



## REMEDY PROPOSALS

An Outline of Proposed Remedies to Google's  
Anti-Competitive Manipulations of its Search Results and Ad Listings

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## Introduction

Although the European Commission's investigation of Google will have covered a range of issues, in this paper we will focus on remedies for the core search manipulation and "leveraging" issues first raised in Foundem's Complaint.

### Discriminatory Preferencing and Demotion (Penalties)

Our European Complaint, originally filed in November 2009 and updated in February 2010, describes how Google anti-competitively exploits its overwhelming dominance of search and search advertising in two ways:

- First, by the discriminatory self-promotion of Google's own secondary services, using different ranking algorithms and relevance criteria to place its own services than it uses to place (rank) everyone else's, e.g. through Google's "Universal Search" mechanism.
- Second, by the discriminatory demotion or exclusion of competing services under the guise of quality control, e.g. through algorithmic penalties targeted at characteristics common to all vertical search services. Note that significant elements of Google's recent "Panda" update fall into this category.

Each of these practices constitutes an abuse of Google's dominant position in its own right, but together they reinforce each other to form part of a single overall anti-competitive strategy.

### Why Remedies Must Address Both Preferencing and Demotion

It is essential to recognise that the systematic promotion of Google's own services through Universal Search, and the systematic demotion or exclusion of Google's competitors through illegitimately-targeted penalties (e.g. those targeted at the "lack of original content" inherent to all search services) are two entirely separate mechanisms that will require entirely separate remedies to address. Any attempt to remedy one of these practices without also remedying the other would not solve the problem. It would simply allow Google to dial-up the un-remedied conduct in order to achieve the same or equivalent anti-competitive effect.

For example, remedies that end Google's ability to systematically self-promote its own services, but do not end its ability to systematically penalise, demote, or exclude those of its competitors are no remedies at all. Absent Universal Search, for example, Google could simply amplify and/or re-calibrate its arsenal of penalty algorithms and ranking signals to achieve a similar anti-competitive effect.

Similarly, remedies that end Google's ability to systematically penalise, demote, or exclude competitors through illegitimately targeted penalties, but do not end Google's ability to systematically self-promote its own services will not solve the problem either. Absent anti-competitive penalties, Google could simply dial-up the "aggression" of its Universal Search mechanism, inserting its own services even higher up the page than it does already and employing even more enticing display formats reserved exclusively for its own services, to achieve a similar anti-competitive effect.

## Limitations to Scope

Note that all of the following proposed remedies are aimed solely at ending Google’s abusive conduct and re-establishing the level playing field required for competition and innovation to thrive; they do not seek to redress any of the harm already inflicted by Google’s six years of abusive practices.

## High Level Principles

Devising remedies that are robust enough to stand up to the ever-shifting landscape of the Internet, yet flexible enough to allow Google to innovate and grow (albeit from a newly established level playing field) will require careful and nuanced consideration.

Together, our proposed remedies aim to restore or implement the following high-level principles:

- **Non-Discrimination:** to end Google’s discriminatory self-preferencing of its own services and its discriminatory demotion or exclusion of competitors.
- **Transparency:** to shed light and scrutiny on the rationale and criteria underpinning Google’s anti-competitive practices. Note that this will not require the publication of Google’s algorithms or business secrets.
- **Non-Retaliation:** given the wide-ranging options available to Google for retaliating against an individual, a website, or a business, it is crucial to devise remedies that allow such practices to be uncovered and stopped.

## Proposed Remedies

### Remedies for Google's Self-Preferencing (Universal Search etc.)

Note that where we refer to “Universal Search”, or to Google’s preferential treatment of its own services, we are referring to any mechanism past, present, or future that Google uses to place and display its own services<sup>1</sup> within or alongside natural search results using different standards, algorithms, or ranking signals than it uses to place and display everyone else’s.

The following remedies are designed to neutralise the anti-competitive incentive and effects of Google’s Universal Search mechanism while retaining any potential user benefits.

#### Remedy 1A: Clear and Conspicuous Labelling

Google must clearly and conspicuously label when it inserts its own content or services into, alongside, or around the organic, “natural” search results, just as it already does when it inserts paid advertisements.

It is important to note, however, that the harm being caused by Google’s preferential placement is not only about consumer deception; it is primarily about the competition-crushing power of Google’s ability to divert substantial volumes of traffic and revenues away from competing services and to its own. Because of this, clear and conspicuous labelling alone will not be sufficient to solve the problem.

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<sup>1</sup> When we refer to Google’s “own services”, we need to also consider any third-party services where Google has a financial or other interest.

It is also important to note that, in the two-and-a-half-years since we submitted our Complaint, Google's labelling of its sponsored links has become significantly less clear and conspicuous. The current label, "Ads", is considerably less conspicuous than the previous label, "Sponsored Links". And the contrast of the background colour used to distinguish advertising from natural search results is now far less noticeable than it used to be. On many modern screens, this new background colour is virtually invisible at certain common viewing angles.

### Remedy 1B: Google Must Hold its Own Services to the Same Standard as Everyone Else's

Google should be required to crawl, index, and rank its own services in exactly the same way that it does everyone else. This is not only vital from a competition perspective, it is also sound business practice (sometimes known colloquially as "eating your own dog food").

For efficiency, Google may suggest that it could physically skip the crawling element as long as it is logically the same as everyone else - e.g. crawl depth determined in part by PageRank and so on. But we suggest that the whole point of this exercise is to ensure that Google's secondary services are treated exactly the same. For example, if Google introduces a constraint that means only a thousand pages of a site will be crawled, it is crucial that Google's own services fall victim to this in the same way as all other services.

There are many additional benefits of this remedy. For years, Google's own services have been immune to the substantial, and often whimsical, constraints imposed by the need to be crawlable and to adhere to Google's ever-changing, and increasingly prescriptive, notion of how all websites should behave and look<sup>2</sup>.

### Remedy 1C: "Answers" Without Links

On the rare occasions when Google has publicly defended the comprehensive self-preferencing of its Universal Search mechanism, Google has tended to claim that these "inserts" offer a clear user benefit, by directly providing *answers* that mean users "don't have to click anywhere else"<sup>3</sup>.

But this argument is fallacious. In most cases, Google's Universal Search mechanism inserts prominently placed links to Google's other services, not answers. Users have to click on these links to find answers, just as they do on any normal, organic search result. Understanding this crucial difference is key to understanding the financial incentive underpinning Google's anti-competitive behaviour.

Fortunately, it is possible to distinguish between inserting *answers* and inserting *links to answers*. Where the former can be argued to provide some additional consumer benefit and is only mildly troubling from an anti-competitive perspective, the latter provides little or no additional consumer benefit and is highly troubling from an anti-competitive perspective.

Examples of "inserts" that can legitimately be considered to be answers include a summary weather forecast, a stock quote, and a dictionary definition. Examples of "inserts" that cannot legitimately be

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<sup>2</sup> As just one example, for several years Google's Webmaster Guidelines confidently asserted that there was no conceivable reason why any legitimate website should have a page containing more than one hundred links. Presumably such things as an index or an interactive Periodic Table were beyond the limits of Google's imagination.

<sup>3</sup> See <http://www.youtube.com/watch?v=BslAhJ5-C9q&hd=1&t=4m32s>

considered answers include links to a price comparison service, links to a flight search, and links to a mortgage comparison tool.

As mentioned above, our proposed remedy (1B) for Universal Search is that Google should not be allowed any form of discriminatory preferential treatment for its own services. Instead, it should subject its own services to exactly the same standards, crawling, and ranking algorithms as everyone else. If Google wants to insert actual answers, then this could be allowed as a tightly defined exception to this principle, the definition of which we take from Google's own justification for Universal Search: namely, that an answer is something that *users don't have to click on*.

Our proposed remedy allows all of the user benefit of embedded answers while neutralising the anti-competitive incentive and effects. We suggest that anything artificially inserted into a user's search results (by Universal Search, for example) as an "answer" should comprise solely of information (text, images, etc.) without any links for users to click on. If links must be inserted (such as for further details, or for the full text of an article, etc.), then these links must not be revenue-bearing and must not take users to pages or services that Google owns or has a financial interest in.

It should also be noted that any definition of what ought to be considered a legitimate *answer* will need to work in concert with any remedies designed to protect the intellectual property rights of content owners. For example, it will need to be determined separately whether it is acceptable for Google to display an *answer* copied from someone like IMDb<sup>4</sup> without their express consent, when it inevitably means that far fewer users will visit IMDb.

#### **Remedy 1D: Enhanced Display Formats for All (Breaking away from "ten blue links")**

Google must not be allowed to employ any enhanced or more enticing display formats for its own services without also making them available to everyone else.

If Google sees a benefit in providing enhanced, context-specific result-formats that include "rich snippets" like thumbnail images, star-ratings, price-ranges and so on, then these enticing display formats need to be made available to all relevant services, not just Google's. Much of this would be relatively straightforward to implement through the use of mark-up based meta-tags, similar to those that Google and others have already adopted.<sup>5</sup>

#### **Remedies for Google's Penalties/Demotions of Competitors**

For background information about penalties and ranking signals, please see Annex 1.

Google has listed the following characteristics as justification for penalising certain websites:

- a lack of original content/high proportion of "copied" content, and
- a primary purpose to deliver users to other websites.

Although these characteristics describe a certain kind of spam site, they are also defining characteristics of all vertical search services—the very services that Google is increasingly choosing to compete with. Google knows better than most that search services are not intended to produce original content: they are intended to organise, search, and summarise the content of others.

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<sup>4</sup> The Internet Movie Database <http://www.imdb.com/>

<sup>5</sup> <http://support.google.com/webmasters/bin/answer.py?hl=en&answer=146750>

Google also knows better than most that the primary purpose of any search service is to deliver users efficiently to other sites (the sites with the content or services they are looking for).

Put simply, Google's stated justifications for penalising many of its vertical search competitors are not legitimate; they are merely a pretext to disguise anti-competitive abuse.

Google has used the same pretext to further foreclose competitors as part of its recent "Panda" update. Google deployed Panda in the face of multiple antitrust investigations on both sides of the Atlantic, many of which were already investigating precisely this kind of abuse.

#### **Remedy 2A: Google Cannot Demote or Exclude Legitimate Sites for Illegitimate Reasons.**

Google must not be allowed to deploy penalties that demote legitimate websites for illegitimate, anti-competitive reasons.

There is a need to differentiate between legitimate and illegitimate penalties or criteria for penalties. Note that this is primarily a question of principle and rationale; in the vast majority of cases, it will not require a detailed analysis of any algorithms or code.

Some examples of characteristics that can be considered a legitimate target for penalties include duplicated content without added value, keyword stuffing, hidden text, an excessive ad-to-content ratio, large numbers of reciprocal links, and large quantities of text which, though original, has clearly been created with search engines and advertising potential in mind rather than users (e.g. "Made for AdSense" content, also known as MFA).

Some examples of characteristics that cannot be considered a legitimate target for penalties include those inherent to vertical search services, such as a lack of original content, a primary purpose to deliver users to other sites, and repetition of product description snippets (where these snippets are search results derived from multiple sources, for example).

Note that this definition renders illegitimate those aspects of Google's recent "Panda" update that are targeted at these characteristics.

Also note that we are not suggesting that characteristics such as a lack of original content cannot be used as part of a broader analysis – one signal which, when combined with other signals, can be interpreted collectively as a sign of low quality or spam. But we are suggesting that these characteristics, which are inherent to all vertical search services (including Google's own), cannot on their own be used to justify the systematic demotion of Google's competitors.

#### **Remedy 2B: Non-Discrimination**

When considering the legitimacy or illegitimacy of penalty signals or other demotion criteria, the principle of non-discrimination is key. Any penalty signals or demotion criteria must be applied equally across all websites and services, including Google's own, and any exemptions (manual or automatic) must be applied legitimately and pro-competitively. For example, exempting sites from a particular negative signal, demotion, or penalty simply by dint of their age or the strength of their brand-name could, without extreme care, systematically punish novelty and innovation while rewarding and reinforcing incumbents and the status quo.

Note that, by disallowing the systematic self-preferencing of Universal Search, Google's own vertical search services would, for the first time, be subjected to the same standards as everyone else. So any penalties targeted at a lack of original content would, without special intervention/provision by Google, demote Google's own services along with everyone else's.

### **Remedy 2C: Transparency about the Rationale behind Penalties and Demotions**

Google needs to be considerably more transparent about the existence and rationale of its various penalties.

Sites that are suffering from any kind of penalty must be notified about the status and expected impact of the penalty as well as provided with an explanation of the rationale behind it. This notification could easily be achieved through Google's existing, site-owner-verified, Webmaster Tools Console.

Sites that have been notified of a penalty through the Webmaster Tools Console should be provided with appropriate contact details, or preferably some kind of form-based system for appealing the penalty and/or requesting more information about it. See Remedy 2D.

Note that this remedy does not require Google to publish its algorithms or provide any kind of recipe for spammers to follow in order to avoid penalties.

### **Remedy 2D: A Timely and Effective Appeals Process**

Penalised sites must be given access to an effective and timely appeals process, with binding timescales, that includes a clear escalation path up to third party arbitration and dispute resolution where necessary.

Using Google's existing Webmaster Tools Console would make this notification and appeals process both straightforward to implement and fully scalable. Few actual *spammers* are likely to appeal a spam penalty; with no brand or customer relationships to protect, most spammers will simply move to a new site name. For legitimate sites, the secure, site-owner-verified Webmaster Tools Console provides a ready-made channel for a scalable, automated penalty notification mechanism. This would ensure that only penalised sites would have access to the appeals process, thereby eradicating any scalability issues. The numerous sites that might be unhappy with their rankings but not actually suffering under a penalty would be able to see this information in the console, and would not be granted access to the appeals process.

### **Remedy 2E: Special Remedies/Precautions for Panda and Related Updates**

Because the anti-competitive elements of Panda have been buried amidst a tangle of unrelated changes, it is necessary to specifically point out that all elements of Panda (and related updates) that demote services based primarily on a lack of original content or any other characteristic inherent to vertical search services are illegitimate and must be reversed.

### **Remedy 2F: Precautions against Anti-Competitive Refusal to Crawl or Index**

To be eligible to appear in a search engine's search results, websites must first be crawled (spidered) and stored in its database (indexed). Any penalty or demotion remedies will need to ensure that Google is not left free to impose other forms of anti-competitive foreclosure from its search results,



by, for example, interfering with either of these processes. Examples of such illegitimate interference would include:

- a refusal to crawl a competitor’s website,
- artificially limiting the crawl depth, crawl speed, or crawl frequency of a competitor’s website, or
- a refusal to index all or a portion of a competitor’s website.

It should be noted that, by their nature, vertical search services tend to be very large. A price comparison service, for example, may contain hundreds of thousands of product-specific price comparison pages, and a digital-mapping service may contain hundreds of thousands of postcode-specific pages. Google has, in the past, introduced measures (e.g. in the “Big Daddy” update of 2006) tying a site’s crawl-depth to its *PageRank*. As a result, very large websites now require a very large number of inbound links to ensure that most of their pages are crawled and indexed. This can give rise to a classic chicken and egg scenario; how can an emerging vertical search service gain the popularity and resultant inbound links required to be crawled and indexed by Google, if it cannot yet be found or discovered within Google? Whether by design or accident, the anti-competitive effect of these changes will have been significant for many emerging vertical search services.

#### **Remedy 2G: More Subtle Penalties and Retaliation**

It is very important that Google is not left free to abuse its power through the imposition of even more subtle, difficult to detect, but potentially devastating, penalties. Possible mechanisms for such subtle penalties include various forms of traffic rationing (traffic throttling, traffic quotas, etc.), as well as various subjective manual manipulations of otherwise objective measures, such as PageRank, Landing Page Quality Scores, and so on.

These subtle forms of discrimination are particularly important when it comes to preventing retaliation by Google against Complainants and others.

### **High-Level Remedies**

#### **Remedy 3A: Independent Technical Oversight Panel/Dispute Resolution Mechanism**

Ensuring that remedies are implemented as agreed will require a degree of ongoing technical oversight, most likely in the form of an independent technical oversight panel.

We would expect this technical oversight panel to form the final point of escalation for disputed penalties. As an added advantage, this would allow the panel to get a sense of any systemic patterns of discrimination or exclusion, whether applied in error or for anti-competitive reasons.

We suggest that this panel would focus primarily on rationale, with limited need for in-depth analysis of source code. In general, there should be a shift in the burden of proof – Google must be able to justify its actions when challenged, allowing the technical oversight panel to determine, for example, which penalties can be considered legitimate and which cannot.

#### **Remedy 3B: Access to Pure, Unfiltered Search Results**

Many users and industry commentators seem unaware of the strictly limited extent to which it is possible to accurately assess the efficacy of a search engine. Many users assume that Google's

search results are "the best", with a degree of confidence that far exceeds their ability to judge. Indeed, Google's founders have highlighted this problem:

*"Since it is very difficult even for experts to evaluate search engines, search engine bias is particularly insidious..."* Sergey Brin and Larry Page, *Anatomy of a Search Engine*, 1998<sup>6</sup>

To allow users, website owners, industry commentators, regulators, and the technical oversight panel to review, assess, and comment on the legitimacy and efficacy of Google's various penalties and filters, Google should be required to provide an advanced search option, which, when selected, delivers "unfiltered" natural search results; effectively disabling selected penalties and filters and delivering results as though all sites had been immunised/whitelisted for these penalties.

This facility can be extended to allow a fine granularity of control, so that any significant and/or controversial updates (such as "Panda") could be provided with their own advanced-search-option, allowing users to selectively disable and enable them, to better judge their efficacy and legitimacy.

### **Structural Remedies – the remedy of last resort**

Before Google's need for growth compelled it to look beyond horizontal search, its unfettered market power wasn't necessarily a problem. Google tended to focus its efforts on providing the best possible search results for its users, even though that usually meant steering them to other people's websites as quickly as possible. Starting around 2005, however, Google began to develop a significant conflicting interest—to steer users, not to other people's services, but to its own growing stable of competing services, in price comparison, travel search, social networking, and so on.

As with all conflicts of interest, the only certain way to deal with Google's inherent and growing conflict is to remove it. In our view, this should remain a remedy of last resort, should Google resist the necessary behavioural remedies.

### **Why "Rotation" Within Verticals is Not a Remedy for Universal Search**

Some have suggested a complex scheme whereby Universal Search is allowed to continue, on the condition that Google opens up the data sources for these specialised categories to an agreed set of competing services, where content is delivered from each on some kind of rotating basis. We believe that this approach has many serious and insurmountable problems, both in implementation and utility. We also believe that this proposal reinforces the erroneous view that Google's Universal Search "inserts" provide some kind of user benefit, let alone one that is worth working so hard to retain. We believe that our proposed remedy 1C, which distinguishes inserts that are answers from those that are links to answers, offers a more practical solution for retaining any user benefits.

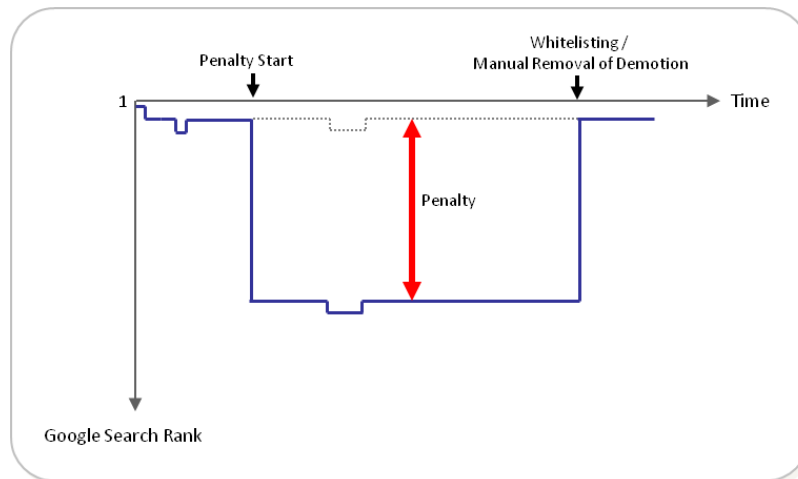
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<sup>6</sup> <http://infolab.stanford.edu/~backrub/google.html>

## Annex 1 – Penalties: Background and Definitions

### Background

Like most horizontal search engines, Google employs a variety of algorithmic penalties designed to demote or remove a website or page, regardless of how relevant they appear to the user’s query. A Google search penalty takes a page’s natural ranking (as determined by Google’s relevance algorithms) and artificially lowers it by some amount, which can be ten, a hundred, or even thousands of places.



These penalties used to be reserved for spam, or sites caught attempting to cheat Google’s algorithms. But, as Foundem’s case demonstrates, Google is increasingly deploying these systematic demotions anti-competitively; targeting penalties at characteristics such as a lack of original content that apply to all vertical search services, as well as to certain spam sites.

Search penalties are often calculated “off-line” (rather than in real time) and are normally applied to an entire website rather than to a particular page. As a result, a site that is currently penalised in this way (and not granted immunity through any kind of “whitelisting”) will tend to be systematically demoted or excluded from all search results regardless of how relevant any of its pages are to the particular search query. For much of Foundem’s three year penalty, for example, its pages were systematically excluded from Google’s search results, even for the many tens of thousands of highly-specific search terms for which Foundem was the only truly relevant result.

Most of Google’s algorithmic demotions work in this way. Although the penalty signal may be just one signal of thousands that Google uses to determine a page’s ranking for a particular search term, the penalty signal is often so heavily weighted that, as far as Google’s ranking algorithms are concerned, nothing else matters. For severe penalties, as long as a site remains penalised, its pages will never appear anywhere near the top of Google’s search results for any query (except, perhaps, for the site’s brand-name) no matter how relevant.

A Google search penalty is a bit like turning the brightness on your television set all the way down to zero. Having done so, no matter what TV station you tune to or what else you tweak, you will not see a brighter image until you remove this ‘penalty’ and set the brightness back to normal.

Ironically, whereas spam sites penalised by old-style ‘spam’, or ‘cheating’, penalties can escape the penalty by mending their ways, legitimate sites struck by these newer anti-competitive penalties cannot. Short of fundamentally changing their business from a search service to a content publisher, their only means of escape is through manual intervention by Google (e.g. whitelisting).

## Ranking Signals

A horizontal search engine will employ hundreds or even thousands of different ranking signals, which it will weight and combine to determine the placement (ranking) of each matching search result. Absent any political, anti-competitive, or financially motivated bias, this ordering would reflect the search engine’s neutral “best guess” at relevance, as encapsulated in its various interwoven algorithms as well as in the selection, calibration, and relative weighting of its various ranking signals.

Generally, positive ranking signals serve to improve a page’s ranking, while negative signals serve to lower it. A site with a great deal of brand “authority” (an example of a positive ranking signal) like the *New York Times* will tend to rank better than a site with less brand “authority” such as that of an occasional blogger.

In order to devise appropriate remedies in this potentially complex area, we need to distinguish legitimate ranking signals from illegitimate ones. More specifically, we may need to consider legitimate combinations of signals versus illegitimate combinations.

Fortunately, for the purposes of defining and enforcing remedies, we can once again turn to the principle that an understanding of the rationale behind a combination of algorithms and signals will usually be sufficient to assess a penalty’s legitimacy.

For example, any rationale that Google puts forward to explain why so many of the world’s leading price comparison services have seen their businesses destroyed by Google’s Panda update, while certain others have not, is unlikely to stand up to scrutiny; particularly when this rationale is contrasted with Google’s rationale for comprehensively preferencing its own price comparison service.

## Re-Defining “Manual” Intervention

Traditionally, when Google has wanted to single out a specific site for special treatment, either to manually penalise it or to manually immunise it from certain algorithmic penalties, it has done so through the use of manually maintained exception lists, which record the names of specific websites to penalise (blacklist) or exempt (whitelist).

These manual interventions have long been controversial and cloaked in secrecy, in part because their inherent subjectivity undermines Google’s claims of absolute, automated objectivity. Over the years, as knowledge of these manual interventions has become more widespread, Google has begun to downplay its claims of absolute objectivity. Where Google used to claim that a site’s ranking in its search results “is automatically determined by computer algorithms”, for example, it now only claims that it “relies heavily on computer algorithms”.

Distinguishing pure algorithmic promotions and demotions, which act solely on information that Google’s algorithms have determined for themselves, from those that act with reference to specific

site names or values that have been set by a Google employee will be crucial when devising and assessing measures to ensure that Google's algorithms act in a fair and non-discriminatory manner.

Google may attempt to circumvent remedies designed to end anti-competitive demotions or penalties, by blurring the line between what is and what isn't considered a "manual" intervention. Indeed, it is possible that, through "Panda" and its various follow-on updates we are already seeing early signs of this strategy.

We will probably need to extend our definition of a manual intervention. For example, manually devising, adjusting, and calibrating a number of different signals until an algorithm produces a desired outcome, such as automatically demoting or promoting a particular website or group of websites, will probably need to be considered a form of manual intervention.