

How to CoreX (go/how2coreX)

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Purpose of this doc: This document captures guiding principles for CoreX and should be a foundation for how we operate as an org. Alignment & awareness on these shared guiding principles will ensure that we are working towards the same goals and operating under the same beliefs for how things should be done to deliver viewer value. Understanding these principles will enable us to work efficiently and build more excellent products for our users.

Viewer focus

Our objective is to add value to viewers' lives in a responsible way. Focus on "Fans First," and all else will follow.

We are fortunate that people love the content on YouTube, and so if we can improve the quality of our service — reduce the latency and failures of the app, improve playback, help people find the content they want, and add features that people enjoy — then people tend to use YouTube more. In this sense, usage metrics like [[HYPERLINK "https://screenshot.googleplex.com/9DwYFDSckbByQF5"](https://screenshot.googleplex.com/9DwYFDSckbByQF5) \h] and [[HYPERLINK "https://screenshot.googleplex.com/wkWB33N8DD4BmGH"](https://screenshot.googleplex.com/wkWB33N8DD4BmGH) \h] are indicative of the quality of the service we provide.

What about creators? We love creators, because their content is what viewers come to YouTube for. We believe the best way to provide value to creators is to help them find an audience and to grow that audience, which means providing value to viewers. This is why we have our YouTube [[HYPERLINK "https://sites.google.com/corp/google.com/youtubersite/your-development-career/north-star-awards?pli=1"](https://sites.google.com/corp/google.com/youtubersite/your-development-career/north-star-awards?pli=1) \h] principle of Fans First, which is an homage to Google's #1 truth: "Focus on the user and all else will follow" ([[HYPERLINK "https://about.google/philosophy/"](https://about.google/philosophy/) \h]). Not all creators will find success in the future of YouTube, but if we focus on being Fans First and growing the audience, then more creators will continue to find more success overall.

We believe usage metrics like [[HYPERLINK](#)

"https://g3doc.corp.google.com/video/youtube/experiments/g3doc/metrics/valued_watchtime.md?cl=head" \h] and daily active users are good approximations of viewer value — people tend to use things they find valuable and to not use things that don't. But don't lose the forest for the trees: growing usage metrics is not our end goal; these metrics are just our best current approximation of true viewer value. Viewer value is the end goal.

Responsibility

As Vivek Murthy, Surgeon General of the United States, has said, for anything we create, we have a responsibility to increase the benefits and to reduce the risks. We believe this deeply at YouTube, and therefore invest a lot to ensure we are reducing the risks from YouTube, both to individuals and to society. This responsibility to reduce risks motivates many of our efforts, including

- Four Rs: Remove, Reduce, Raise, Reward
- Racial justice, Equity, and Product Inclusion
- ML Fairness
- Health, News, Elections, and more
- Kids, including Supervised Experiences (SupeX)

Although we are focused on increasing value to viewers, we must also treat creators fairly. It's the right thing to do, and anyway, YouTube is nothing without creators. Sometimes, changes we make will have profound negative consequences for particular creators, but as we said above, we have to continue making these changes to drive more value for our viewers. When we have to make these changes that negatively impact creators, we must ensure that our systems are fair to individuals and groups of creators¹, and that we treat various types of content and formats appropriately.

Measuring value: Quantitatively & Qualitatively

We are a metrics-driven organization. To deliver viewer value, we must first be able to measure what viewer value means.

¹ One of the primary aims of our Racial justice, Equity, and Product inclusion (REP) ([[HYPERLINK "http://go/yt-rep"](http://go/yt-rep) \h]) program is to ensure that we treat all creators fairly, and we made a significant investment to lead the industry in ML Fairness towards this end

We use metrics to help us understand if a change we make to YouTube improves viewer value. We do not by fiat decide what is valuable or not valuable to users; we don't take our own point of view regarding how or what viewers watch.² Instead, YouTube has been successful because we focus on the viewer and let the viewers decide what to watch and which features to use — and we use metrics to help us objectively evaluate whether a change is valuable to viewers or not.

The metrics we use will evolve over time, as we better understand how to approximate and model viewer value. In 2011, views were the best measure we had for value to viewers (it was also the common currency on the internet at the time). In 2012, we switched to using watchtime rather than views because watchtime is much better than views at estimating value to viewers, especially since it eliminates the things one clicks but doesn't really watch. In 2016, we further refined to [[HYPERLINK "https://g3doc.corp.google.com/video/youtube/experiments/g3doc/metrics/valued_watchtime.md?cl=head" \h](https://g3doc.corp.google.com/video/youtube/experiments/g3doc/metrics/valued_watchtime.md?cl=head)], which estimates not only whether something was watched but also if the viewer would say later it was worth their time. As of 2022, we're now using [[HYPERLINK "https://g3doc.corp.google.com/video/youtube/experiments/g3doc/metrics/capped_valued_watchtime.md?cl=head" \h](https://g3doc.corp.google.com/video/youtube/experiments/g3doc/metrics/capped_valued_watchtime.md?cl=head)] in order to reduce bias towards people who watch the most (i.e., existing core users) and ensure we broaden our appeal to casual users. We expect to continue to evolve our metrics over time.

In addition to the top level engagement metrics (daily active users and capped WT), we also have supplemental metrics that delve into particular nuances for each of the main surfaces:

- Home - [[HYPERLINK "https://screenshot.googleplex.com/63qSfAkkzhM5AK5" \h](https://screenshot.googleplex.com/63qSfAkkzhM5AK5)], [[HYPERLINK "https://g3doc.corp.google.com/video/youtube/experiments/g3doc/metrics/responsibility.md?cl=head" \h](https://g3doc.corp.google.com/video/youtube/experiments/g3doc/metrics/responsibility.md?cl=head)]
- Watch - [[HYPERLINK "https://screenshot.googleplex.com/9DwYFDSckbByQF5" \h](https://screenshot.googleplex.com/9DwYFDSckbByQF5)], [[HYPERLINK "https://g3doc.corp.google.com/video/youtube/experiments/g3doc/metrics/responsibility.md?cl=head" \h](https://g3doc.corp.google.com/video/youtube/experiments/g3doc/metrics/responsibility.md?cl=head)]
- Search - [[HYPERLINK "https://screenshot.googleplex.com/Bf3LmkS4hGjFgnF" \h](https://screenshot.googleplex.com/Bf3LmkS4hGjFgnF)], [[HYPERLINK "https://screenshot.googleplex.com/ATK4n9Lx2BqZvMi" \h](https://screenshot.googleplex.com/ATK4n9Lx2BqZvMi)]
- Shorts - [[HYPERLINK "https://screenshot.googleplex.com/6nXVfrbCpJReCkP" \h](https://screenshot.googleplex.com/6nXVfrbCpJReCkP)]

Not everything that's viewer valuable can be measured by engagement metrics. Some features or projects can make YT more appealing, more delightful, or just more useful, even if we don't observe increased engagement — e.g. simplified options in Settings, better way to navigate your Watch History, or modernizing our UI design. For these types of projects, we can evaluate value through a [[HYPERLINK "http://go/whatisvalue" \h](http://go/whatisvalue)].

² The place we step-in with our own judgment is when we believe our responsibility to society and to other viewers demands that we do so

If a change is proposed to one of these surfaces and the primary metrics used by that surface are going in the wrong directions, then there is a presumption that the change is negative and does not improve YouTube or that surface. If we believe that is mistaken — that the change does improve YouTube and the surface — then some additional justification is required.

This is not impossible, but it will require explanation. For instance, imagine a change that ranks news videos at the top of Home, and in experiment causes Capped Watchtime and [[HYPERLINK "https://screenshot.googleplex.com/63qSfAkkzhM5AK5" \h](https://screenshot.googleplex.com/63qSfAkkzhM5AK5)] to decrease. One might suggest that in spite of declines in the primary metrics, the change is good because people can quickly glance at the top stories of the day, get value fast, and then go on more satisfied having caught-up with the latest news. This may be correct, but then we should try to find some way to measure the value these folks are getting, and ensure this experience is triggering only for the people looking for this kind of value.

Ancillary metrics

Although we have mentioned only a few metrics, you will notice we have many, many more in our launch report documents, and still more in RASTA. We use this broader range of metrics to help assess the overall impact of any change we make – e.g., they may indicate a bug somewhere. Some metrics represent what matters to other stakeholders, like advertisers or creators. We pay attention to these non-viewer metrics because sometimes they indicate an unintended effect on other stakeholders. Sometimes we can easily resolve these consequences ahead of launch; other times, we can at least prepare ourselves and our partner teams to better handle reactions from our advertisers or creators.

The movement of these ancillary metrics does not, on its own, determine whether a change is improving or degrading YouTube for viewers. Almost every change which has improved YouTube has degraded some metric, and we would make no progress if we let this stand in our way of launching these changes.

Here are some examples:

- A [[HYPERLINK "https://docs.google.com/document/d/1fKmF3WYAcI_3s-yMTXLfN7WyB1zsofWEIzxAm-42k_8/edit?resourcekey=0-3tmBHARIsKLLAjCSOvu3YA" \h](https://docs.google.com/document/d/1fKmF3WYAcI_3s-yMTXLfN7WyB1zsofWEIzxAm-42k_8/edit?resourcekey=0-3tmBHARIsKLLAjCSOvu3YA)] caused many metrics to decrease, including Creators Getting Started. The change improved the accuracy of predictions (eg. CTR, watchtime, etc) and led to significant increases in [[HYPERLINK "https://g3doc.corp.google.com/video/youtube/experiments/g3doc/metrics/valued_watchtime.md?cl=head" \h](https://g3doc.corp.google.com/video/youtube/experiments/g3doc/metrics/valued_watchtime.md?cl=head)], but reduced [[HYPERLINK](#)

"https://g3doc.corp.google.com/video/youtube/experiments/g3doc/metrics/creator_segment_discovery.md?cl=head" \h] because videos from CGS had been systematically over-predicted. This was a clear improvement to ranking in Watch Next and so we launched it, even though it meant we were unlikely to achieve our annual Google-level OKR for Creators Getting Started ([[HYPERLINK "http://goto.google.com/20220okrs-youtube"](http://goto.google.com/20220okrs-youtube) \h]). (i.e., traded off internal success metric for user value)

- We developed and launched the [[HYPERLINK "http://go/WatchFeed"](http://go/WatchFeed) \h], removing the comments at the “bottom” of Watch Next and replacing them with the infinite Watch Feed. This led to a decrease in comments readership, but was a better viewer experience and enabled us to add a wider variety of items into both the watch feed and comments. (i.e., traded off comments readership metrics for better viewer experience)
- On March 15, 2012, we switched from ranking Watch Next primarily by expected views to rank by expected watchtime³, which led to a 20% decrease in overall views on YouTube and an immediate drop of at least 15% in revenue! But we knew watchtime approximated viewer value much more closely and we believed that, over the long-term, increasing viewer value would pay off in ad revenue. We were right. (i.e., short term revenue for long term viewer value)

Teamwork

We are a consensus-driven organization and we are trying to make decisions which stick and which can outlast the tenure of any one of us. Teamwork - [[HYPERLINK \l "h0zevcqt01o5" \h](#)], [[HYPERLINK \l "cg93x2qcv48c" \h](#)], & [[HYPERLINK \l "1q3jqdqltwmo" \h](#)] - will enable us to go much faster for a longer period of time in the chosen direction.

Seek alignment

We believe in rich, open debates of different perspectives and opinions. It is through such an approach that we believe we'll make the best, highest quality decisions. Each of you are experts in your own domains and projects, your VPs and directors do not know the intimate details you do. We welcome discovery as a group through discussions and debates, drawing on the opinions and inputs of many experts and voices.

This is why we believe in the process of seeking alignment and consensus. Instead of a leader or a team making unilateral decisions in this complex product area that has many moving parts and many teams involved, we want members of this team to seek out the opinions and expertise of the working group and partner teams.

³ [[HYPERLINK "https://www.businessinsider.com/youtube-watch-time-vs-views-2015-7"](https://www.businessinsider.com/youtube-watch-time-vs-views-2015-7) \h] of the change from views to watchtime

However, not all decisions will have universal alignment or consensus. Sometimes, options are equally attractive (or equally unattractive); other times, two partnering teams will have irreconcilable points of view. We believe strongly in escalations – raise the decision to the next level where the tie can be broken. [[HYPERLINK](https://docs.google.com/document/d/1Z2wT2ckrvUvQsbKjebzYh3pqj98fzGnSsi_n2S-n8Fg/edit) "https://docs.google.com/document/d/1Z2wT2ckrvUvQsbKjebzYh3pqj98fzGnSsi_n2S-n8Fg/edit" \h], when done well, are not seen as a failure; we see it as a healthy part of the decision making process.

Once we reach a decision, we expect commitment. An essential part of this culture of alignment and consensus is that we need to “disagree and commit” even if our personally-favored option was not chosen. Committing to the decision is critical to our ability to make progress: we cannot have teams re-litigating decisions (without new circumstances, data, or learnings) or withholding support from a decided course of action.

The people we trust to make launch decisions (i.e., those who can “flip the PA bit”) also want alignment. This alignment is either explicit via (additional) review, or implicit via pre-alignment on the goals and the guardrails. We should all aim to make our processes & decision making efficient by building alignment with the right stakeholders, escalating readily as needed, and committing to decisions made.

Notify, don't block

CoreX is a viewer-first organization, and the most important goals we pursue are viewer ones. When a change is good for viewers, we will choose to launch it.

That said, when a viewer-favorable change has an unfortunate, negative effect on the other stakeholders (e.g., advertisers, creators, other partner teams), we have the responsibility to be a good partner and inform them of the impact. This is particularly important for people who meet with creators, including our Strategic Partner Managers (SPM), because it's irresponsible of us to know that a particular creator or group of creators will see decreased viewership due to a change but not alert the person who will have to answer questions from that creator. Remember that these people are on our team, and we want to help them be as successful as possible, and to understand what we are doing, the impact it will have, and why we are doing it. Don't be afraid to tell people that their metric will go down and we are not going to block the launch because it's good for viewers . . . and if those folks don't agree, let them escalate the decision. These instances serve to reinforce our position as a viewer-focused organization, and they have to happen once in a while to test and reinforce that position again. Have faith: our viewer-focus hasn't changed in 11 years, and if anything, it's more widely accepted as a key to our success.

We all have a role to play

When working on teams, it's helpful to clarify roles & responsibilities, especially when it comes to understanding who you should notify vs. get approval from. When engaging with multiple stakeholders, work with your team and manager to align on roles from the start and if necessary, escalate discrepancies. (Tip: We recommend teams use a [[HYPERLINK "https://www.forbes.com/advisor/business/raci-chart/"](https://www.forbes.com/advisor/business/raci-chart/)] framework to clarify roles)

Avoid a hierarchy of reviews

Let's try to avoid a hierarchical set of reviews by choosing to start at the right level. We don't want to create a culture in which something which must be reviewed and decided at the highest levels of YouTube must climb a hierarchy of individual reviews. Doing so will discourage our teams from working on the hardest things, those which may require a significant change in our approach or thinking, and therefore necessarily require a decision at a very high level of YouTube.

How can we avoid a hierarchy of reviews? The most effective way is to choose the highest level needed and prepare for that review. Other people involved may want to review and inform the content in advance, to align on the proposals, etc. They can do this via email or, if necessary, one-off discussions.

Work with your manager, or director if necessary, to determine the right level for decision making.

What decisions should be elevated to Cristos / Nate / Woojin?

Some decisions require input from Cristos, Nate, & Woojin. We have drafted high level criteria (see [[HYPERLINK \l "7ckg9073ch4t" \h \]](#)) to provide guidance on the types of decisions that should be elevated. For decisions that do not require Cristos, Nate, & Woojin's input, teams should feel empowered to make the decision at the Director level.

Truth Seeking: We are all shareholders

Our goal is to increase value to viewers by seeking truth and making good decisions for YouTube broadly (vs. at the team level), and the truth we seek is what will make YouTube better, particularly for viewers and for society. Winning arguments at team levels (i.e., local optimization) is a non-goal. One might imagine that when it comes to making difficult or controversial decisions, YouTube should function like a court of law in which all parties argue their points of view as well as they can and then a judge makes a final decision: wrong! We don't want people to focus on representing their narrow team or project incentives; we want people to try to do

what they think is best for viewers, even when that means sacrificing their OKR. We want people to ask themselves “What would I do if I had to make the final decision, and why would I do that?”

We will sometimes legitimately disagree with one another about what is best to do for viewers, and in that case, debate is fine. We don't want people to debate just because they think it is their role to play despite disagreeing with the position they are taking. We need to be wary of the bad ideas that have persuasive proponents, and be on the lookout for the good ideas that have poor arguments. Similarly, be mindful to avoid the bias of “pretty pictures” that cause a project or feature or proposal to have a halo effect.

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Got feedback? Visit [[HYPERLINK "http://goto.google.com/how2corex-feedback" \h](http://goto.google.com/how2corex-feedback)]

Appendix: Decisions for Cristos / Nate / Woojin

The goal is that teams only attend 1 launch review within CoreX. You may be required to attend other partner launch reviews.

Launch Review Best Practices:

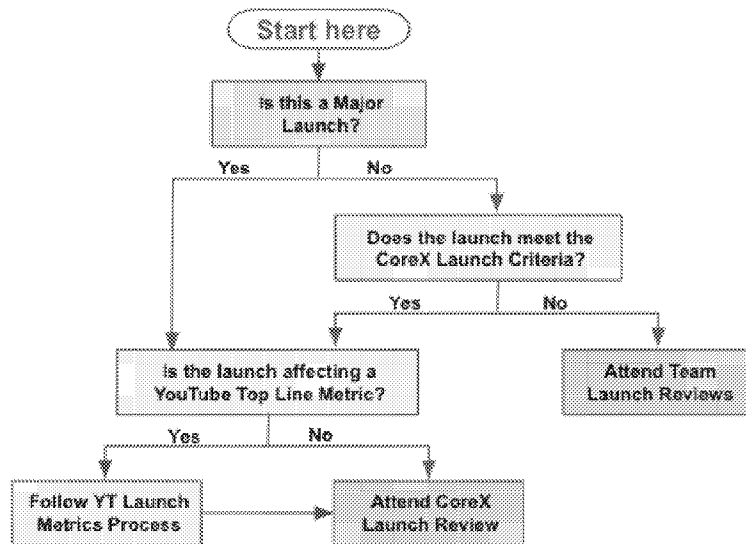
- Only attend CoreX review if your launch meets the criteria below, otherwise, attend a more specific org level launch review
- The objective for Launch reviews is for getting approvals to drive progress on technical project implementation (other forums such as CoreX Leads are available for updates)
- Teams should aim to attend only 1 launch review for any launch within CoreX (We don't want to create a culture in which something that must be reviewed and decided at the highest levels of YouTube must climb a hierarchy of individual reviews)
- You may need to attend additional reviews for approvals from other parts of YouTube such as EMCO, Commerce, etc.

For detailed steps for navigating the launch review process, visit [[HYPERLINK "http://goto.google.com/corexlaunchreview-process" \h](http://goto.google.com/corexlaunchreview-process)]. Regardless of what process you decide to follow, it is your responsibility (launch owner) to determine whether your launch is of high quality (i.e. no bugs) and that the objective value benefits YouTube as a whole.

Org Level	Criteria For Decision (one or more)	Decision Maker
CoreX	- Major Launches to [HYPERLINK "https://sites.google.com/corp/google.com/mlr" \h] that includes GTM Comms + potential for PR sensitivity - Any experiment with UI impact that is > 5% traffic (exceptions below) - Significant negative impact to [HYPERLINK "https://g3doc.corp.google.com/video/youtube/analytics/data_science/docs/launch_metrics/g3doc/launch_metrics.md?cl=head" \h] - Launches marked Yellow Track - Launches with changes to Youth Policy - Launches that negatively impact multiple surfaces - Known partner team trade-offs, potential for OMGs, Code state change, or bugs	Cristos / Nate / Woojin
Search, Youth, Learning, Knowledge, Main App, Resp Growth	- Low risk (e.g., [HYPERLINK "https://docs.google.com/document/d/1xCyc8GNdJ7yvbygDo3Tqmpbela706h-c21KKMt8j9aY/edit" \l "heading=h.5rnsh2f18pg4" \h], [HYPERLINK "https://sites.google.com/corp/google.com/mainapp-team/for-main-app-teams/launch-review?authuser=0" \h], [HYPERLINK "https://docs.google.com/document/d/1zqNdxROit8ZEZNm_eQyJVDN1UDFvejSwxiNLOojFeyw/edit?usp=gmail" \h]) - Parity launches on new surface / platform - Negative impact to one's own surface area metrics - Any experiments with UI impact that is < 5% traffic - New metric / principle introduction for specific surface area - Statistically significant partner impact with potential for escalation to PA Leads - Neutral to positive impact on Top Line metrics with no known partner trade-offs	Search: Pei, Pablo, Judy Youth: James, Nitin, Lindsay Learning: Pei, Jonathan, Robert Knowledge: Nicolas, Vincent, Judy Main App: Emmanuel, Brian, Taeho Resp Growth: - Tier 1: Emily, Romer, Judy - Tier 2: Bev, Geoff, Su-Lin, Todd

When is approval from partner teams required

CoreX teams should reach out to partner teams if their launch results in a negative impact on a partner team's surface. In the event the teams are unable to align on tradeoffs and get leadership buy-in before proceeding to review for approval, the following options below are available to drive teams to resolution:



- [HYPERLINK "https://g3doc.corp.google.com/video/youtube/analytics/data_science/docs/launch_metrics/g3doc/process.md?cl=head" \h] Review the YouTube Launch Metrics process and evaluate if your launch is a risk for a negative impact on a surface you do not own
 - If launch is negatively impacting top line or surface area metrics, follow the listed process to notify Partner teams and collaborate on a path forward.
- [HYPERLINK "https://docs.google.com/document/d/1mf3YJx5_a2V9ltBBJnq0RduArR8nltYBAvgfKxnh64l/edit" \l "[bookmark=id.tosgj2o0grml](https://docs.google.com/document/d/1mf3YJx5_a2V9ltBBJnq0RduArR8nltYBAvgfKxnh64l/edit?bookmark=id.tosgj2o0grml)" \h] If your launch is neither impacting Top Line Metrics nor a Major Launch, but you still find yourself stuck due to competing priorities, difficult partner engagement, contested decision or a potential rejection from another PA Lead (expectation for progress on discussion should be 72 hours) - escalate to CoreX Launch Review for a decision
- [HYPERLINK "<https://sites.google.com/corp/google.com/mlr>" \h] If you are going to MLR, follow MLR guidelines to determine partner approvals required (e.g., GTM, PR)

