Global Risk Perceptions
Q2 2020

DEEP·LEARNING

Tactix Risk Communications

Preface

Brand owners are making complex predictions about what the next two quarters will look like for their business.
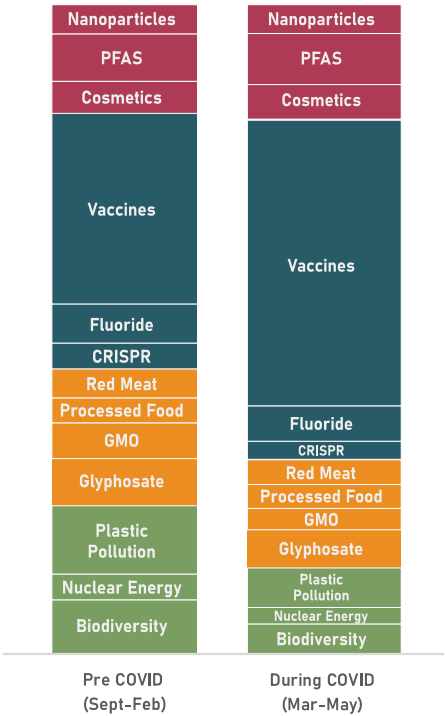
Accordingly, this month's Global Risk Perceptions Report is focussed on sorting through which COVID-related changes will last and which ones will not, by using metrics of volatility (looking through the wild fluctuations, some risk perceptions towards consumer products – cosmetics and PFAS, by example – have steadily grown).

To further support these time-compressed predictions, we offer data and insights into leading indicators that help anticipate when the public will mobilize against specific products.

Paul S Hillier
Co-Lead,
Risk Communications Practice

Global Allocation of Risk Perception: Before and During COVID

	Pre COVID (Sept–Feb)	During COVID (Mar–May)
Nanoparticles		
PFAS		
Cosmetics		
Vaccines		
Fluoride		
CRISPR		
Red Meat		
Processed Food		
GMO		
Glyphosate		
Plastic Pollution		
Nuclear Energy		
Biodiversity		

Change in Allocated Risk Perception

Nanoparticles	↓	2%
PFAS	↑	9%
Cosmetics	↑	9%
Vaccines	↑	50%
Fluoride	↓	10%
CRISPR	↓	30%
Red Meat	↓	15%
Processed Food	↓	5%
GMO	↓	40%
Glyphosate	↓	19%
Plastic Pollution	↓	42%
Nuclear Energy	↓	35%
Biodiversity	↓	45%

Methodology

Using Artificial Intelligence

With over two decades managing product defense campaigns, we understand what drives people to feel outrage, fear, or uncertainty towards technologies.

Tactix' Risk Indices are measured using a proprietary sentiment analysis algorithm. We built the algorithm specifically to analyze controversial products and practices.

If you are looking for historical data, weekly breakdowns, deeper analysis, or for another issue to be added to the tracker, reach out to us at paul.hillier@tactix.ca.

Proprietary Risk Indices

Severity Index: measures the percentage for public conversation that is registering as highly concerned.

Personalization Index: measures the percentage of public conversation that is associating the concern with a family member.

Measure Behaviors, not Attitudes

Why do we not poll people like many other risk reports do? Because polling asks people what they think they are concerned about.

Problem one: people often do not know what they are concerned about.

Problem two: they are unable to answer why they are concerned about something.

Ultimately, we want to anticipate the public's behaviors. And so, it only makes sense, to build risk indices based on actions – the comments people post on social media, their mobilization, what they search and what they read. Behaviors drive attitudes, not the other way around. So we measure behaviors.

Mobilization Index: measures the percentage of public conversation that is calling for a ban, boycott, or political change.

Nature of Concern: measures the percentage of concern that is concentrated on environmental impacts compared against concern that is concentrated on human health impacts.

Using the data to make decisions: Predicting when the public will mobilize

Comparing risk perceptions across industry sectors may provide helpful benchmarks, but brand owners are looking for leading indicators.

To be more than just a passive monitoring tool, we need to help anticipate when the public will mobilize against a product (e.g. launch petitions or coordinated social media campaigns for it to be banned).

The data from our three risk indices allows us to determine that mobilization can be anticipated, but with indicators that differ by issue. Mobilization against glyphosate, for example, is accompanied by increases in the conversations about severe harm (severity index). Mobilization against cosmetics, in contrast, shows no meaningful association with conversations about severe harm; however, continuing with the example of cosmetics, the degree to which risk is perceived to be personal (i.e. impacting oneself or family) is extremely predictive of public mobilization.

When brand owners are faced with public pressure it can become difficult to differentiate between different kinds of concern, and even more difficult to know which types of concerns are likely to lead to behavioural change.

Passive social listening tools are helpful for cataloguing brand mentions. But a predictive model that anticipates mobilization allows for early intervention.

■ R² greater than 70%

■ R² greater than 40%

Issue	Is Personalization Predictive of Mobilization	Is Severity Predictive of Mobilization
Glyphosate	Low	High
GMO	Low	Low
Processed Foods	Moderate	High
Red Meat	Moderate	Low
Cosmetics	High	Low
PFAS	Low	High
Nanoparticles	Low	Low
Biodiversity	Low	Low
Nuclear Energy	High	High
Plastic Pollution	Moderate	Low
CRISPR	Low	Low
Fluoride	High	Low
Vaccines	High	High

Figure 2. Regression analyses from the past 9 months test the extent to which mobilization can be predicted by a) the severity index and b) the personalization index. An R^2 value of more than 70% indicates that more than 70% of the increase in mobilization can be explained by the other variable.

Is CRISPR Being Equated with GMOs?

Early feedback from regulators has been positive: the scientific distinction between gene editing (such as CRISPR) and genetically modified organisms (GMOs) may well be accepted. But the public is just beginning to have its say.

Direct comparisons with GMOs are on the rise (in May, direct comparisons were 60% more frequent in public conversations than a few months earlier). If these technologies are equated, CRISPR may face a similar fate as GMOs.

Currently, from the public's perspective, the major difference between the two technologies is where they are used. Gene editing has typically been associated with healthcare, scientific research, and human health. In contrast, risk perceptions towards GMOs span both human health and environmental factors.

This difference has blurred. Over the past few months, perceptions towards gene editing technologies have increasingly been associated with their potential environment ramifications. Figure 3 shows how the risk perceptions of GMOs and CRISPR are trending towards one another.

Somewhat counterintuitively though, when CRISPR is talked about in the context of agriculture, public reaction is strongly favourable. This is an opportunity for agriculture to help shape the public's understanding and confidence in the technology, because the alternative is to forget two lessons from GMOs: first, lack of public acceptance for a technology can derail regulatory acceptance; second, pursuing a strategy of hoping the public does not pay attention to a technology carries significant long-term risk.
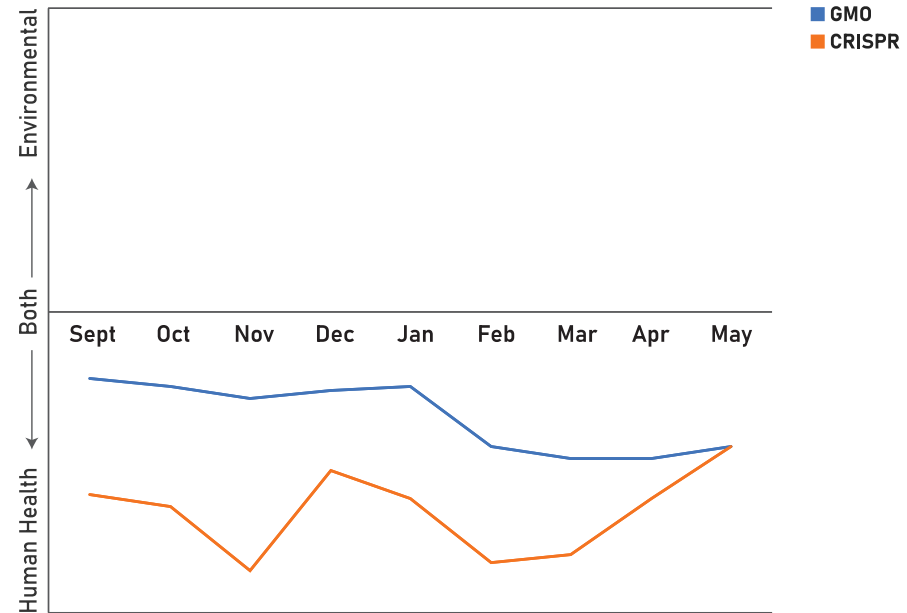
Nature of Concern: CRISPR and GMOs

Figure 3. As GMOs and CRISPR have increasingly similar risk profiles, they are at higher risk of being seen as comparable technologies. And the more they are seen as comparable, the less likely is market acceptance of CRISPR.

Risk perceptions post–COVID:
What to do when you lack a crystal ball

It is fashionable to take extreme positions on forecasting about COVID:

1. To be hyperconfident – declaring definitively that either 'everything will be different' or 'everything will be the same'; or,

2. To be nihilistic – resigning that we are in a black swan event and we read somewhere that black swans are impossible to predict so we should not bother to try.

We offer the following alternative. First, every change in risk perceptions falls somewhere on a spectrum between being systemic and being temporary. With early hypotheses we can plot each change somewhere on this spectrum, and then build leading indicators to offer early warning with time for course corrections.

On the previous page we detailed some examples of leading indicators. Here, we offer a suggestion for separating systemic changes from temporary ones using volatility. The speed with which a given risk perception changed is often proportionate to the speed with which it is likely to revert back post–COVID.

As an example, risk perceptions towards plastics were amongst the first to fluctuate, but this volatility also makes this change unlikely to endure. The trend holds at a more micro level: some specific uses of plastics have changed with much greater volatility than others, making them less likely to be enduring changes.

Lesson in Forecasting: the Changes that Last are those which Build Slowly

Word of the Year

chad (2000)

9/11 (2001)

WMDs (2002)

metrosexual (2003)

red state/blue state (2004)

truthiness (2005)   **Word of the Decade**

plutoed (2006)   to google (verb)

subprime (2007)

bailout (2008)

tweet (2009)

Figure 4. One example of this principle of volatility is the disconnect between what gets ranked as the Word of the Year versus the Word of the Decade. The Words of the Year seem important in the moment, then quickly fade from everyday vernacular. In contrast, the Word of the Decade took longer to build, but shows its relevance many years later.

Forecasts about COVID should follow the same principle: the changes that will last are the ones slowly building.

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Managing complex issues? Talk to us at paul.hillier@tactix.ca