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Words for pharma: a quantitative and qualitative analysis on vision, mission and values of multinational pharmaceutical companies

Giulio Zuanetti[1], Francesca Giorgia Colombo[2], Carlotta Galeone[3]

[1]Aboutpharma HPS S.r.l., Milano - Italy
[2]PharmD Student, Faculty of Pharmacy, Università Statale di Milano, Milano - Italy
[3]Department of Clinical Sciences and Community Health, Università Statale di Milano, Milano - Italy

Abstract

Introduction: Pharma companies deal with the same important challenges that humans face: to grow and stay healthy. The crucial role of pharma companies in preserving health would suggest that they might rank highly in the reputation indexes. However, this does not seem to be the case. Our aim was to collect, cluster and analyse the words used by pharma companies in their mission, vision and value statements as a base to identify areas of improvement in their corporate communication.

Methods: A total of 97 multinational pharma companies were selected based on their size and presence within major markets. Mission, vision and company values were captured from company websites and analysed. Word clouds were built to analyse the frequency of words in the statement. The influence of company size and location was also analysed.

Results: Most companies (90.7%) have a mission and 54.6% have a clearly stated vision statement, 71.4% mention values. "Life/lives" "patients", "innovative", "people/persons" are the most frequently used words. "Innovation" and "integrity" are by far the most common values, followed by "respect", "ethics", "responsibility" and "passion". References to healthcare professionals, access to treatment and sustainability, open science, transparency and care for the environment are more scanty.

Conclusions: Most, but not all, pharma companies provide comprehensive statements focussing mostly on the innovation and its impact on patients. Topics such as role of health care professionals, economic sustainability and care for the environment are rarely listed. An in-depth analysis of their alignment with key needs and trending topics is warranted to further engage customers and build reputation and value.

Keywords: Company mission, Company values, Pharma companies, Web reputation

Introduction

Pharmaceutical companies deal with what is perhaps the same important challenges that humans face in their lifetime: healthy growth, maintaining health and, if an acute or chronic disease occurs, to recover as quickly as possible and/or prevent complications from those diseases.

In order to meet these challenges, pharma companies face a rather unique industry and market scenario. In fact, their business depends upon their research and development (R&D) programme, including the careful testing of their drugs in clinical trials, the submission of registration dossiers to regulatory agencies for approval and the timely engagement of their direct customers (i.e. the physicians, the pharmacists, the regulators and the payors) to secure a rapid and effective market access. Yet, none of these stakeholders is the final user, that is, the individual patient, who benefits from drug treatment together with his/her family members and/or caregivers.

The crucial role of pharma companies in preserving health would suggest that they might rank highly in the reputation indexes. However, this does not seem to be the case (1, 2).

Corporations in different business environments use specific wording to communicate their philosophy and their brand identity: commonly, but not always, they articulate the company vision, the company mission and the company values (3) and sometimes they summarize them by adding a short tagline to their brand.

The main purpose of our study was to collect, cluster and analyse the words used by pharma companies in their corporate statements, in order to identify common themes (such as innovation, patient centricity, breadth of offering, operational excellence, outcome, trust) and to identify the words used most frequently by pharma companies worldwide. This might help to identify which themes could be useful to better familiarize customers, improve pharma company reputation and, ultimately, their business value.

Methods

The initial selection of companies was based on their size and market share. We identified the top 50 global companies, based on the rankingthebrand report (4). In addition, we identified a convenience sample of an additional 48 multinationals selected according to where their headquarters (HQ) were based in the most important pharma markets in Europe (UK, Germany, France, Italy, Spain and Portugal). The identification and the final selection were based on desktop research, as well as on suggestions by expert colleagues in those countries. Names of individuals are listed in the acknowledgement section.

Finally, we applied the predetermined exclusion criteria to exclude the suggested companies which appeared to be active only in one country and/or did not have an English-language corporate website. The corporate websites were searched to identify and list the following statements: mission, vision and company values. Specific URLs for each company analysed are listed in Supplementary Table I. We also identified whether companies had a specific "tagline", defined as a short statement embedded and/or closely linked to the company name/logo. The search was performed between March and July 2019, and data were checked a second time in December 2019. Data extraction was performed by authors (FGC, GZ) independently, and disagreements were resolved by discussion.

We clustered words used in vision, mission and payoff statements in four broad domains/themes:

a) Innovation and R&D (i.e. words such as "innovative", "leading", "discover", "develop", etc.)

b) Impact on patient's life (i.e. words such as "patients", "people", "life", "care", etc.)

c) Operational excellence (i.e. words such as "quality", "trust", "history", etc.)

d) Breadth of reach and access to drugs (i.e. words such as "world", "worldwide", "commercialization", "access", "affordable", etc.)

Standard descriptive analyses were performed on number and frequency of words reported in company values. Whenever words with a similar meaning (i.e. agility and simplicity) were listed together they were counted as one in the quantitative analysis. With reference to comparison between groups, categorical data were analysed using the contingency table analysis with the chi-square or Fisher's exact test, as appropriate, whereas continuous data were analysed using a Student's t-test, after checking whether data were normally distributed (based on the Shapiro-Wilk statistic, or a Wilcoxon rank-sum test otherwise. All tests were two-sided and a p value of less than 0.05 was considered statistically significant. Data analyses were conducted using SAS version 9.4 (SAS Institute, Cary, NC, USA) statistical software.

Finally, two overall word cloud analyses were performed using the freely available TagCloud (tagcloud.com) app on the internet, which is considered the most appropriate when "strict, clear measurement is more important than aesthetics" (5). The first word cloud included all words appearing in mission, vision and tagline, the second included all words appearing in company value statements.

Results

Out of the top 50 global companies included in the rankingthebrand website (4), Shire was acquired by Takeda in the meantime and since its website reflected this change, it was not included in the present analysis.

Table I shows the taglines of the top global companies (31 out of 49): 42% of these pharma companies have tagline either embedded in their logo or very prominently listed on the header and/or landing page of the company website. In most cases we were able to identify what appeared to be mission (90.7%) and vision (54.6%) company statements. Out of the 49 companies, 36 (73.4%) had values. Mean number of values was 4.9 ±1.7 SD, median 4, range from 2 to 10.

Company values for the top 50 global companies are shown in Supplementary Table II.

TABLE I - Taglines consistently present on the company website of top 50 global companies. Updated to December 2019.

Company	Country HQ	Tagline
Abbvie	**US**	**People. Passion. Possibilities.**
Actelion	Switzerland	Committed to PAH – today and tomorrow
Allergan	US	Live boldly
Aspen Pharmacare	South Africa	**Healthcare. We care.**
AstraZeneca	UK	We believe in what science can do
Bayer	Germany	**Science for a better life**
Biogen	US	Pioneers in neuroscience
Boehringer Ingelheim	Germany	Value through innovation

TABLE I - (*Continued*)

Company	Country HQ	Tagline
Celgene	US	**Committed to improving the lives of patients worldwide**
Chugai	Japan	**innovation all for the patients**
CSL	US	**Biotherapies for life**
Daiichi Sankyo	Japan	**Passion for innovation. Compassion for patients**
Danippon Sunimoto	Japan	**Innovation today, healthier tomorrows**
Eisai	Japan	**The human healthcare**
Endo Health Pharma	Ireland	Delivering quality medicines, helping patients in need
Ferring	Switzerland	Helping mothers and babies, from conception to birth
Fresenius	Germany	Forward thinking healthcare
Mallinckrodt Pharma	UK	Managing complexity. Improving lives
Merck KGaA	Germany	Vibrant science and technology
Merck & Co	US	**Inventing for life**
Mylan	US	Better health for a better world
Novartis	Switzerland	At Novartis, we are reimagining medicine
Novo Nordisk	Denmark	Driving change, together
Ono	Japan	**Dedicated to man's fight against disease and pain**
Otsuka	Japan	People creating new products for better health worldwide
Pfizer	US	Breakthroughs that change patients' lives
Regeneron	US	Delivering life-transforming medicines
Roche	Switzerland	**Doing now what patients need next**
Sanofi	France	Empowering life
Takeda	Japan	**Better health, brighter future**
UCB	Belgium	**Inspired by patients. Driven by science.**

- Shire excluded from the analysis; Taglines linked to company logo are in bold.

TABLE II - Taglines consistently present on the company website of the convenience sample of selected companies

Name	Country HD	Tagline
Alfasigma	Italy	Pharmaceuticals with passion
Almirall	Spain	**Feel the science**
Angelini	Italy	**In the future since 1919**
Baxter	US	At the intersection of saving and sustaining lives
Bial	Portugal	**Keeping life in mind**
Biocodex	France	**Healthcare with passion and conviction**
Bracco	Italy	**Life from inside**
Cantabria Labs	Spain	**Celebrate life**
Chiesi	Italy	**People and ideas for innovation in healthcare**
Esteve	Spain	**Advancing health together**
Expanscience	France	**Protecting your health through innovation**
Faes Labs	Spain	A lifetime taking care of your health
Ferrer	Spain	At the cutting edge, across the health spectrum, all over the world
Gedeon Richter	Hungary	Health is our mission
Genevrier	France	**Your health is our priority**
Grunenthal	Germany	Think innovation. Feel life.

TABLE II - (*Continued*)

Name	Country HD	Tagline
Helsinn	Switzerland	**Building quality cancer care together**
Incyte	US	Pivotal. Science.
Ipsen	France	**Innovation for patient care**
Italfarmaco	Italy	Research, innovation, productive technology and international expansion
JazzPharma	Ireland	Life-changing medicines. Redefining possibilities.
Leo	Denmark	Dermatology beyond the skin
Lundbeck	Denmark	Progress in mind
Mayoly Spindler	France	Committed to your health. Every day.
MedexusPharma	US	Enhancing treatment options for patients
Mediolanum	Italy	Innovation and research since 1972
Merz	Germany	**Live better. Feel better. Look better.**
Mundipharma	UK	To move medicine forward
Nordic	Sweden	Caring about unmet medical needs
Pharmamar	Spain	World leader in the development and commercialization of anticancer drugs of marine origin
Pierre Fabre	France	Taking care, living better
Rovi	Spain	Researching to grow for health
Santen	Japan	**A clear vison for life**
Santhera	Switzerland	**Their future-our focus**
Sobi	Sweden	**Rare strength**
Thea	France	**Let's open our eyes**
Zambon	Italy	Life enhanced

Table II illustrates the taglines for the convenience sample of smaller companies selected for our study. Out of the 48 companies analysed, 33 (68.7%) listed values. Mean number of values 5.3±1.9 SD, median value 4, range 3 to 10. Company values for the smaller companies are shown in Supplementary Table III.

To have a holistic view of the most frequent words used by pharma in their mission, vision and taglines, we combined the statements from the entire set of companies and performed an overall word cloud of all the names, attributes and verbs used in those statements. Figure 1 illustrates the TagCloud of the top 100 words used in company statement.

Fig. 1 - Word cloud of top 100 words listed within vision, mission and tagline of pharma companies.

Fig. 2 - Word cloud of words listed at least twice among company values.

The words "life/lives" were the most frequent reported, followed by "patients", "innovative", "people/persons".

Similarly, to have a holistic view of the most frequent values mentioned in pharma corporate statements, we performed an overall word cloud of all the values mentioned. Figure 2 illustrates all the words appearing at least twice within company values. The words "innovation" and "integrity" were by far the most common values, followed by "respect", "ethics", "responsibility" and "passion".

A further, in-depth quantitative analysis of the dataset indicated that the themes and concepts associated with patient health, quality of life and their engagement and empowerment were most common, since 89.7% of companies referred to those themes. Similarly frequent was the broad theme of innovation (80.4% of companies). On the other hand, reference to themes related to operational excellence and trust and/or access to drugs was significantly less frequent, being discernible in approximately half of the cases (51.6% and 49.5% respectively).

Lastly, we looked to see whether the sizes of the companies or the geographical location of their HQ could have some influence on the type and focus of the words used (Tab. III).

TABLE III - Number of companies with vision and mission and number of values by company size and company HQ location.

	Company size				Company HQ location				
	All companies	**Top 50**	**Other**	**P for comparison**	**USA/ Canada**	**Europe/ Israel**	**Japan**	**Other**	**P for comparison**
Total no of companies	97	49	48		23	59	12	3	
No with vision (%)	53 (54.6)	33 (67.4)	20 (41.7)	**0.01**	11 (47.8)	29 (49.1)	10 (83.3)	3 (100.0)	0.08
No with mission (%)	88 (90.7)	45 (91.8)	43 (89.6)	0.74	22 (95.6)	53 (89.8)	12 (100.0)	1 (33.3)	0.38
No. (%) with ≥1 value	71 (73.2)	38 (77.6)	33 (68.8)	0.33	14 (60.9)	46 (78.0)	9 (75.0)	2 (66.7)	0.29
No company values (Mean ± SD)	3.7 ± 2.8	3.8 ± 2.5	3.7 ± 3.0	0.97	3.1 ± 2.8	4.1 ± 2.8	3.3 ± 2.5	3.3 ± 2.9	0.43
Median no of company values	4	4	4		4	4	3.5	5	

Note: Comparisons were performed between USA/Canada, Europe/Israel and Japan.

The only significant difference was that larger companies seem to include a vision statement more often than smaller companies (67.4% vs. 41.7%, p = 0.01). For what concerns the geographical location, although some trends were noticeable, there was no clear indication that this per se plays any relevant role, although Japanese companies seem particularly meticulous in indicating a mission (100%) and a vision (83.3%) on their company websites.

Discussion

The main purpose of the pharmaceutical industry is to bring to market drugs and devices that help humans to prevent the occurrence of disease and help patients with acute or chronic diseases to live longer lives and/or experience a better quality of life. A very large number of people are employed by pharma companies and therefore the choice of

words in company statements has a direct influence on several million workers worldwide. These two concepts were clearly present in a recent post by Ian Read, Pfizer chairman, in which he stated *"The purpose of the pharmaceutical industry is to bring patients innovative new therapies that help them to live longer, healthier lives. That is our reason for existing and is the reason that millions of people come to work for the pharmaceutical industry each day"* (6).

Several authors have analysed the content of a mission statement of companies, usually by focussing on specific country such as the United States (7), using parameters such as existential purpose, fundamental values, social responsibility, literary composition and semantic impact, or Italy (8) using the model developed by David (9).

However, the literature on mission, vision and values of pharma companies is relatively scanty (10, 11). To the best of our knowledge, this is the first in-depth analysis performed to collect and cluster the words used by multinational pharma companies when articulating their company statements.

A first analysis of our dataset suggests the possibility to cluster the words into four broad themes/concepts: (1) R&D and Innovation; (2) Value for Patients; (3) Operational Excellence and Trust; (4) Access to Treatment. Not surprisingly, the first two themes were present in the vast majority of company statements (four out of five companies would list either of them), whereas the latter themes were emphasized in only half of company statements. Among company mission and vision statements, "life/lives", "patients", "innovative", "people/persons" were mentioned at least 50 times. On the other hand, words referring to other major healthcare stakeholders appeared very rarely: "professionals" was listed seven times, there was only one mention to "physicians/doctors" and none to "nurses", "pharmacists" and "payors". Of note, we did not find any comparative statements (i.e. we are better/larger than our competitors). In fact, when we first started the dataset analysis, we identified one company, Mundipharma, whose tagline was very strongly focussed on competitors and read "we see what others don't". However, the statement was recently changed to a simpler, less ambitious, non-comparative statement: "to move medicine forward".

The lack of focus on the theme of economic and environmental sustainability was somewhat surprising: the term "sustainable" was present only five times and the term "environment" was not used anywhere.

Analysis of the word cloud of the company values indicates that "innovation" and "integrity" are by far the most commonly used words, either of them used in 30 instances or more, with "respect", "ethics", "responsibility", "patient", "passion" and "team-teamwork" all mentioned in more than 10 instances. It is clear that there is a strong focus towards inward-looking company values while value for the patient, or more generally, the consumer, is somewhat lacking. Overall, the term "innovation" thus emerges as the most quoted word in company statements. On the other hand, words such as "sustainability", "transparency" and "environment(al)" were rarely mentioned among company values. We expect this to evolve significantly within the next few months/years as sustainable business models, open science, general transparency in business and care for the environment become

even more critical for building a strong company reputation on the web.

Implication for reputation of pharma companies

Building a strong reputation with patients and consumers is a difficult challenge for companies worldwide. According to studies by the Reputation Institute, no pharma company ranks among the Top 10 companies globally, and their rank is average both in the United States (1) and in France (2). Pharma companies still suffer from some of the lowest familiarity levels across industries and, on the other hand, face a wide variety of reputational challenges, including the increased public and regulatory scrutiny of unaffordable drug costs for new innovative therapies. Their perceived focus on profit vs. societal benefits dents their effort to establish a strong positive reputation. Our analysis suggests that there are still significant areas of improvement in corporate pharma communications. First, not all the companies have a clear tagline that is easy to articulate; second, it is sometimes difficult to dissect their vision and mission or purpose. Third, company values tend to be very much "inward" rather than "outward" looking so that value for their customers is sometimes overlooked. Finally, broader topics such as transparency, economic sustainability and care for the environment are infrequently listed as core company values, indicating that companies are still very much focussed on their core competences and business.

Limitations of our study

A few important limitations of the study must be mentioned. First, the distinction between mission and vision on some of the websites was not straightforward. In other cases, values were not clearly mentioned on the website but were later identified in company brochures or other material. It is therefore possible that in some cases values are not missing as currently indicated in Supplementary tables II and III.

Second, the companies to be analysed were selected based on a combination of quantitative data (ranking of companies worldwide) and the expert advice of professionals working with these companies in different countries. This advice is by definition based on a somewhat subjective judgement but we felt it was the best approach to have a representative selection of companies under scrutiny.

Third, we did not embark into analysing Chinese HQ pharma companies, since their presence in the major US and European countries is still relatively modest, but we acknowledge that their role will become much more relevant in the next 3 to 5 years and we plan to run specific analyses on them.

Conclusions

This dataset represents a baseline reference that can be useful to follow the evolution in the company communication messages, in light of the rapid changes from an M&A, business and scenario perspective.

The results of our analysis indicate that most multinational pharma companies provide comprehensive statements, focussing their vision and mission statements mostly on their innovative R&D approach and their impact on patient prognosis and their quality of life.

However, an in depth analysis of their alignment with key needs and trending topics is warranted to further engage their customers in order to build their reputation index and ultimately their value within the business community.

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Disclosures

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