

## A Changing World

30%

Business-as-we-know-it is getting upended by a one-two-three punch of:

- <u>Rapid technological acceleration</u>. The convergence of technologies like mobile, cloud computing, and advanced machine learning.
- **Globalization**. An interconnected global marketplace, bringing new opportunities and new threats.
- **<u>Demographic shifts</u>**. Millennials the largest generation in US history, with an internet-shaped identity and unprecedented expectations becoming an increasingly powerful market force.

The struggles of print media and the taxi industry have made it clear that we're in "evolve fast or get eaten" times. Hands tied by a combination of security threats and heavy regulation, financial institutions face obstacles to change that are perhaps only rivalled by the healthcare industry.

As the operators of the world's largest millennial community for open innovation, <u>MindSumo</u> has front-row seats to the challenges, hopes, and daring new initiatives of the world's most influential financial brands. Companies post challenges to our platform, and MindSumo's community of 300,000 millennials suggests solutions. This report showcases insights gleaned from examining finance industry challenges en-masse. It aims to provide a window into how the world's biggest players are tackling a changing marketplace and the mindset of a new generation coming into power.

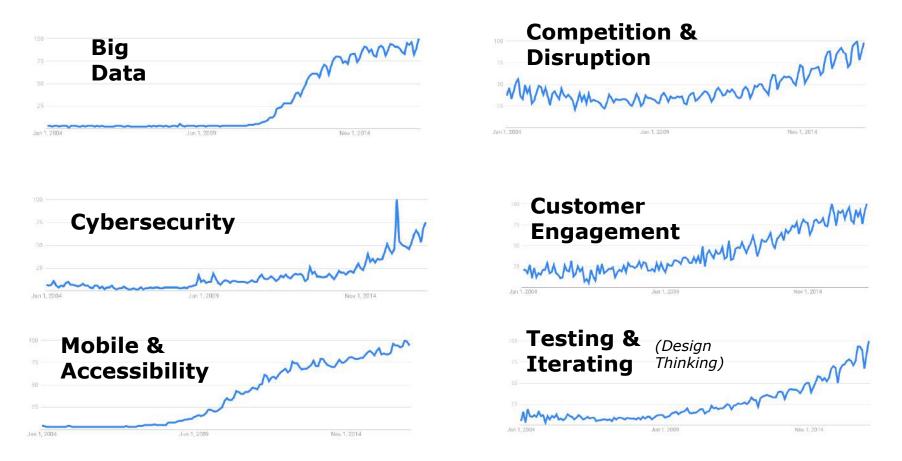
# Methodology

MindSumo's financial clients include Capital One, Wells Fargo, American Express, Allstate, Commerce Bank, Scottrade, UNFCU, AIG, Guardian, Prudential, Royal Bank of Canada, and others. Respecting our clients' IP rights, we were able to extract generalized insights from the 5,199-solution database through natural language processing and examining customer satisfaction ratings.

We kicked off our research by identifying ten key problem areas finance innovation, product, and marketing teams are focusing on:

- 1. Ensuring Customer Accessibility in a Mobile, On-Demand Era
- 2. Improving Brand Image in a Finance-Hostile Climate
- 3. Moving Fast in a Heavily Regulated Industry
- 4. Remaining Secure Against External Threats
- 5. Building Customer Engagement and Loyalty
- 6. Extending Services to Underserved Populations
- 7. Combatting Disruption from Competitors and Startups
- 8. Better Serving New Global Customers
- 9. Differentiating from Other Banks
- 10. Leveraging Big Data for Growth

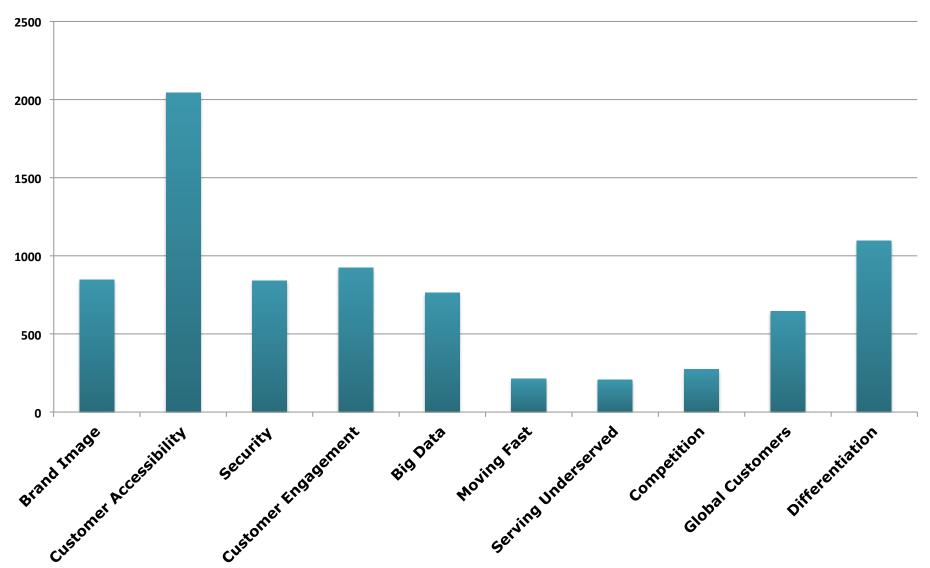
Clients have confirmed in conversations and <u>in the press</u> that these are primary areas of concern. Google Trends data supports that these areas have increased in importance across all industries since 2004.



Each of the identified ten areas of concern has associated terminology and concepts. By querying the solution database for those, we found the following:

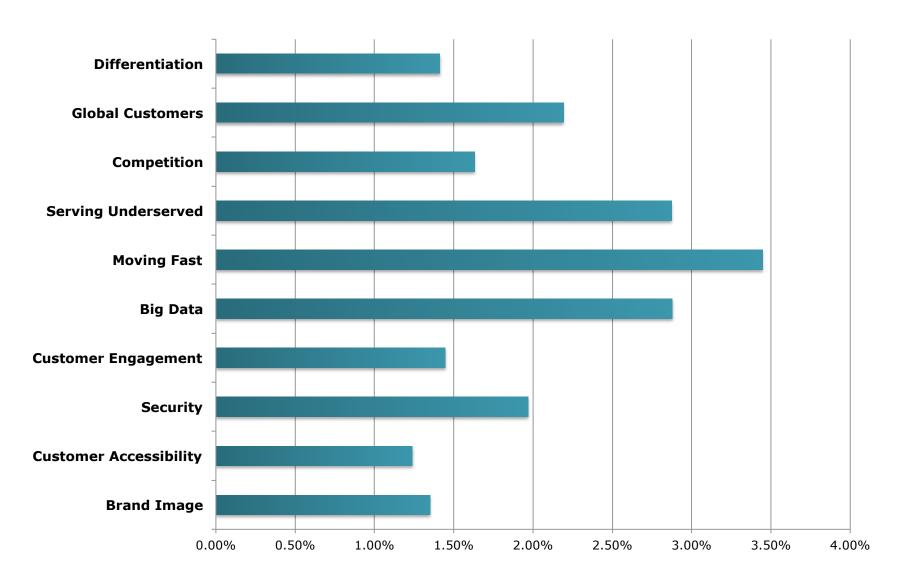
### What Kind of Ideas Are Being Submitted?

Frequency of Key Topics Across All Submissions



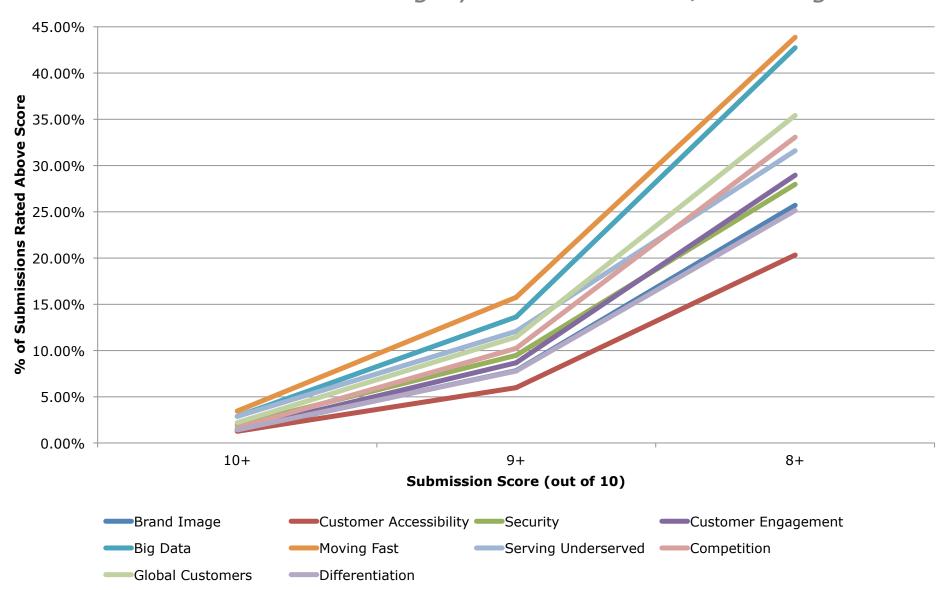
### What Kind of Ideas Are Most Impressive?

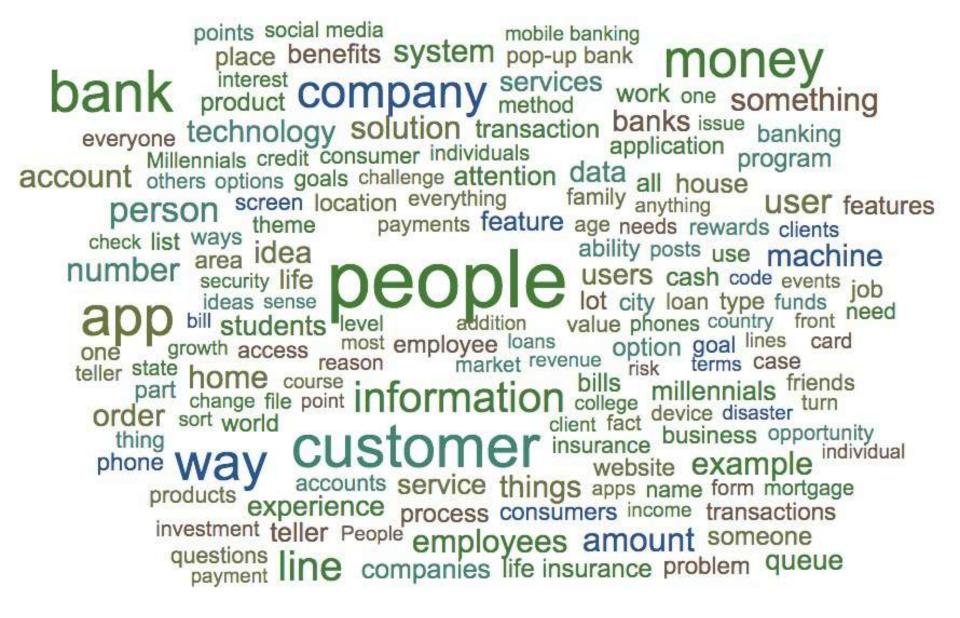
% of Submissions in Category that Received Highest Score



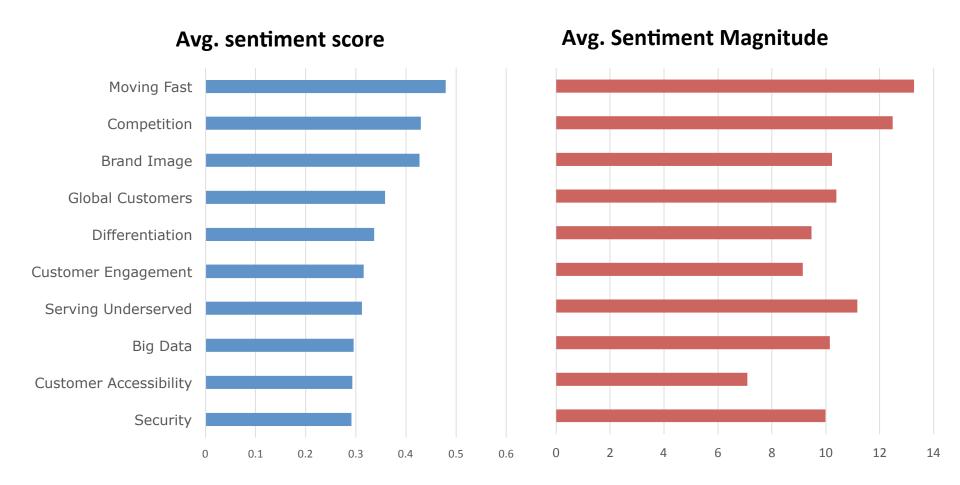
### What Kind of Ideas Are Most Impressive?

% of Submissions in Category that Received 8/10 or Higher





Word cloud of entities across all finance solutions, for entities with a count of at least 240. Entities <u>extracted</u> by Google's Cloud Natural Language API.



Sentiment analysis across the ten solution areas, using Google's Cloud Natural Language API. Per Google:

The *score* of a document's sentiment [between -1 and 1, with 1 being positive] indicates the overall emotion of a document. The *magnitude* of a document's sentiment [ranging from 0 to infinity, with each sentiment (whether positive or negative) contributing to the magnitude] indicates how much emotional content is present... [Magnitude] is often proportional to the length of the document.

A document with a neutral score (around 0.0) may indicate a low-emotion document, or may indicate mixed emotions, with both high positive and negative values which cancel each out. Generally, you can use magnitude values to disambiguate these cases, as truly neutral documents will have a low magnitude value, while mixed documents will have higher magnitude values.

#### **DATA:**

Ideas around customer accessibility (i.e. speed, ease of use, mobility, cloud) are the most frequently submitted (2042) but the **lowest** rated (only 1.24% receive 10/10 score).

#### **HYPOTHESIS:**

Companies know their products & services need to fit mobile lifestyles. Millennials may be suggesting actions that companies already know they need to take; the stumbling block to action is likely red tape, rather than a lack of ideas or insight.

#### DATA:

Ideas around moving quickly (testing and prototyping) are the second most rarely submitted (213) but the **highest** rated (3.43% receive 10/10 score).

#### HYPOTHESIS:

Financial services likely feel comfortable with their prioritization of new features and services. They don't feel comfortable moving quickly along that roadmap. External talent, like crowdsourcing, could be put to use in suggesting new processes for moving fast and confronting roadblocks to growth.

#### **DATA:**

Ideas related to big data are neither common nor rare (763), but they have the highest average rating (6.51 out of 10) of any category.

#### **HYPOTHESIS:**

Companies in the financial sector are still understaffed technically. College students in STEM have novel insights in a vital and difficult area. (Indeed, multiple clients have used the platform to even recruit top technical talent.)

#### DATA:

Average sentiment scores across all solution areas range between 0.29 and 0.48 (out of a possible range of -1 to 1). [Moving fast] has the highest score, followed by [Competition] and [Brand image]. [Security], [Customer accessibility], and [Big data] have the lowest. [Competition] has the second highest magnitude after [Moving fast].

#### **HYPOTHESIS:**

Sentiment scores are in the range you'd expect in recommendations to corporations (calm, measured language that leans toward positivity). It also makes sense that more technical subject areas like [Security] and [Big data] score closer to neutral sentiment.

Queries for [Competition] and [Moving fast] included disruption-focused keywords like innovate, fintech, and startup. This appears to be an area where consumers are hopeful and excited.



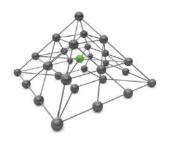
#### **ACCESSIBILITY:**

Financial institutions understand customers are very eager for increased accessibility and mobile-friendliness. External roadblocks may be causing a slowdown in roll-out of these features.



#### **MOVING QUICKLY:**

Financial institutions need to adapt to a rapidly changing marketplace. Thus, they are finding strategies for speedy growth and change to be of particular interest.



#### **DATA:**

Convenience and customer experience strongly differentiate in today's market – most are investing heavily in delivery, returns, and pickup.



#### **COMPETITION:**

Millennial consumers feel positively about innovation and disruption in the financial services space.

## Appendix

Theme	Frequency	Average	Median	% w/ 10+ Score	% w/ 9+ Score	% w/ 8+ Score
Brand Image	848	5.836653364	6	1.35%	7.84%	25.68%
Customer Accessibility	2042	5.775799033	5.75	1.24%	5.98%	20.31%
Security	841	6.037559752	6	1.97%	9.45%	27.95%
Customer Engagement	924	6.010344079	6	1.45%	8.69%	28.95%
Big Data	763	6.509649494	6.53125	2.88%	13.64%	42.73%
Moving Fast	213	6.322051177	6.25	3.45%	15.76%	43.84%
Serving Underserved	206	5.805721003	6	2.87%	12.07%	31.61%
Competition	273	6.173846029	6	1.63%	10.20%	33.06%
Global Customers	644	6.215269413	6	2.19%	11.47%	35.41%
Differentiation	1096	5.862484674	6	1.41%	7.77%	25.13%

Theme	Avg sentiment score	Avg sentiment magnitude
Brand Image	0.426674501	10.23078731
Customer Accessibility	0.293164063	7.095751953
Security	0.290855803	9.988276671
Customer Engagement	0.315193966	9.139331897
Big Data	0.295714286	10.14649351
Moving Fast	0.479723502	13.2640553
Serving Underserved	0.312135922	11.16601942
Competition	0.429454546	12.47709091
Global Customers	0.358551618	10.39060092
Differentiation	0.336520947	9.476867031