commendations
candidate_name	work_city	description	description
download_resume_url	work_company	resume_id	rank
eligibility	work_description		resume_id
resume_url	work_start	Certifications	service_country
last_updated	work_start_dt	date	service_date
relocate_willing	work_state	resume_id	
resume_headline	work_stop	title	Patents
resume_id	work_stop_dt		date
resume_summary	work_title	Groups	description
skills		date	hyperlink
state_residing	Education	description	resume_id
town_residing	degree	resume_id	title
	degree_date	title	
Publication	resume_id		
date	school	Links	
description	school_city	hyperlink	
hyperlink	school_state	resume_id	
resume_id			
title			

Once the 172K are downloaded, it takes less than an hour to scrape out all the contents of all 172K resumes.

Awards	7,636
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Certifications	23,841
Education	252,969
Groups	2,971
Header	172,008
Links	5,316
Military	3,183
Patents	49
Publications	423
Work Experience	849,172

Some resume sections are one-to-many. A candidate may have 3-4+ **positions**. The same candidate may have **several** schools s/he attended. The header file is for all information in the resume that does not repeat, like resume headline.

### Who Actually Worked at UPS?

As expected, there are many ways to say UPS on a resume. We know the stores are independently owned and will be excluded for this analysis. This looks like a pretty good (%wildcard%) query:

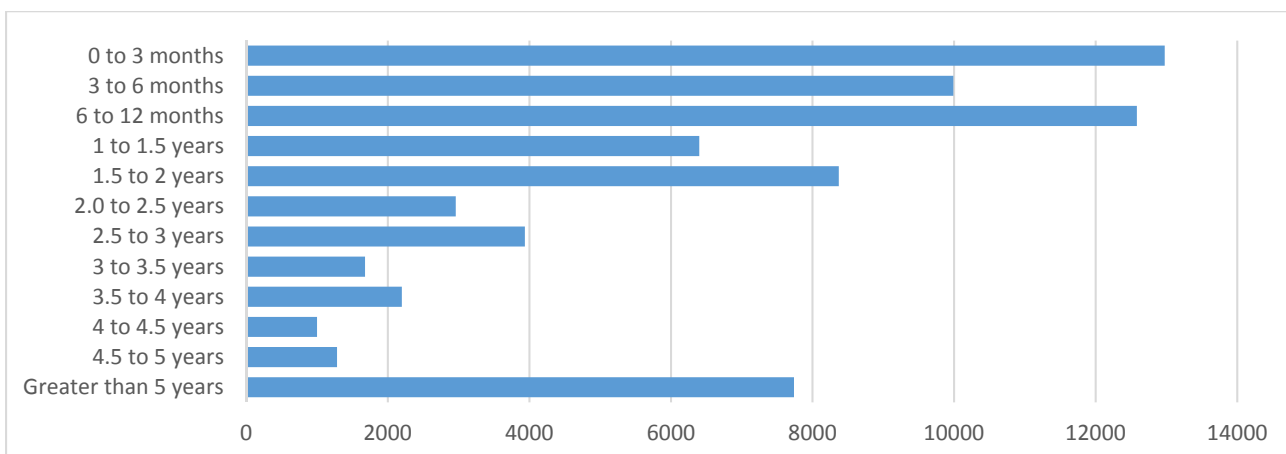
```
where (work_company ilike '%ups%' OR work_company ilike '%united parcel%' OR work_company ilike '%u.p.s.%') AND work_company not ilike '%store%'
```

Adding this filter drops our 172,008 down to 159,031. The rest are store employees or false. There are 180,005 total work experiences at UPS. A candidate can multiple UPS positions/jobs.

### UPS Package Handlers

71,145 of the positions are package handler/loader... zero surprise. What is fascinating is the 44,493 different (overall) ways UPS employees describe themselves. 11,878 are variations on loading/unloading/handling packages. In a more detailed analysis, we would remove rare false positive titles like "Package Center Supervisor."

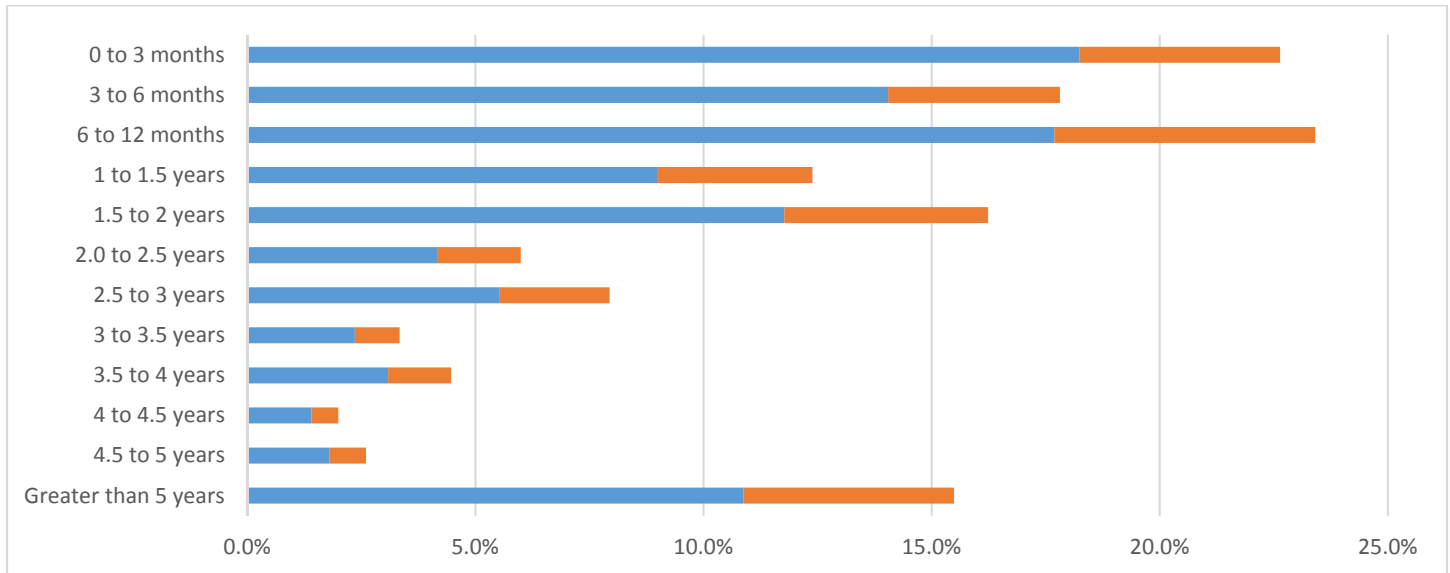
Average number of months worked by a package handler is 26.



UPS loses 50% of their package handlers within the first year. There is an interesting drop at 3-6 months and then ticks up again at 6-12 months. Keep in mind, this is only the package handler position. Would be interesting to test it with "total" time spent at UPS (since handlers can get promoted). More false positive will show up over 5 years, but even with some cleaning, we still have ~6100 sorters at 5+ years in position. I would love to know what makes them tick.

23,734 have no previous work experience (33%) before becoming a package handler. This means they are coming right out of high school (maybe college too?). Below we see high schoolers in orange and all others in blue. For example,

12,976 of the 71,118 (some resumes do not have dates), or 18%, leave UPS as handlers within the first 3 months. But only 3,124 the 12,976, or 24%, of the high schoolers leave.



High schoolers make up 1/3 of the resume count. It appears up until 12 months, employees with no previous work experience stay longer than those with experience. At around 2 years, (the reverse trend) we jump to 40%+ of high schoolers leaving UPS.

One might conclude that hiring employees with zero experience is an excellent idea, but these handlers need to be promoted right at the first year (or so) anniversary. Again, it would take a more detailed analysis, looking at “total” years with UPS to make a final recommendation.

The next thing we will look at is whether candidates are using UPS more as a temporary stopover. Of the 71,118 resumes we have average time at each employer, 30,759 (43.1%) stay longer than their average position. For example, Jane Doe may work an average of 2.2 years per job in her career. But she worked at UPS for 5.7 years as a handler. She spent 2.59 times longer at UPS than her average job. This may tell us that UPS is not a revolving door. Handlers are investing as much time into UPS as they are any other employer.

We have already analyzed high schoolers. What about UPS employees who worked prior to becoming a package handler? Cashier leads the list. In fact, if we look at all forms of a cashier title, that number jumps to 3,724. This number seems low. It's not. Consider the 1000+ possible positions one might have before becoming a handler. The fact that 1 out of 20 hires is a cashier is significant.

To really analyze inbound positions, we would want to first normalize them. A cashier and a retail clerk may be the same thing. A stocker and warehouse worker may be grouped together. Then we need to look at whether these groups leave more or less frequently than the average UPS handler. In other words, do cashiers make better handlers? Early thoughts: I would hire high schoolers, cashiers, sales and customer service and anyone who has any association with a warehouse.

I get these numbers are low and at first glance do not appear to be meaningful...

Walmart	2854
Wal-Mart	2713
Target	1879
McDonald's	1639
Home Depot	1482
McDonalds	1389
Macy's	1027
FedEx	937
United States Army	932
Burger King	916
Best Buy	872
Subway	845
United States Postal Service	843

But it does tell us that big box retailers and fast food places are top feeder companies into UPS. The data would need to be normalized (e.g. McDonald's/McDonalds and Wal-Mart/Walmart). I would definitely analyze which type of feeder company makes for a better UPS handler. And I would really like to know if hiring from FedEx is an advantage.

Who likes to hire package handlers? Big Box and Fast Food, but Amazon makes the list too. And USPS seems to hire UPS employees more than UPS likes to hire from USPS. Again, low numbers, but look at the thousands of possible employers in the U.S. And grouping these companies into industries would also be interesting.

Looks like UPS has package handlers in 1,319 different locations (removed single candidate locations). Largest are:

Louisville, KY	2204
Hodgkins, IL	1617
Philadelphia, PA	1567
Chicago, IL	1125
Indianapolis, IN	1041
Dallas, TX	1038
Atlanta, GA	1029
Secaucus, NJ	944
Jacksonville, FL	807
Ontario, CA	770
Houston, TX	712
Mesquite, TX	690
Memphis, TN	647
Greensboro, NC	636

I have to believe that UPS has more than a normal hub in Louisville, Hodgkins and Philadelphia and these are airport locations? Here, too, one can analyze handler turnover compared to market size to assess if a local management team is losing too many employees.

Do package handlers get promoted? We show only 1,350 staying with UPS after being a handler. This area would need detailed analysis, and perhaps candidates listed all UPS positions in a single job description?

**GUTCHECK:** Now, if you work for UPS and are reading this analysis, first thing you say is so what. We have all this data and much, much more in HR. We can tell you exactly what the turnover is in Greensboro, NC. But can a UPS exec tell me what FedEx's Greensboro turnover is? So, I get that this is not "insider" information. But UPS would probably love to have this analysis about every FedEx/USPS/etc. employee.

11,864 candidates have been to 2,629 different community colleges. We talk about high schoolers being a great source of recruits. Community College is a close second. 31,761 candidates list a high school. Now, some may have both college and high school listed on their resume, but it is far more common to list high school when college is not present on resume. Again, in a more detailed analysis, we can break out who went to college and who stopped after high school.

Metadata is not the only thing we can analyze. Most candidates include a short description of their experience as a package handler. What are the most common phrases used in these sections?

load unload	sorting packages	lifting lowering
loading unloading	unloading trucks	customer service
sort packages	zip codes	timely manner
fast paced	fast pace	packages trucks
responsibilities load	responsibilities i	package handler
load packages	sorted packages	packages conveyor
delivery trucks	conveyor belt	responsibilities unload
accomplishments i	unload packages	loading packages
loaded unloaded	conveyor belts	zip code
unload trucks	load trucks	loaded packages

Of course handlers will talk about packages, loading and sorting, but they also talk about things like conveyor belts, zip codes and then behaviors like being fast paced, timely and customer service. Some three word phrases include:

lowering sliding packages	load unload trucks
lifting lowering sliding	continual lifting lowering
fast paced environment	load unload packages
responsibilities load unload	conveyor belts delivery
packages conveyor belts	belts delivery trucks

Even the single keywords give us a glimpse of what’s important to UPS package handlers. Beyond trucks and packages and skills, etc..., accomplishment is used quite a bit. Fast and time are expected, but safety scores high too. And handlers will sometimes mention weight, like lbs and pounds.

## Looking Beyond Package Handlers

We can do the same metadata analysis for non-package handlers, but we find companies are really interested in what employees say in their work descriptions (especially when doing a competitor analysis). Here are a few examples:

1. UPS has a “Middle Market Account Manager” In 2015, if you got 2% over goal, you were a Top 10% salesperson.
2. A UPS analyst receives about 80 calls per day, supervises ~60 drivers and helps to reduce driver mileage.
3. A Territory Account Executive manages ~\$16 million in sales.
4. Account Manager handles ~8 million in sales.
5. The North Atlantic district has a yearly budget of \$1.2 billion.
6. Middle market accounts are defined as \$50,000 to \$2 million in annual revenue.
7. Senior Account Manager manages ~\$24 million in revenue, averaging about \$500K per client in revenue.
8. A Senior Business Development Manager handles about \$125MM and has ~8 senior/major account reports.

Feel an organization chart for UPS Sales coming together? Me too. And this is a tiny sample of resumes. More fascinating – how do these numbers change across the United States? The CH Robinson account is worth about \$75MM to UPS. This candidate tells us Operations Managers make about \$80K and work 65 hours a week. This candidate mentions money 16 times in the UPS job description.

The queries can get pretty intense:

```
select hd.last_updated, we.resume_id, we.work_title, we.work_company, we.work_description
from work_experience we
join header hd on hd.resume_id = we.resume_id
where (we.work_description ilike '%million%' OR we.work_description ilike '%billion%')
AND hd.last_updated like '%2016' AND extract(year from we.work_stop_dt) = '2016'
AND (we.work_company ilike '%Ups%' OR we.work_company ilike '%united parcel%' OR we.work_company ilike
'%u.p.s.%') AND we.work_company not ilike '%store%'
AND (we.work_title not ilike '%package%' AND we.work_title not ilike '%handler%' AND we.work_title not ilike
'%loader%' AND we.work_title not ilike '%sort%')
```

Here we are looking for work descriptions that have the term “million” or “billion” in them. Then, we don’t want old resumes. We want ones that have been updated recently and employee worked at UPS in 2016. We want to eliminate package handlers and make sure employees works at UPS (Corporate). This is just one query.

How about a query that mentions how often candidates use a dollar sign in their UPS job description?

We can also look at job description length. Here is a recruit supervisor with a 4,262-character job description.

Companies/Competitors also like to search for acronyms:

POL	Patch of Land	Sales
GVM	Global Volunteer Month	HR
EES	Employee Engagement Survey	HR
LINC	Leadership Improvement through Networking Connections	HR
LTL	Less Than Truck Load	Center
MAPP	Management Assessment and Promotion Process	HR
AE	Automated Employment System	HR
OTN	On Time Network	Center
WWDSL	Worldwide Duty Sub-Ledger	Finance
LIB	Left In Building	Center
GSPCAM	Global Small Package Cost Ascertainment Model	Sales
PAS	Preload Assist System	Center
HMI	Human Machine Interface	Center

It’s crazy what people put in their resumes. Not sure what a “patch of land” means? Not a problem. Just enter that phrase as the search string and start reading... We’ve seen companies try to rebuild a competitor’s org chart, learn about clients and even get intel on new innovations. Just doing a title search of UPS resumes nets 25K drivers and 17K supervisors. And we can use combinations of phrases to mine descriptions, like call center management.

Title Keyword	Resumes
<a href="#">driver</a>	25,922
<a href="#">supervisor</a>	17,142
seasonal	6,136
operation	5,916
<a href="#">manager</a>	5,202
sales	5,202
<a href="#">warehouse</a>	4,153
<a href="#">clerk</a>	3,761
Customer service	3,344

So far, this seems like a lot of manual hunting a pecking. But technology can do a lot of this for us. The The Stanford NLP Group has some excellent software, including one that extracts entities, like client names.

While we will not do the same level of metadata analysis (in this document) for non-handlers, there are some interesting takeaways. There are over 1800 “operations supervisors” and 1000+ customer service representatives. This CSR number climbs to 3,347, when we look at different variations of the customer service title.

As mentioned at the top of this analysis, there are more than just header and work experience tables. We get awards are not as important for competitor intelligence, but I imagine HR would find the list interesting: Employee of the Month; Supervisor of the Month; Gold Pen Award; Safe Driving; Balanced Score Card; Above & Beyond; etc... all show the values and skills UPS rewards.

UPS is big into first aid and CPR certifications and different forklift certifications. One might assume that UPS does a ton of military hiring. Only around 3100 of the 172K have military backgrounds.

Army	1561
Navy	536
Marines	486
Airforce	466

This section seems like a weak way to finish off this 7-page analysis? But I would want to know if (long-term) forklift operators are more likely to be ex-military. Are drivers more likely to be ex-military and stay at their companies/UPS longer than the average driver. Are UPS employees who served more likely to stay longer? Maybe UPS would be interested in hiring candidates who have been “employee of the month,” since this is recognized. Basically, one can go nuts slicing and dicing the data.

And again, and very important, I get this is nothing compared to what UPS knows about its own employees. But I think a detailed analysis of FedEx would be very valuable. And if nothing else, I would like to know what my former employees are putting on their resumes and email them to take confidential information off those resumes.

## Conclusion:

I would run machine models to recruit package handlers, drivers, supervisors and customer service representatives. Handlers/Sorters/Loaders are cheap to hire and require little training. But I have to believe a 50%+ turnover in the first year is impacting morale and encouraging good employees, who have potential for promotion, to exit. I imagine this also impacts management’s investment in handlers. Why groom and develop, when half are going to leave.

I would do a very detailed competitive analysis of FedEx and USPS. I would also analyze all warehouse workers, drivers and CSRs nationwide (regardless of employer) to see how UPS stacks up against all industries.

I would put in a risk management process to read every UPS resume for confidential information.

Finally, I would create a special tool to comb the job boards for superstar candidates. If I were FedEx, I would really want to talk to this person. Not only does s/he work directly on the DIAD project, but s/he helped create the DIAD training module for Integrad. And this person helps coordinate staffing at Amazon and has received awards for implementing Integrad. FedEx would hire these two candidates, regardless of whether they had an open position or not!