



Visualizing Change With Force Field Analysis

By Thomas C. Redman





Force field analysis (FFA) is a powerful strategic tool for change management that was first developed by Kurt Lewin in the mid-20th century. It allows organizations and individual practitioners to visualize and analyze the driving and resisting factors underpinning projects and initiatives. Some factors help produce the desired results — these are called *driving forces*. Others, called *restraining forces*, contribute to poor results. FFA provides a means to sort this out and, more important, helps guide decision-making. If you want to improve areas that are important to your business, you have three choices:

- You can strengthen and/or increase driving forces.
- You can weaken and/or decrease restraining forces.
- You can transform a restraining force into a driving force.

In this toolkit, we will explore how to conduct your own FFA using a problem set and analysis from my recent research.

STEP 1

Set up your canvas and specify your topic of interest.

Draw a horizontal line across the center of your workspace — a sheet of paper, a whiteboard, or this downloadable toolkit will work. This line will represent your topic of interest. Label the area above the line Restraining Forces and the area below the line Driving Forces.

From there, add five lines above and five lines below the topic-of-interest line. These markers will represent the strength values of the restraining and driving forces.



The next step is defining the topic of interest. In our example, we’re analyzing the business impact of data science as a topic. Note that FFA is quite flexible and can work for a range of technical, organizational, and social topics.

STEP 2

Brainstorm the driving and restraining forces.

Driving forces go below the centerline and push upward in support of our selected topic. Restraining forces go above the centerline, pushing down against the initiative.

It's also helpful to think about the relative strength of each force. Using the "Force Field Analysis Scorecard" on Page 9 of this document, you can assess the strength of each force on a 5-point scale (1 being the weakest, and 5 being the strongest). When plotting the force on the FFA graph, use the horizontal markers on the y-axis that match the strength you've assigned to each force.

In the following figure, I've illustrated this point using one driving and one restraining force.

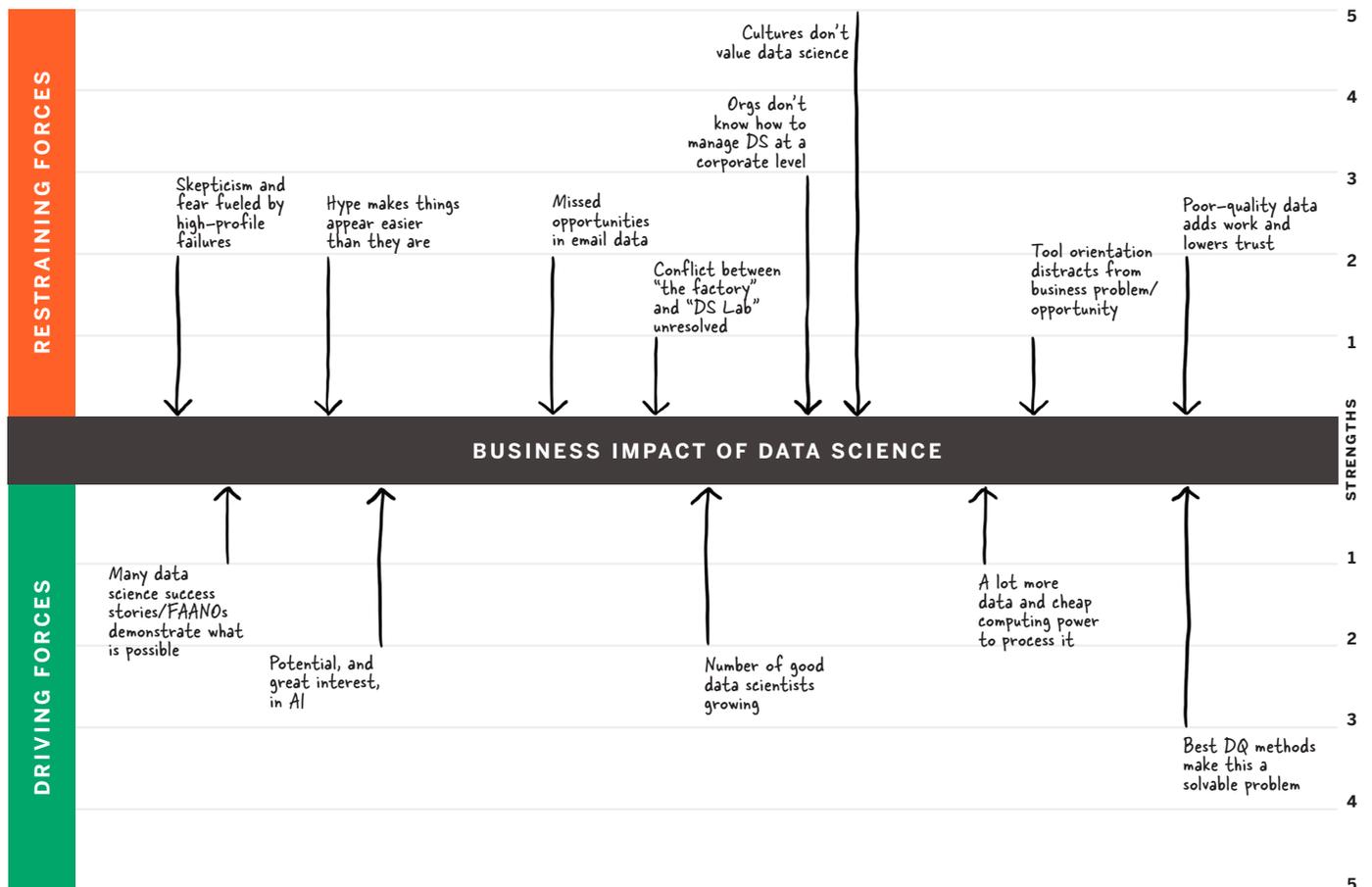


STEP 2 (CONTINUED)

Driving and restraining forces come from all areas in the organization. It's important to think broadly when developing an FFA, and it may be helpful to reach out to others when gathering data and inputs for forces.

It's often useful to classify major subcategories of your topic first and then drill down to relevant individual forces. In this example, we searched for forces relevant to the impact of data science in six broad categories: external factors, data quality, data monetization, internal organizational factors, technology, and defense.

The following figure represents several weeks of iterative work. For example, the notion that there might be built-in conflict between the data science lab and the factory initially struck my research team as counterintuitive, and we did not include it in early drafts. But as we talked to other experts, they all concurred that it was relevant, and thus it's reflected in the analysis.

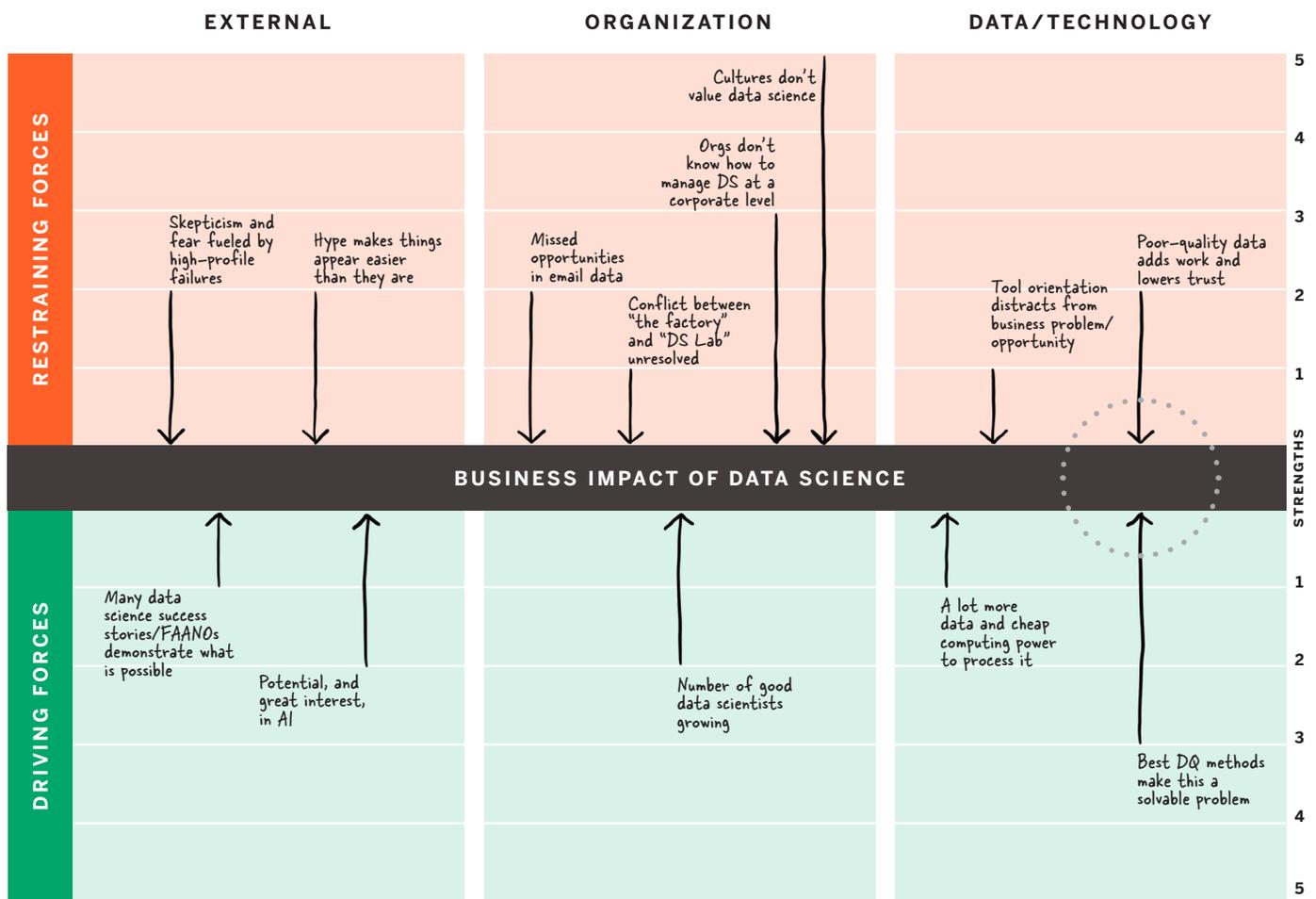


STEP 3

Refine the groupings and presentation of forces.

Once you have determined all of the different forces and plotted them accordingly, you can begin to organize and refine the graphic. For example, you may wish to do the following:

- Simplify the graphic by grouping like items together. In our example, external factors, organization, and data/technology proved useful.
- Adjust forces that tend to cancel each other out so they appear opposite each other. In the example, we did this with opposing forces related to data quality.
- Plot forces using the strength score (from 1 to 5) to help you understand trends within various groupings.



STEP 4

Develop (then execute) a plan to improve progress.

In order to effect change, your plan must strengthen and increase driving forces, weaken and decrease restraining forces, and/or transform restraining forces into driving forces.

For driving forces, ask what your team/company can do to increase the power and effectiveness of each, and push to develop ideas for new driving forces.

To address restraining forces, ask what your organization can do to mitigate existing forces and prevent new opposing forces from forming.

Similar to your information-gathering phase during the FFA process, your planning stage will benefit from casting a wide net. Make it a team exercise so you can benefit from a variety of different inputs and perspectives.

We urge chief data officers, chief analytics officers, senior leaders, and managers interested in advancing data to develop their own force field analyses. The companion article “What’s Holding Your Data Program Back?” looks at the five key categories that companies must tend to for data success.

This type of graphical analysis can apply to any change management issue, data related or not, and it is a great choice when the range of forces an organization faces is large. Everyone can contribute, which allows individuals at different levels of the organization to benefit from having a better understanding of the driving and restraining forces affecting the initiatives they are invested in. This encourages buy-in and can help teams and organizations mobilize resources to drive change.

To read more:

Thomas C. Redman, “[What’s Holding Your Data Program Back?](https://sloanreview.mit.edu)” MIT Sloan Management Review, Aug. 2, 2021, <https://sloanreview.mit.edu>.

Conduct your own force field analysis using our blank template on the following page.



DRIVING FORCES

RESTRAINING FORCES

STRENGTHS

5

4

3

2

1

1

2

3

4

5



Force Field Analysis Scorecard | Instructions

You can assess the strength of each force on a five-point scale (1 being the weakest, and 5 being the strongest) using the following scorecard templates.

STEP 1

Specify your topic of interest.

STEP 2

Brainstorm the driving and restraining forces.

STEP 3

Refine groupings and select a template that matches the number of categories.

STEP 4

Assign a weight on a scale of 1 to 5 to each force.

STEP 5

Calculate the net force of each category.

STEP 6

Develop (then execute) a plan to improve progress.

Force Field Analysis Scorecard | 3 Categories

TOPIC OF INTEREST

Driving Forces	→	Score	Score	←	Restraining Forces
			Net		

			Net		

			Net		

Force Field Analysis Scorecard | 4 Categories

TOPIC OF INTEREST

Driving Forces		Score		Score		Restraining Forces
	→					
			Net			
			Net			
			Net			
			Net			