

Fortune 50 (F50): While there is a large amount of innovation going on in start-ups, Fortune 500 (F500) companies which are all about scale and results, are still responsible for a large part of the impactful innovation driving the economy, if not directly from their internal powerhouse, through acquisitions of start-ups that can provide them with the innovation format and content they need. In many company lists published in the media (Fortune 2018 Business by design List, Fortune 10 Most Successful Companies, Fortune 10 Most Profitable Companies, BCG Most Innovative Companies), the large majority of companies been cited are still large companies, independently if they are F500 or not.

Some have stated the F500 is a very US centric list of corporations that does not express reality of design executive presence in large corporations throughout the world (e.g.: Italy, Germany, Japan, France, UK, etc.) where designers might have executive roles. There are two explanations for this decision, one is based on recent research that clearly states that ‘the United States is still considered the world’s number 1 economy and has been so since 1871 (Investopedia, 2017). Though this might be disputed because China has been gaining the U.S for a number of years, if one looks at nominal GDP, the U.S. maintains its leadership, followed by China and Japan. According to research on this topic, ‘large U.S. corporations also play a major role on the global stage, with more than a fifth of companies on the Fortune Global 500 coming from the United States’ (Focus Economics, 2018). The second reason is rather more practical, F500 companies have a lot of credible public data due to the intense scrutiny they are under.

While the topic of this doctoral thesis started with the F500 US list, a first peak into the top 3 corporations in terms of Board of Directors revealed a need to engage a smaller sample size for practical reasons, just these top 3 corporations have 32 members of the Board of Directors and 59 executives that respond to the CEO/ President/ Chairman. So, the choice was to reduce the sample size to the F50 corporations, knowing that extrapolating results to the other 450 may not be the best way to achieve F500 results, but then that is not our intent.

We started by characterizing F50 corporations and their TMT's. Below data visualization of the F50 publicly available data in 2017, starting with visibility of their total size versus size of Board of Directors and C-Suite 'Figure 2'. The most important sector is the Financials sector (10 corporations), but then the list is pretty evenly split between Technology (7), Health Care (6), Retailing (5), Energy (4) and there on covering 14 sectors, making this a good sample size regarding sectors covered 'Figure 3'.

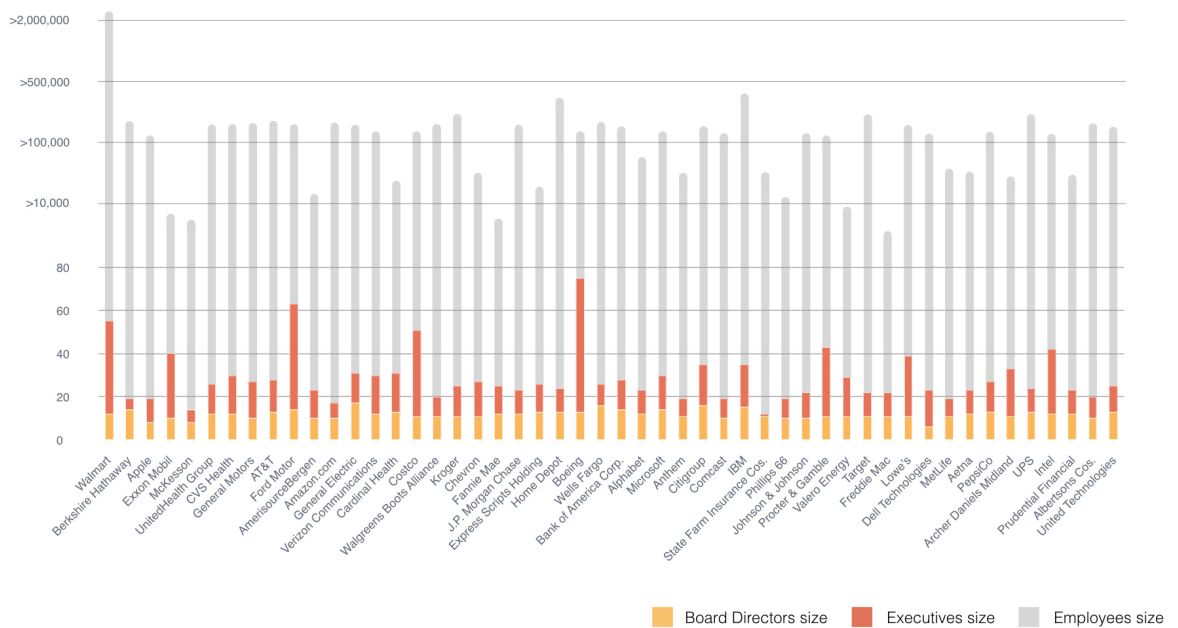


Figure 2 - F50 total employee count, size of Board of Directors and of C-Suite. José dos Santos 2020

These F50 corporations have an average of 10 independent member of the Board of Directors and 17 members of the C-Suite, including CEO/ President/ Chairman. While the average in the Board of Directors is pretty stable, the number of executives varies very much, we have organizations with more than 40 (Boeing 62, Ford Motor 49, Walmart 43, Costco 40) and 11 organizations with less than 10 executives.

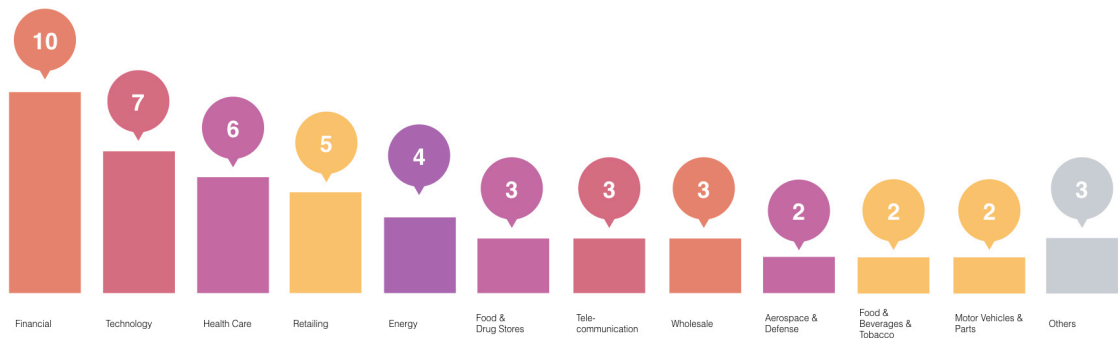


Figure 3 - F50 Sectors. José dos Santos 2020

Research identified 845 executives in the F50 corporations. After sorting and clustering the titles, research has identified 13 groups of titles. A large number of these titles are CEO (111)/ President/ Chairman and Senior Vice Presidents (SVP) without a particular role in public data (total 284), but after this group the three largest groups of titles are Legal/ Administrative/ Compliance/ Counsel with 104 executives, Operations/ Purchasing/ Supply Chain with 98, and Finance/ Treasurer/ Comptroller with 88 executives. Number of executives per group of titles will steadily diminish until 12, then there are two areas each with 4 executives in the F50 corporations, Design/ Experience and Sustainability/ Social Responsibility 'Figure 4'. These 4 executives with a title openly connected to Design/ Experience represent 0.5% of the total executives, they all have academic training in Design/ Architecture/ Art. There are two executives, trained as architects, who do not seem to be in design related roles, a Senior Vice-President of Investor Relations (Michael P. McGuire/ CVS Health in 2017, now with Macy's in the same role) and Chairman and CEO (Charles F. Lowrey/ Prudential Financial). Though a small sample, on one hand might suggest designers are also capable of assuming different roles beyond design per se, on the other might suggest trained architects are better positioned to do so.



Figure 4 - F50 Executive titles. José dos Santos 2020

When the research started in 2017, based on publicly available data in on the Bachelor degree of these executives (9% not available or other), research has identified that 45% of them stem from Business/ Economics/ Accounting/ Finance, 21% from different engineering backgrounds, 9% from Legal, 5% from Medicine and Sciences, 4% from Computer Science, and then starts decreasing with a list of academic majors from Political Science, History, Marketing, Mathematics, Information Technology, Languages, and then with less than 1% (6 executives) what we have defined as designers which include Architecture and Art. 'Figure 5'. To be precise, there are some majors with less representation, like Journalism, Psychology, Agriculture, Physics, etc.

This secondary research on the F50 has validated the main question in this doctoral thesis, that there aren't many designers in the C-suite in the F50 corporations.

This is not to say design is not represented in these corporations, by designers, and many times at senior level. Recent research has identified 35 N-1 and N-2 executives in the F50 corporations, a list that includes well-known Chief Design Officers (or similar title) like Phil Gilbert/ IBM, Ernesto Quinteros/ Johnson & Johnson, Mauro Porcini/ Pepsico, and Ivy Ross/ Google-Alphabet 'Table 2'. Nevertheless, all these are N-2, the only two remaining designers in N-1 in 2019

were Phil Duncan/ Procter & Gamble and Jonathan Ive/ Apple (who left Apple at the end of 2019).

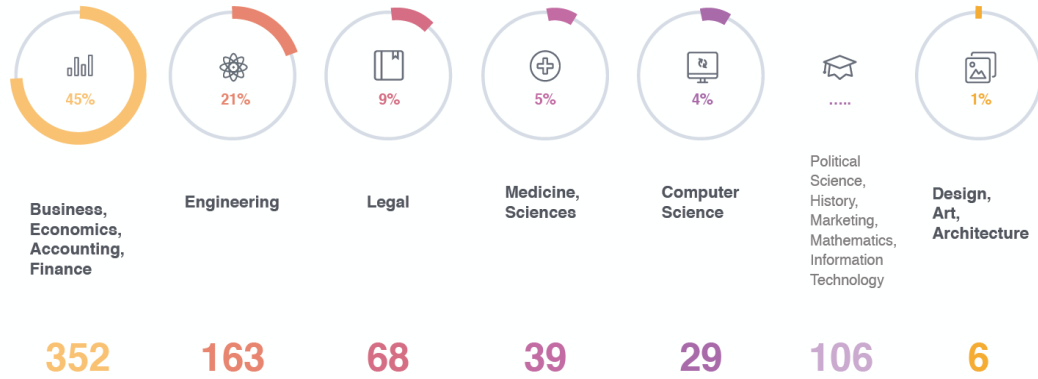


Figure 5 - F50 Bachelor's degree. José dos Santos 2020

Table 2 - Design Executive positions in the F50 in 2019 (N-1 and N-2). José dos Santos 2020

Company	Rank	Executive Job Title	Level	Reporting to	Reporting Area
Walmart	1	Head of Design	N-2 to CEO	Executive Vice President and Chief Customer Officer	Customer
Apple	3	Creative Director	N-2 to CEO	Senior Vice President Worldwide Marketing	Marketing
Apple	3	Vice President of Industrial Design	N-2 to CEO	Senior Vice President Worldwide Marketing	Marketing
Apple	3	Vice President Special Design Project	N-2 to CEO	Senior Vice President, Hardware Engineering	Hardware Engineering
Apple	3	Vice President of Human Interface Design	N-2 to CEO	Chief Operating Officer	COO
UnitedHealth Group	6	Vice President, Design and Construction	N-2 to CEO	Senior Vice President and Chief Marketing Officer	Marketing
CVS Health	8	Vice President, Brand Innovation and Design and Executive Creative Director	N-2 to CEO	Chief Marketing Officer	Marketing
Alphabet	11	Vice President, Head of Design, Hardware	N-2 to CEO	Senior Vice President, Devices and Services	Marketing
Ford Motor	12	Vice President, Design	N-2 to CEO	Executive Vice President of Product Development and Purchasing, and Enterprise Product Line	Product Development & Connectivity
Ford Motor	12	Chief Designer, Mobility	N-2 to CEO	Chief Transformation Officer	Transformation
GM	13	Vice President of Global Design	N-2 to CEO	President, and President of Global Product Group, Cadillac and Quality	President, Product & Quality
Verizon	19	Head of Design	N-2 to CEO	Executive Vice President and Chief Marketing Officer	Mktg
Verizon	19	Senior Vice President, Chief Creative Officer	N-2 to CEO	Executive Vice President and Chief Marketing Officer	Mktg
Fannie Mae	22	Vice President and Head of Enterprise Design	N-2 to CEO	Senior Vice President and Chief Marketing Officer	Marketing
Microsoft	26	Corporate Vice President of Design, Experiences and Devices Group	N-2 to CEO	Executive Vice President, Experiences and Devices	Experiences & Devices
Microsoft	26	Corporate Vice President, Hardware Design & Technology	N-2 to CEO	Chief Technology Officer and Executive Vice President, Artificial Intelligence & Research	CTO, AI & Research
Home Depot	27	Vice President, Brand Marketing & Creative	N-2 to CEO	Executive Vice President, Outside Sales & Service	Outside Sales & Service
Comcast	32	Vice President, Design	N-2 to CEO	Executive Vice President, Chief Communications Officer (retiring in Dec 2020)	Communication (> Dec 2020)
Johnson & Johnson	37	Chief Design Officer	N-2 to CEO	Vice Chairman of the Executive Committee	Deputy CEO
IBM	38	General Manager, Design	N-2 to CEO	Senior Vice President, Digital Sales and Chief Marketing Officer	Digital Sales & Marketing
Target	39	Senior Vice President and Chief Creative Officer	N-2 to CEO	Executive Vice President, Chief Marketing and Digital Officer	Mktg & Digital
Target	39	Vice President, Food & Beverages, Product Design and Sourcing	N-2 to CEO	President of Food and Beverage	Food & Beverage
Target	39	Senior Vice President, Owned Brand Management and Product Design	N-2 to CEO	Executive Vice President, Chief Marketing and Digital Officer	Mktg & Digital
UPS	41	Vice President, Employee Communications and Creative Services	N-2 to CEO	Chief Human Resources Officer	HR
Intel	43	Vice President and General Manager of Design Enablement	N-2 to CEO	Senior Vice President Chief Technology Officer General Manager, Technology Development	CTO & Technology Dev
MetLife	44	Vice President, Global Brand Design	N-2 to CEO	Executive Vice President, Global Chief Marketing Officer	Mktg
MetLife	44	Vice President, Customer Experience Design	N-2 to CEO	Executive Vice President, Global Chief Marketing Officer	Mktg
MetLife	44	Senior Vice President, Global Customer Experience Design	N-2 to CEO	Executive Vice President, Global Chief Marketing Officer	Mktg
P&G	45	Chief Design Officer	N-1 to CEO		
P&G	45	Brand Design Director, Global Oral Care	N-2 to CEO	Chief Executive Officer, Health Care	Health Care
P&G	45	Director of Design, Global Innovation & Capability	N-2 to CEO	Chief Design Officer	Design
UTC	46	Chief Design Officer	N-2 to CEO	Senior Vice President & Chief Digital Officer	Digital
Pepsico	48	Senior Vice President and Chief Design Officer	N-2 to CEO	Marketing Director Transformation, Global beverages Group	Marketing
Pepsico	48	Vice President, Creative and Digital	N-2 to CEO	Executive Vice President, Global Operations	Operations
Pepsico	48	Vice President, Global Beverage Design and Brand Experience	N-2 to CEO	Marketing Director Transformation, Global beverages Group	Marketing