OKRs in Government

- 1. What the public sector knows as 'targets', the technology industry reinvented as "OKRs" meaning "Objectives and Key Results". They're largely the same thing.
- 2. Technology companies are incentivised such that "the growth team will charge ahead and do it",² in order to scale and grow. In previous times, residents of London felt the consequences of being on the receiving end of "*Blitz*scaling" the OKRs of others;⁴ this approach is also entering politics.
- 3. The definition of 'what matters' is (at best) reduced to a single measurable figure, which becomes prioritised above all else. Those singular targets, a single "Objective", are often fundamentally flawed by design, as they mandate that anything not in service of that single goal is disregarded. This isn't new. At worst, there will be multiple conflicting objectives, such as in the Education Act 2011 s128 which are one cause of the 2020 A-Level results fiasco.
- 4. Adverse consequences of the OKR target are most often seen as a PR problem,⁵ with companies resorting to techniques that would make even the worst of the tobacco industry inhale deeply.⁶ In the public sector, 'objective-driven' technology has led to adverse consequences that include dead bodies in such events as the mid-Staffs scandal,⁷ or in civil society, the 'Samaritans Radar' fiasco in 2014.⁸
- 5. Tech companies (especially) throw effectively infinite resources at these OKRs; they structure themselves and their systems around them, and empower decision-making on the same basis. Similarly, the Government issues rules which limit how Job Centres can tell claimants where they can get food when their money is cut off. If the OKR for DWP was "make work pay and combat worklessness and poverty", 9 Universal Credit would look very different and some of that would not be handled through UC at all.

https://www.samaritans.org/how-we-can-help-you/supporting-someone-online/samaritans-radar#10mar

¹ John Doerr: 'Measure What Matters: OKRs: The Simple Idea that Drives 10x Growth' https://www.whatmatters.com

² Facebook documents, as published by the DCMS Committee Inquiry on Fake News and Disinformation: "This is a pretty high risk thing to do from a PR perspective but it appears that the growth team will charge ahead and do it." (emphasis added) https://www.parliament.uk/documents/commons
-committees/culture-media-and-sport/Note-by-Chair-and-selected-documents-ordered-from-Six4Three.pdf

³ https://www.amazon.co.uk/Blitzscaling-Lightning-Fast-Building-Massively-Companies/dp/0008303630

⁴ https://www.youtube.com/watch?v=QEJ9HrZq7Ro

⁵ https://www.talkingpoliticspodcast.com/blog/2018/133-talking-politics-guide-to-facebook

⁶ https://www.recode.net/2018/11/16/18098008/facebook-mark-zuckerberg-sheryl-sandberg-new-york-times-kara-swisher-scott-galloway-pivot-podcast

⁷ https://en.wikipedia.org/wiki/Stafford Hospital scandal

⁸ https://en.wikipedia.org/wiki/Samaritans Radar and

⁹ 2010 UC white paper https://assets.publishing.service.gov.uk/government/uploads/system/uploads/
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/

OKRs mandate and provide a sole focus

- 6. An OKR of "Get Brexit Done; then ARPA" may work for an individual in charge of their own agenda, but Events (and other people's OKRs) will endlessly intervene for everyone else. Without a functional and well-informed balancing of competing priorities, what you get is a complete clownshow.
- 7. As the recovery from the first phase of COVID-19 begins, one part of Government has a target to reduce obesity, while another part has a target of saving the hospitality industry with "Eat out to help out"; the Department of Health tells people to "stay home", while the Department for Business tells people to "go into the office".
- 8. The civil service has always had singular objectives for civil servants, but now coupled with modern technologies, these allow them to do harmful things even faster.
- 9. When DWP both wants to have your NHS data and has committed to sharing the data it holds, it is entirely reasonable for citizens to fear that their NHS data is being shared. Given the volume of mistakes at DWP, official assurances that people's NHS data is not being shared for the purposes of punishing people must ring hollow. Even if such assurances turn out to be true today, the tech companies (and civil service) are practised experts at promising today that they won't do what they then turn around and do tomorrow. And the relentless churn in civil servants provides the 'cognitive safety' that it wasn't them who misled the public; they are just doing their job.
- 10. Paragraphs 22-29, 37-42, 50-64, of our evidence¹⁰ (and 65-71 of the supplementary evidence¹¹) to the recent House of Lords Select Committee on Artificial Intelligence provide a further case study of the consequences for innocent citizens of aggressive OKRs within a culture akin to "move fast and break things". We do not repeat that discussion here, except to add one point: the three-month OKR cycle at Google was the first question raised against Google's public claim that it had not fed 1.6 million medical records to an AI, as its officers told an ethics committee they *would* do before they understood that it would be unlawful and some seven months before they first denied they had done so after they had been told by others, correctly, that it was unlawful.

¹⁰ http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/artificial-intelligence-committee/artificial-intelligence/written/69500.html

¹¹ http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/artificial-intelligence-committee/artificial-intelligence/written/75844.html

The 'Bible' for flawed incentives

- 11. 'Measure What Matters: OKRs: The Simple Idea that Drives 10x Growth' by venture capitalist John Doerr is a book published in 2017 which, amongst other case studies, chronicles the incentives and priorities behind the growth in viewership of YouTube. It could be considered a 'Bible' for optimising Immersive and Addictive Technologies.
- 12. The biography on Mr Doerr's employer's website says: 12

"For years I've spread the gospel of Andy Grove with a short slide presentation about goals and OKRs to organizations large and small. Measure What Matters is my chance to now do the subject justice."

13. As a long-time board member of Google, his book is illustrated by a case study of YouTube (as excerpted by Wired¹³):

"I came with my present for Google, a sharp-edged tool for world-class execution. I'd first used it in the 1970s as an engineer at Intel, where Andy Grove, the greatest manager of his or any era, ran the best-run company I had ever seen. Since joining Kleiner Perkins, the Menlo Park VC firm, I had proselytized Grove's gospel far and wide, to 50 companies or more."

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"My first PowerPoint slide defined OKRs: "A management methodology that helps to ensure that the company focuses efforts on the same important issues throughout the organization."

An OBJECTIVE, I explained, is simply WHAT is to be achieved, no more and no less. By definition, objectives are significant, concrete, action oriented, and (ideally) inspirational. When properly designed and deployed, they're a vaccine against fuzzy thinking—and fuzzy execution.

KEY RESULTS benchmark and monitor HOW we get to the objective. Effective KRs are specific and time-bound, aggressive yet realistic. Most of all, they are measurable and verifiable. (As prize pupil Marissa Mayer would say, "It's not a key result unless it has a number.") You either meet a key result's requirements or you don't; there is no gray area, no room for doubt. At the end of the designated period, typically a quarter, we declare the key result fulfilled or not. Where an objective can be long-lived, rolled over for a year or longer, key results evolve as the work progresses. Once they are all completed, the objective is necessarily achieved. (And if it isn't, the OKR was poorly designed in the first place.)

My objective that day, I told the band of young Googlers, was to build a planning model for their company, as measured by three key results:

¹² https://www.kleinerperkins.com/people/iohn-doerr

¹³ When John Doerr Brought a 'Gift' to Google's Founders. 2018: https://www.wired.com/story/when-john-doerr-brought-a-gift-to-googles-founders/

KR #1: I would finish my presentation on time.

KR #2: We'd create a sample set of quarterly Google OKRs.

KR #3: I'd gain management agreement for a three-month OKR trial.

By way of illustration, I sketched two OKR scenarios. The first involved a fictional football team whose general manager cascades a top-level objective down through the franchise org chart. The second was a real-life drama to which I'd had a ringside seat: Operation Crush, the campaign to restore Intel's dominance in the microprocessor market."

14. The book continues:

"In November 2012, at our annual YouTube Leadership Summit... was to announce a big stretch goal to kick off the coming year: one billion hours in daily user watch time. ... we settled on the end of 2016, a four-year OKR." (page 164)

"While one billion daily hours sounded like an awful lot, it represented less than 20 percent of the world's total television watch time." (page 165)

"Once the billion-hour BHAG [Big Hairy Audacious Goal] was set, however, we never did *anything* without measuring impact on watch time. If a change might slow our progress, we'd be scrupulous about estimating just how much. Then we'd build internal consensus before going through with it." (page 165)

"We began putting people's names next to our YouTube company goals, with coloured bars denoting progress: green, yellow, or red." (page 169)

"In September [2016]... all of our search and recommendations improvements were amplified. Reaching one billion hours was a game of inches; our engineers were hunting for changes that might yield as little as 0.2 percentage more watch time. In 2016 alone, they would find about 150 of those tiny advances. We'd need nearly all of them to meet our objective.

By early October, daily watch time was growing beyond our target rate... And then one glorious Monday that fall, I checked again – and saw that we'd hit a billion hours over the weekend." (page 170-171)

- 15. That weekend, medConfidential understands, being the one immediately before the 2016 US presidential election.¹⁴
- 16. To quote the Venture Capitalist arm of Google: "OKRs are public". 15

¹⁴ In an interview the author has been unable to find again in time to include, there was a reference to the first weekend in November.

¹⁵ With caveats... https://library.gv.com/how-google-sets-goals-okrs-a1f69b0b72c7

'A Big Mistake'

- 17. Professor Nick Bostrom of the University of Oxford talks about artificial intelligence and the idea of "a big mistake in designing its goal system": 16
 - "...a well-meaning team of programmers make a big mistake in designing its goal system. This could result, to return to the earlier example, in a superintelligence whose top goal is the manufacturing of paper clips, with the consequence that it starts transforming first all of earth and then increasing portions of space into paperclip manufacturing facilities. More subtly, it could result in a superintelligence realizing a state of affairs that we might now judge as desirable but which in fact turns out to be a false utopia, in which things essential to human flourishing have been irreversibly lost. We need to be careful about what we wish for from a superintelligence, because we might get it."
- 18. What Prof Bostrom framed as a hypothetical future for AI is today a demonstrable reality for existing technologies. There are many examples of incentives going badly, 17 but the most highly addictive and intrusive has resulted, as @gchaslot says,18 in "the two best Als of the world, on Instagram and YouTube, competing to convince people that the earth is flat."
- 19. "Most of the [flat earth] conference goers say they converted three years ago, getting hooked by YouTube," according to media coverage¹⁹ of their conference. Given that conference was held in late 2018, "three years ago" would be around late 2015, i.e. just as YouTube was ramping up its viewing hours OKR.
- 20. While the stated goal of YouTube was to increase the amount of time viewers spent on YouTube, following industry norms, many other video hosting sites will simply replicate whatever works for YouTube in order to compete - without necessarily being aware of the consequences.²⁰ Due to its provision of video for free at the point of use, YouTube is effectively the monopoly that sets public understanding of how a video site works – covering, as it does, around 20 percent of the world's total television watch time.²¹
- 21. While general concern that YouTube's recommendation engine has become gamed and polluted by 'extremism' is in its early stages, public and media interest in that model's replication across other video hosting services is likely to be of far greater general concern²² – especially given the 'specialist'²³ nature of most video sites that rank outside

¹⁶ Cognitive, Emotive and Ethical Aspects of Decision Making in Humans and in Artificial Intelligence, Vol. 2, ed. I. Smit et al., Int. Institute of Advanced Studies in Systems Research and Cybernetics, 2003, pp. 12-17 https://nickbostrom.com/ethics/ai.html

¹⁷ Someone on the internet keeps a running spreadsheet of just how bad humans are at designing incentives in the very constrained world of computer games:

https://docs.google.com/spreadsheets/u/1/d/e/2PACX-1vRPiprOaC3HsCf5Tuum8bRfzYUiKLRgJmbOoC-32JorNdfyTiRRsR7Ea5eWtvsWzuxo8bjOxCG84dAg/pubhtml

¹⁸ In context: https://twitter.com/qchaslot/status/1064527592428986368?lang=en

¹⁹ https://twitter.com/thedailybeast/status/1064254552168415232

²⁰ 'Microsoft refuses to answer key questions about child porn in Bing search results', Gizmodo, January 2019: https://gizmodo.com/microsoft-refuses-to-answer-key-questions-about-child-p-1831655413

²¹ See the quotes in paragraph 10 of this submission.

²² 'I analysed the searches people used to read my blog and it's not good news for women', Jessica Eaton, December 2018: https://victimfocus.wordpress.com/2018/12/27/i-analysed-the-searches

²³ YouTube is number 2, Netflix is at 23, the video sites below this are almost exclusively porn sites.

the top 20 in the Alexa Top 500²⁴. Even on YouTube's 'kids' app, not all popular videos are benign.²⁵ Had those videos been of (copyrighted) Sam Smith songs, they would have been blocked in minutes; that they weren't is one consequence of the prioritisation choices made by the companies involved.

22. The underlying problem in all this is the exclusion of human beings *with agency* from oversight of the process. The desire to remove as much agency as possible from corporate proxies applies as equally to Amazon²⁶ as it does to YouTube – and as much to the processes of the Home Office and DWP as it does to the processes of the American technology giants.

Impact on public services via 'digital government'

- 23. The management structures of the civil service replicate that of companies using OKRs. They give a well-meaning civil servant the obligation to focus on one particular part of an issue and do not allow for the wisdom of choosing a wider perspective in particular, under dysfunctional governments with narrow agendas and a lack of objective political awareness.
- 24. For example, prior to passage of the Digital Economy Act, a 'sham marriages objective' was discussed where the then-Director of Data at the Cabinet Office raised with NHS officials whether the Home Office could access all women's medical records, looking for indicators of 'sexual dissatisfaction' to help further this Home Office policy the narrow objective of one politically-prioritised civil servant. Everyone else rightly thought this was nuts.
- 25. Until the consequences of requesting, receiving, and retaining data are aligned between data controller, data processor and data subject, the very real types of harm we outline in this evidence will continue to occur. Many of the most harmful algorithmic practices would simply not happen if the data subject were to know what they were; companies would never take the reputational hit of being asked the question. Instead, we allow companies affecting millions of people's lives to choose their own priorities without proper transparency or accountability. A freedom we do not give to the State, precisely because of its unique roles and responsibilities.
- 26. The public sector is bound by law, and overseen by democratic means. Services that deliver benefits to citizens have fewer opportunities to ignore 'blind spots', which does not mean they are immune from prioritisation failures²⁷ although it could be said the Home Office gives it a good try.

²⁴ https://www.alexa.com/topsites

https://www.nytimes.com/2017/11/04/business/media/youtube-kids-paw-patrol.html?_r=0

²⁶ 'Prime and Punishment: Dirty Dealing in the \$175b Amazon Marketplace', December 2018: https://www.theverge.com/2018/12/19/18140799/amazon-marketplace-scams-seller-court-appeal-reinstatement

²⁷ https://www.whatdotheyknow.com/request/455733/response/1106577/attach/3/FOI%2072%20Reply.pdf