

An aerial photograph of a city, likely New York City, showing a dense grid of buildings and streets. The entire image is overlaid with a semi-transparent red color. Three horizontal yellow bars are positioned across the left side of the image, containing the title text in teal. The text is arranged in three lines: 'STATE OF' on the top bar, 'CORPORATE' on the middle bar, and 'GIVING' on the bottom bar. To the right of the top bar, there is a block of white text. At the bottom left, there is a block of white text.

STATE OF

*Written by Kendall Ruth,
Director, Content & Storytelling
at Unbridled*

CORPORATE

GIVING

*A yearly look at the realities of Corporate
Giving in America – tracking trends over
time and providing insight into generosity
and society at scale.*

Corporate charitable giving is not a product of the new millennium, but an oft-debated subject spanning more than 100 years.

Franklin D. Roosevelt, the President responsible for government social programs that came in the form of the New Deal and was integral in moving America out the Great Depression, was against corporate giving and sought regulatory legislation to block it. Free-Market Iconoclast Milton Friedman went so far as to call the notion of charitable giving by corporations as bordering on fraud. Yet, the zeitgeist applauds corporate givebacks. When companies are known for their giveback, they are given a credibility they couldn't acquire by merely being profitable. But, what does that look like in 2017 and what are the drivers behind the data?

If you follow Friedman's logic, for a corporation "there is one and only one social responsibility of business—to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game." Thus, corporate social responsibility is limited to being profitable and anything outside that scope is considered "a 'fundamentally subversive doctrine' in a free society." In essence, a corporation's job is to make more money. But, what if there's more to it?

The last 17 years has seen both extremes of economic prosperity and decimation throughout the United States, as well as on a Global Scale. The impact shifted some fundamental assumptions for many economists when considering the value of corporate social responsibility. John Taft, CEO of RBC Wealth Management, who wrote *Stewardship: Lessons Learned from the Lost Culture of Wall Street* after an "epiphany" in the midst of the financial crisis: "It hit a moment where I just thought, 'I've got to stop worrying about myself. I've got to think first about other people.'"

This coincides with what chief executive of the U.S. branch of the Charities Aid Foundation, Ted Hart, said in response to data showing the United States ranking 13th in the world for charitable giving: "What makes a society charitable is how we care for each other, not just the measure of how much money we give away." Taking a more Friedmanesque stance to this kind of thinking, Justin Fox, writing for Harvard Business Review says, "Does it really work as an all-purpose guide to business decision-making? No. Business-as-purely-altruistic endeavor won't get you far."¹

So, how have companies fared when it comes to charitable giving? Is Justin Fox right? Was Milton Friedman's assessment missing a bigger picture? Are there benefits to corporations and society that aren't mutually exclusive, but mutually productive and beneficial? Recent data provides insight that negates both Fox and Friedman, while bolstering the mutual benefits argument. But, in light of Emergent's 20:20:60 Radical Generosity model, there is plenty of room for increasing the amount a corporation gives.

1. <https://hbr.org/2012/04/you-might-disagree-with-milton>

How much did the USA give as a whole? And how much did corporations give?

In 2001: Individuals gave by far the largest share of charitable contributions to nonprofit organizations. In 2001 individuals accounted for \$163.5 billion or 76% of total giving to charities. An additional \$16.3 billion or 7.7% was donated through charitable bequests. Taken together, approximately 84% of the \$215.4 billion total contributed to nonprofit organizations across the nation comes from individuals.²

Corporate charitable contributions in 2001 were estimated to be \$9.05 billion in 2001. This represents 1.3 percent of corporate pretax profits.

In 2015: Total giving to charitable organizations was \$373.25 billion in 2015 (2.1% of GDP). This is the sixth straight year that giving increased and the second straight record-setting year, following 2014's total of \$358.38 billion. As with 2001, the majority of that giving came from individuals. Specifically, individuals gave \$264.58 billion, accounting for 71% of all giving and representing a 3.8% increase over 2014 (3.7% when adjusted for inflation). Corporate charitable contributions in 2015 were \$18.45 billion for an increase of 3.9% (or 3.8% when adjusted for inflation).³

Here is the breakdown of growth and general movement of giving by corporations and some of the factors that influence its increase or decrease:

- Giving by corporations is predicted to increase by 4.6% in 2016 and by 4.7% in 2017.⁴
- The 2015 projections for giving by corporations for the years 2016 and 2017 were higher than the 10-year and 25-year historical averages for giving of this type, but lower than the 40-year average growth rate.
- Giving by year:
 - 10 year average – 2.5%
 - 25 year average – 2.8%
 - 40 year average – 5.9%
- Corporate Giving Predicted corporate giving will be lower if GDP grows less than 3% for each year 2016 and 2017, corporate savings grows less than 8% in 2016 and 6% in 2017, the S&P 500 grows less than 7% in 2016 and 6% in 2017, and consumer sentiment declines more than 1% in 2016 or declines at all in 2017. Corporate giving may also decline if corporate tax rates decline.⁴

Corporations, especially publicly traded entities, adjust their giving based on GDP, tax rates, measurable effectiveness of giving on their revenue, and a slew of other factors. What would happen is corporations set a fixed percentage that was not influenced by markets or marketing? We have to see how this would impact the giving landscape, Emergent's 20/20/60 model is a good place to start.

2. https://www.bc.edu/content/dam/files/research_sites/cwp/pdf/Charitable.pdf

3. <https://www.charitynavigator.org/index.cfm/bay/content.view/cpid/42>

4. http://philanthropyoutlook.com/wpcontent/uploads/2016/01/Philanthropy_Outlook_2016_2017.pdf

What percentage of pre-tax profits do corporations give to charity?

In 2001: 1.3% average⁵

In 2013: 1.6% average⁶

So, in 12 years, the amount of pre-tax giving by companies only increased an estimated three tenths of a percent.

One of the more fascinating pieces of data from the Giving in Numbers report is the correlation between giving and an increase in financial performance:

"...companies most committed to contributing to society also performed better financially. Companies that increased total giving between 2013 and 2015 by 10% or more had higher median growth rates between 2013 and 2015 in terms of revenue (8.3%) and pre-tax profit (2.6%)."

Whether it is monetarily or in volunteer hours or some combination of both, corporate charitable giving benefits everyone involved. Contrary to Friedman's supposition that "businessmen who talk this way are unwitting puppets of the intellectual forces that have been undermining the basis of a free society", it is, indeed, these businesses that are transforming the societal and corporate landscape for the better.

How does giving impact a company's health and engagement?

- It's well known that employees want to work for companies that care. In fact, Cone Research found that 79% of people prefer to work for a socially responsible company and 79% of employees think it's important that their companies match their charitable giving.⁷
- According to Project ROI, a well-designed corporate social responsibility program can increase employee engagement up to 7.5%, increase employee productivity by 13%, reduce employee turnover by 50%, and increase revenue by as much as 20%.
- When charitable choice is given, employee participation increases. (Source: America's Charities 2013 Snapshot)⁸
- More than 49% of nonprofit respondents identified workplace giving as a growth strategy for their organization. They see workplace giving and employee engagement programs as opportunities to promote their mission, programs and services, and to identify and recruit new volunteers.
- 86% believe that employees expect them to provide opportunities to engage in the community and 87% believe their employees expect them to support causes and issues that matter to those employees.⁹

5. <http://pgdc.com/pgdc/charitable-giving-reaches-212-billion-2001>

6. <https://doublethedonation.com/blog/2014/08/top-10-companies-that-donated-to-charity/>

7. <http://conecomm.com/research>

8. <https://www.charities.org/snapshot2013>

9. <https://www.charities.org/facts-statistics-workplace-giving-matching-gifts-and-volunteer-programs>

So, what's happening with Corporate Giving?

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A photograph of a theater stage. In the foreground, there is a wooden floor with a prominent grain pattern. Behind the floor, dark brown curtains hang down. In the background, through the curtains, there are several out-of-focus, warm-toned lights, creating a bokeh effect. A semi-transparent dark horizontal band is overlaid across the middle of the image, containing white text.

Theater Db Content Strategy Exercise

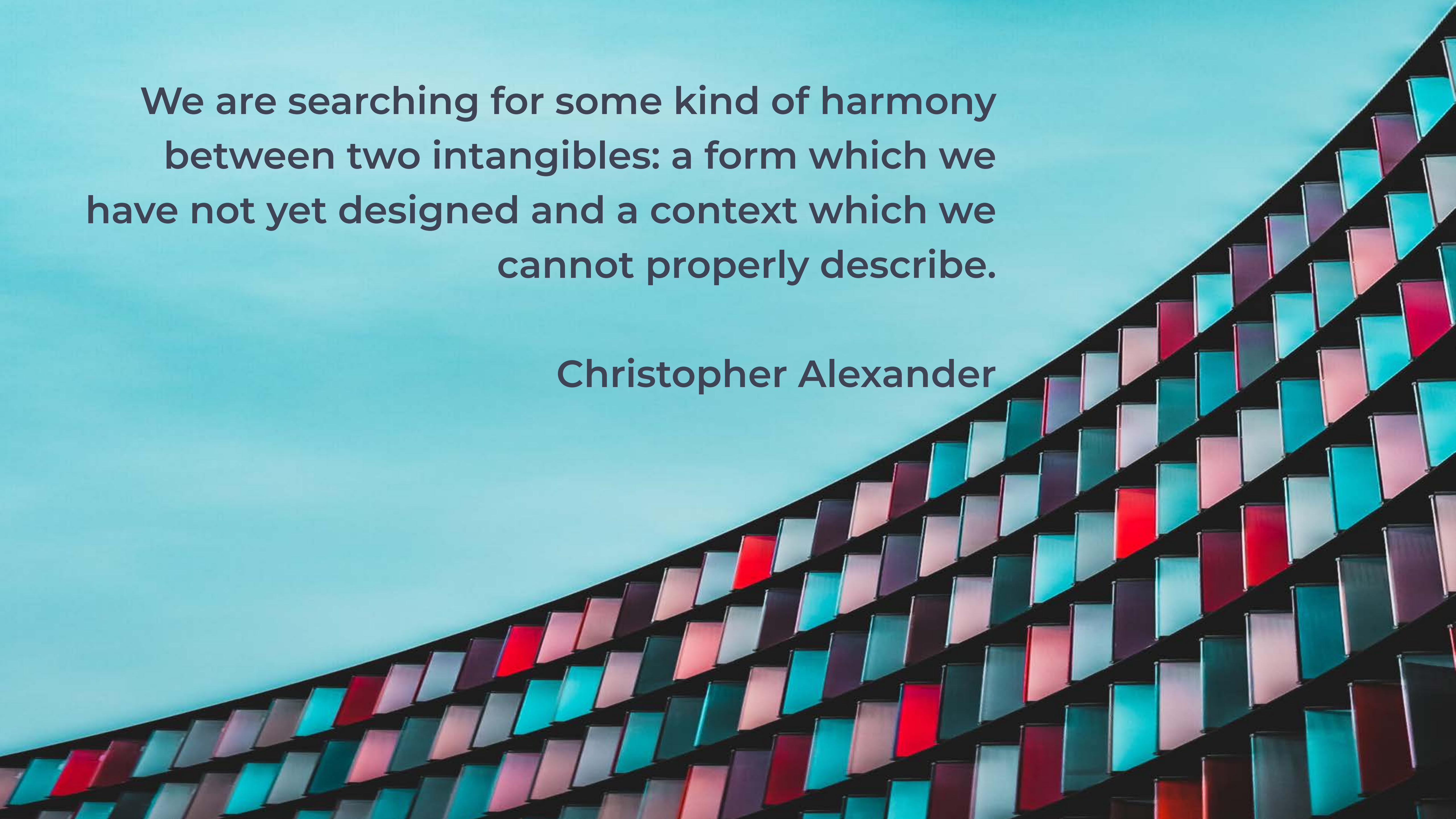
Objective

Create a fluid, intuitive Theater Database, akin to IMDb.com, focused around plays and musical theater. Organize and structure content in the experience in a way that allows users to access all of the relevant content about their favorite plays and musicals, discover works that are new to them, and generally get them excited about live theater, even if they are new to it.



We are searching for some kind of harmony
between two intangibles: a form which we
have not yet designed and a context which we
cannot properly describe.

Christopher Alexander



Strategic Process Outline

First

BRAINSTORM

✓ Ideas

Free of influence of existing platforms.

- Asking "What if?"
- Unrestricted by the medium in order to potentially recreate the medium with a new experience.
- Include Design, UX, Developer, Client, Content.
- Meet for 2 hours. Before meeting each person must come in the room with 1-2 ideas on how it could look and feel, what they would like to see.

Second

RESEARCH

✓ What Exists?

Research how this a theater database has already been done, taking note of what works and doesn't work.

✓ How's it Feel?

- Relevant examples
- Color Palette
- Typography
- Logo Toolkit

✓ Data

- Relevant Search Data
- Keywords?
- Traffic

Third

INTERVIEW

✓ Questions

Develop list of relevant Qs that are both curious and user experience relevant. Adjust as needed for audience.

✓ Who

- Patrons
- New Fans
- Producers
- Actors
- Writers

Fourth

MOCKUPS

✓ Collaborate

Build design and flow based off steps 1-3. Adjust as needed from Big Idea to what works.

✓ Asks

- Does this work?
- What's missing?
- Is it simple?
- How's the flow?
- What's the story?
- Can I choose my adventure?

Fifth

BUILD

✓ Structure

- Hosting
- Make sure structure is cooperative.

✓ Connect

Weekly communication.

- Front-End
- Designers
- Client

✓ Break

Host a bug and break party to make sure it works properly. Include client and a few non-involved users to offer a third perspective.

Sixth

LAUNCH

✓ Governance

Free Initially static, but needs to be flexible based on real-time feedback.

- 6 & 12 month reviews.

✓ International

Launch global experience 6 months after initial launch.

First

BRAINSTORM

✓ Ideas

Free of influence of existing platforms.

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- Include Design, UX, Developer, Client, Content.
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If too few opportunities for curiosity are available, if too many obstacles are placed in the way of risk and exploration, the motivation to engage in creative behavior is easily extinguished.

- Mihaly Csikszentmihalyi

First

Netflix Experience

What if Content Experience is more like Netflix and less like IMDB?

You saw a local production of *True West*.

You want to find out more about the playwright and other productions of the play, as well as other plays they have written.

- *True West* has a profile page.
- Playwright is listed as Sam Shepard, with hyperlink to his profile page.
- Videos of scenes from different productions of the play, ranked by most likely to be popular.
- Other Shepard plays with links to each.
- Unique Productions of the play
- Cast is list of actors who have played the role(s) and what else they may have been in.
- Current or upcoming productions of the play regionally or nationally.
- Suggested shows. "If you like this, then check out..."



95%



7 friends



Sons of Anarchy

TV-MA




(2008-2012) 26 Episodes

Sons of Anarchy, aka SAMCRO, is a motorcycle gang that operates both illegal and legal businesses in the small town of Charming. They combine gun-running and a garage, plus involvement in porn film. Clay, the president, likes it old school and violent; while Jax, his stepson and the club's VP, has thoughts about changing the way things are, based on his dead father's journal. Their conflict has effects on both the club and their personal relationships.

Season 1

▶ 01	"Pilot"	<div style="width: 100%;"></div>	60 of 60m
▶ 02	"Seeds"	<div style="width: 100%;"></div>	60 of 60m
▶ 03	"Pilot"	<div style="width: 70%;"></div>	42 of 60m
▶ 04	"Fun Town"	<div style="width: 0%;"></div>	60m
▶ 05	"Patch Over"	<div style="width: 0%;"></div>	60m
▶ 06	"Giving Back"	<div style="width: 0%;"></div>	60m

Cast

-  **Charlie Hunnam**
Jackson 'Jax' Teller
-  **Katey Sagal**
Gemma Teller Morrow
-  **Mark Boone Junior**
Robert Munson
-  **Kim Coates**
Alex 'Tig' Trager
-  **Tommy Flanagan**
Filip 'Chibs' Telford
-  **Maggie Siff**
Tara Knowles
-  **Ron Perlman**
Clarence 'Clay' Morrow
-  **Theo Rossi**
Juan Carlos 'Juice' Ortiz
-  **Ryan Hurst**
Harris 'Opie' Winston

More o



Bikes &



People



Similar

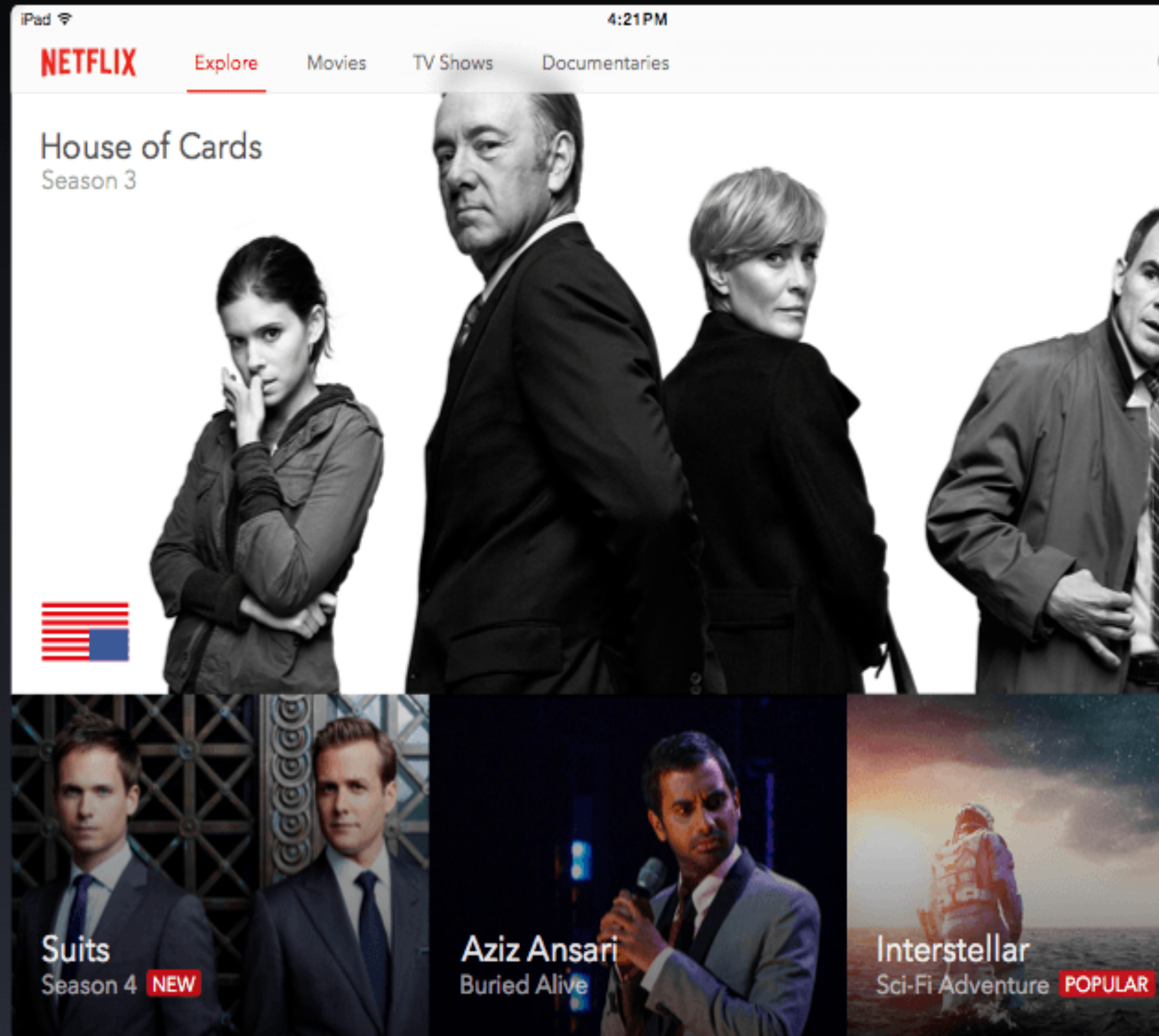


First

Considerations

Within the Netflix concept, some things to consider:

- **CONS:** Netflix tends to limit experience after algorithm adjust for behavior.
- **SOLUTION:** Limit search history, or simply do not have pigeon hole flow with too much AI.
- Subscription option, similar to IMDB?
- Advertising on the site?
- Integrate geolocation to curate data for where a user is currently accessing.
- User "reddit" discussion boards to limit the troll reviewing and foster fan community.
- Podcasting and/or Videocasting wherein a play, a writer, a director, an actor, or even stage production crew are interviewed. Similar to how Rich Roll does his with both audio and video production.



Second

RESEARCH

√ What Exists?

Research how this theater databases have already been done, taking note of what works and doesn't work.

√ How's it Feel?

- Relevant examples
- Color Palette
- Typography
- Flow
- Ease of use

√ Data

- Relevant Search Data
- Keywords?
- Traffic



The Others

Existing versions of the Theater Databas
Concept, for good or bad.

ibdb.com:

- Professional feel.
- Four top categories: Shows, People, Theaters, Awards.
- Design feels like facebook.
- Less visual, more linear.
- Limited connection of dots when you find person, making it hard to learn more and thus is less holistic..
- The Shows pages are built out with all the details of a production, staffing, actors, directors, hair and makeup.



Sam Shepard

Gender
Male

Born
Nov 05, 1943
Fort Sheridan,
Illinois, USA

Died
Jul 27, 2017
Kentucky, USA

Writer

External Links

Shop 

Also Known As Samuel Shepard Rogers [Birthname]

Comments Other plays include *Curse of the Starving Class*, *Simpatico*, *A Lie of the Mind*, and *Eyes for Consuela*.

CREDITS AWARDS

Broadway

True West (Jan 24, 2019 - Mar 17, 2019)

- Written by *Sam Shepard*

Play

Drama

Revival

Fool for Love (Oct 08, 2015 - Dec 13, 2015)

- Written by *Sam Shepard*

Play

Original

True West (Mar 02, 2000 - Jul 29, 2000)

- Written by *Sam Shepard*

Play

Drama

Original



Search

Show

[More search options](#)

On this date

Opened:

- [The Grand Tour](#)
- [Pacific Overtures](#)
- [The Father](#)
- [Stepping Out](#)

Closed:

- [Proposals](#)
- [Tintypes](#)
- [Wild Honey](#)
- [The Front Page](#)

[Full Listing](#)

Login

You are currently not logged in.

[Login](#)

On the Boards

[Broadway](#)
[Off-Broadway](#)
[National Tours](#)
[Regional](#)

About ITDb



The Internet Theatre Database

By the fans for the fans

Welcome to our new release. We are working to provide you with even more of what you want. Please have a look around. We appreciate any [feedback](#).

Voting and user comments are now available! Tell us what are your favorites and duds.

Welcome to the *unofficial* history of theatre as provided by you and your fellow theatre fans. A lot has changed at ITDb since our last update. After a lot of time and effort, we have decided to completely open up our database to anyone and everyone! We hope that means that all theatre will be represented and given its just emphasis.

We are actively looking for people willing to give a few hours a week to help maintain and update this site and its information. If you wish to take part either send e-mail to staff-support@theatredb.com or check out the [Staff pages](#) to see how we are organized.

Where We've Been?

You wouldn't believe if we told you. The past year has been a tough one for a variety of reasons. But, we're back at it and hope you're there to help. We've subtitled this site "by the fans for the fans" because we believe it's the living history of theatre that each of us keeps that makes it so special. We want you to share those experiences with us using our user comments section to document your experiences, joys, and horrors in watching or participating in professional theatre. Theatre history is more than facts, but a rich description of what it was like to be there for the final performance of "[Carrie](#)".

So, come join us and relive theatre.

Actors

Let the Internet Theatre Database be your reference. Send us your head shot and resume and we will make sure that it gets into our database (after verifying its accuracy, of course). Send requests to resume@theatredb.com.

Found an Error

We are aware that errors are in our database. We are trying to fix the typos and the omissions, but you are our best source of information. If you find an error,

Second

The Others

Existing versions of the Theater Databas Concept, for good or bad.

theatredb.com:

- May have been designed in the 90's
- Feels like a Wikipedia page
- Too much text, no imagery.
- Colors are trying to feel like a stage and curtain, but make for undesirable experience.
- search is suboptimal

THEATREDB.COM



POPULAR SHOWS LATEST NEWS

- West Side Story
- The Music Man
- Beetlejuice
- The Minutes
- Hadestown
- Dear Evan Hansen

SUMMER JAN 28 - FEB 9 BUELL THEATRE [CLICK FOR TICKETS](#)

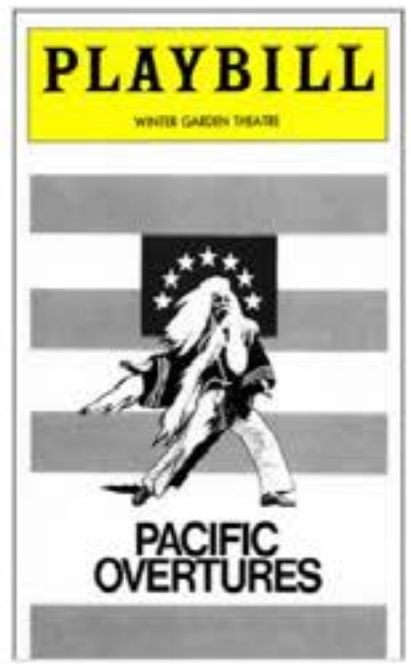
THE DONNA SUMMER MUSICAL

SEARCH THE LARGEST BROADWAY DATABASE ONLINE

ON THIS DATE - JANUARY 11



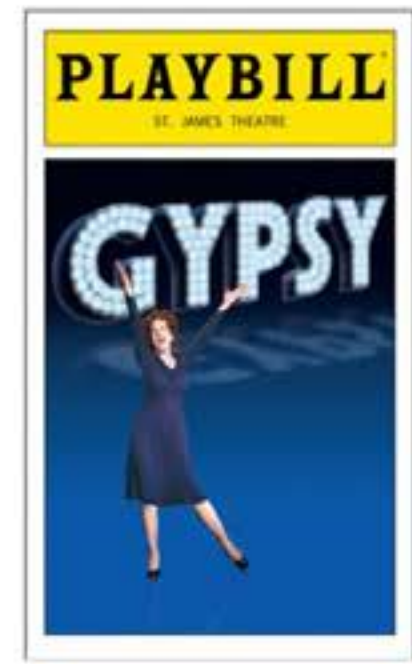
Tamika Lawrence
Birthday



Pacific Overtures
Opened in 1976



Max von Essen
Birthday



Gypsy
Closed in 2009



Eva Le Gallienne
Born in 1899

Bundle auto and renters.
You could save.

[GET A QUOTE](#)

GEICO

Second

The Others

Existing versions of the Theater Databases Concept, for good or bad.

playbill.com/archives:

- Closest in look & feel to IMDb.com
- Design off longstanding brand within the theater world.
- Includes targeted advertising
- Provides ability to buy tickets
- Feels outdated
- Shows are sub-categorized by Broadway, Region, London, Off-broadway, Hard-to-find, Touring.

Third

INTERVIEW

✓ Questions

Develop lists of relevant Qs that are both curious and user experience relevant. Adjust as needed for audience.

✓ Who

- Patrons
- New Fans
- Producers
- Actors
- Writers

Third

Questions

We need to ask a variety of questions based in curiosity while seeking to gain insight into how people experience theater, why and how they would use a database, and what current interfaces they use and enjoy...and why.

SAMPLE QUESTIONS:

✓ **Curiosity**

What is it about a play or musical theater that you enjoy?

Do you ever want to find out more about a play, who wrote it, directed it, acted in it or other productions?

✓ **Insight**

How do you usually go about learning more about the actors, plays, or writers you enjoy?

Do you search on your mobile device or a desktop computer?

If you've used IMBd for movies, what do you wish it did that it doesn't?

✓ **Features**

If you were searching for more information about a musical, would you like to know where it is playing next, and if it is near your home?

Would you pay for premium features if a subscription was an option? (early access to tickets, notifications about upcoming shows, new releases)

Third

Who



Patron



New Fan



Writer



Director



Actor



Unknown

Fourth

MOCKUPS

√ Collaborate

Build design and flow based off steps 1-3. Adjust as needed from Big Idea to what works.

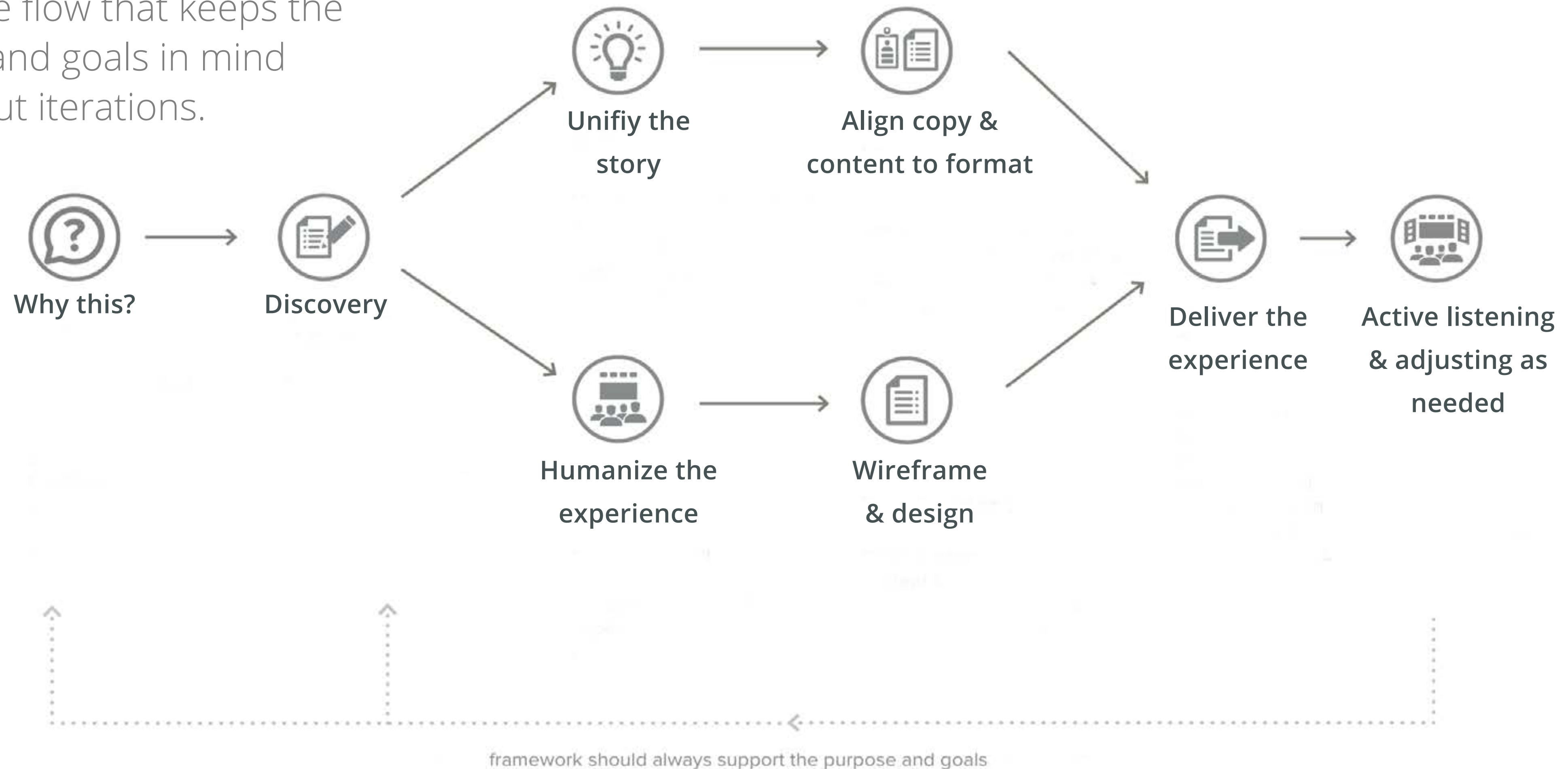
√ Asks

- Does this work?
- What's missing?
- Is it simple?
- How's the flow?
- What's the story?
- Can I choose my adventure?

Fourth

Collaborative Content Architecture

Design and infrastructure need generative flow that keeps the purpose and goals in mind throughout iterations.



BUILD

√ Structure

- Hosting
- Make sure structure is cooperative.

√ Connect

Weekly communication.

- Front-End
- Designers
- Client

√ Break

Host a bug and break party to make sure it works properly. Include client and a few non-involved users to offer a third perspective.

Sixth

LAUNCH

✓ Governance

Initially static, but needs to be flexible based on real-time feedback.

- 6 & 12 month reviews.

✓ International

Launch global experience 6 months after initial launch.

A photograph of a stage with heavy, dark brown curtains on either side. The floor is made of dark wood with a prominent grain. In the background, there are several out-of-focus, warm-toned lights, creating a bokeh effect. A semi-transparent dark grey rectangular box is overlaid on the left side of the image, containing the word "Questions?" in a white, bold, sans-serif font.

Questions?

The Balanced Mind: Does Cortisol Help Your Mental Health?

(Original URL:

<https://rebalancehealth.com/blogs/news/the-balanced-mind-does-cortisol-balance-help-your-mental-health>)

INSIDE THIS ARTICLE:

1. It's Not All In Your Head, So To Speak
2. Stressors Aren't Always "Out There"
3. Cortisol Was Never Meant To Be Star Of The Show
4. Cortisol May Be Keeping Your Brain From Therapy
5. Practices to Help Balance Your Cortisol and Your Mind
6. Shake Your Groove Thing
7. Breathe
8. Community

It's all in your head. Or at least that is what we are told when things seem off, we aren't living at our best, when we feel tired and have zero desire to turn it on with our partner. To some degree, it actually is all in our head because that is where the body gets all its communication signals. More to the point, it's where the "flight or fight" signal starts that gets our cortisol elevated to deal with the stress event right in front of us. But what happens when the stress events aren't as clear and we feel like we are always "on"? What happens if we want to live in more balance, less stress but we can't seem to "think" our way there?

As well intentioned as so many "positive thinking" literature or seminars may be, it's not just your thoughts that control your mood, your strength, or your levels of happiness. It's hormones.

It's Not All In Your Head, So To Speak

Our brain does a lot to keep us alive and is even where the mechanisms that trigger cortisol reside. But cortisol is a global hormone – global being inside the whole body, not

just the brain. Responding to a message from one part of your brain, cortisol actually revs up in your adrenal glands, located on top of your kidneys and, then, it kicks up your heartbeat to get blood going to wherever the brain thinks it's needed to deal with the perceived emergency.

If your cortisol, and, subsequently, the rest of your hormones aren't operating at their best, then your mind doesn't have a chance. Retired ultra-endurance athlete Christopher Bergland writes: "Cortisol is believed to create a domino effect that hard-wires pathways between the hippocampus and amygdala in a way that might create a vicious cycle by creating a brain that becomes predisposed to be in a constant state of fight-or-flight,"

Psychology Today. Change your mind all you want, but your hormones may determine how much change is possible.

Stressors Aren't Always "Out There"



We may not be running from a predator or having to fight for our lives in the ways our prehistoric ancestors did but our brain still responds in the same way. There are moments in our less caveman-like world that require the same mechanism – let's be honest, it's usually traffic related. But it doesn't have to be a physical threat to trigger your cortisol. We can set off our stress response system just by our thoughts - it could be something that stresses us out, or causes us to feel threatened and out-of-control. It can be as benign as giving a presentation, the anticipation of social interactions, going to the dentist, or, as a parent, anything to do with your kids. Your stress response can even be triggered by reliving old stressful experiences.

What does all this mean for your brain? According to this study on [“How Stress Affects The Brain”](#): “When chronic stress is experienced, the body makes more cortisol than it has a chance to release. This is when cortisol and stress can lead to trouble. High levels of cortisol can wear down the brain’s ability to function properly. According to several studies, chronic stress impairs brain function in multiple ways. It can [disrupt synapse regulation](#), resulting in the loss of sociability and the avoidance of interactions with others. Stress can [kill brain cells](#) and even [reduce the size of the brain](#). Chronic stress has a shrinking effect on the prefrontal cortex, the area of the brain responsible for memory and learning.”

Cortisol Was Never Meant To Be Star Of The Show

Cortisol is a great thing when you need it. And it was never meant to hang around too long in large quantities. Otherwise, your body can’t get back to doing all the other things that go with living a good life. Too much blood sugar for too long leads to diabetes. Too much rapid breathing and increased heart beat for too long wears out your cardiovascular system sooner than later. (Imagine driving your car in the redline zone every time you get in it...even if it is just to the grocery store. The engine will burn up quickly). And this perpetual high cortisol state also tells your body to keep the sex drive turned off...because sex doesn’t factor in as a necessary survival function in “fight or flight” mod – when you are “running for your life” your body doesn’t have time for sex.

As [we’ve talked about elsewhere](#), stress is a key factor to insomnia. Most of us know this at some level – you don’t sleep because you are stressed about a work meeting, your marriage, how your kid seems to be acting out and you can’t figure out how to help them, or how you are going to make ends meet this week, this month, this year. But it’s not as general as “stress = insomnia”. If that were the case then being wealthy and having no kids would mean perfect sleep every night.

Stress’s influence on sleep is cortisol related. It’s not the kid, the bank account, the car, or the bills keeping you awake at night. It’s how your body manages cortisol that is created from mulling all those things over, all the time, that keeps the fires burning all night long. “Sleep and circadian rhythm disruption is a common feature in many psychiatric disorders, including depression and anxiety. Stress hormones, such as cortisol, play a key modulatory role in sleep. Elevated cortisol levels can therefore

interfere with our sleep. The restoration of sleep patterns and circadian rhythms may therefore provide a treatment approach for these conditions.” ([The Conversation](#)).

That last sentence is the key – restoring sleep patterns and circadian rhythms as a means of helping reduce depression, anxiety, and other mental health impacts of sleep deprivation. [The Anxiety System™](#) is designed to integrate with the circadian rhythm to actually work with the body to reduce cortisol, and help bring positive repair to your body.

Cortisol May Be Keeping Your Brain From Therapy

Does going to a therapist give you the balanced mind we are talking about? It depends. A good therapist can give you tools to healthily engage stress, reduce the effects of triggers, and maybe even teach you some helpful techniques to increase a sense of a balanced mind. Even the best therapist, though, can't be as effective on a brain operating under perpetually high cortisol as they might be in other areas. [Evidence suggests](#) that those suffering from depression paired with high circulating cortisol don't seem to have the necessary cognitive functions to be receptive to behavioral therapy.

In short, the brain isn't able to “take in” the new paradigms and helpful information that a therapist is offering because the elevated cortisol has made it nearly impossible to receive new information. By no means is this saying all depression is a result of high cortisol and if you fix the cortisol you won't need your therapist, or the depression will go away. But the cortisol could be getting in the way of your brains' ability to get better.

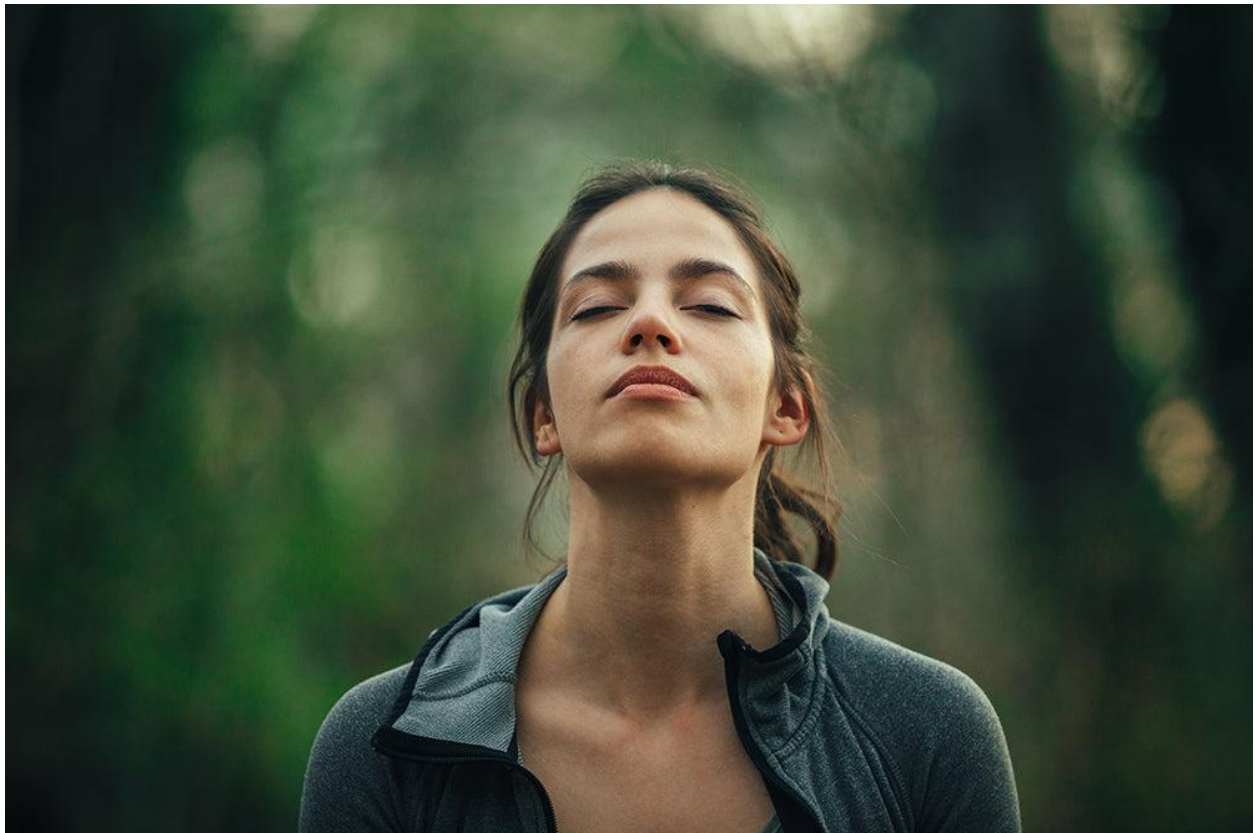
Practices to Help Balance Your Cortisol and Your Mind

It's not all doom and gloom for the hyper-stressed. Your brain is not on a one-way track to diminishment. There are practices you can take to “change your mind” that have little to do with actual thinking.

Shake Your Groove Thing

Movement can make a big difference. If you get regular exercise you can decrease cortisol...and this can make room in your brain for not just the chemical benefits of exercise but a sense of endurance. This gives you the ability to do the hard thing without being taken out by whatever the stress comes with it. Exercise increases the production of new brain cells, kicks up an anti-inflammatory response which is what you want when all those parts of the brain are inflamed from stress hormones.

Breathe



Breathing. Yes, breathing. But are you doing it right? (Don't let that be another anxiety trigger) Right now, reading this article, what's your breath doing? How deep is it? How fast or slow? Most people don't breathe the way the body was meant to. Shallow, rapid breathing is actually a negative vital sign when being assessed by a first-responder or doctor.

Make good on the Physiological Sigh. Inhale deep, and then sneak in another inhale breath. Follow it with a long exhale. "Just one, two, or three of these Physiological sighs brings your level of stress down very, very fast.", notes [Andrew Huberman](#).

Community

Being around other people, and being present to those you are around can get you out of your head. The 12-step program has a built-in mechanism for helping others because they know the self-destructive nature of an addict is perpetuated by self-centered thinking and living. It's good to be reminded we aren't the only ones living through the ups and downs of life. You know the feeling when you are around friends and even if you didn't verbally say what you are stressed about you find yourself heading home thinking, "Boy! I needed that!" It is a reduction and release. Reduced stress, released tension.

It doesn't take a genius to know there are numerous benefits to taking care of your mental space. Creating a more receptive, positive environment for your head space keeps you thriving today, and has long term benefits as you grow older. Stress gets in the way of a balanced mind, sometimes with debilitating results. There are literal, active changes that occur in your body and mind when cortisol is running your show. [Helping keep cortisol in balance](#) is how you get it to work for, not against, your mental health and live with a balanced mind.

Project:

Research study for publication in medical journals to support the marketability of a cortisol-balancing supplement

What I Did:

Rebalance Health conducted a study to show the bioavailability of their formulation set against the leading supplement. With the raw data and as the SME for the company, I drafted the initial paper for publication. This draft was reviewed by the medical team that would have their names attached to the study. With minimal suggested edits from the medical team, what follows is the final study, submitted and published. To support the credibility of the paper I opted to not have my name included in the authorship.

Preliminary Clinical Data Findings on the Efficacy Data on Rebalance Health’s Novel Delivery Method and Its Effect on Surrogate Markers of Cortisol Levels

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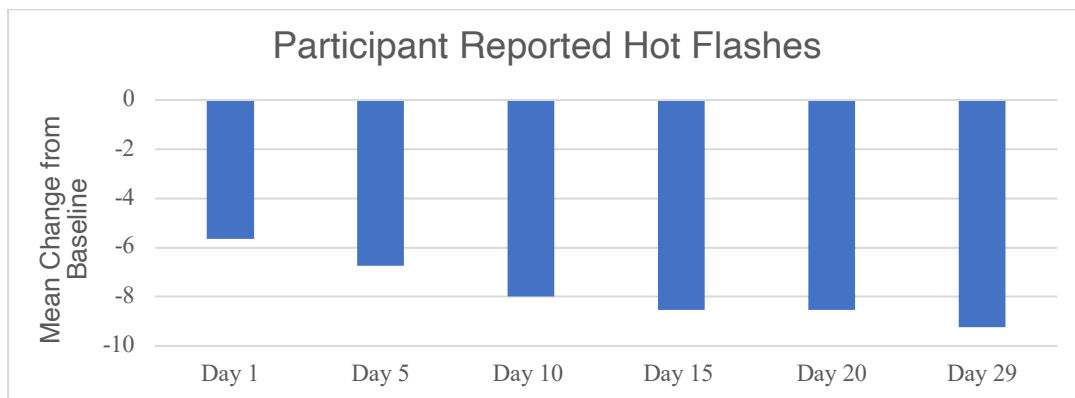
^bOwner of Peptide RX, West Palm Beach, FL. Specializes in women’s health, hormone testing and treatment, regenerative medicine and the use of therapeutic peptides.

^cOwner of Complete Care Medical Group, Inc. Irvine, CA. Expert lecturer on the topic of cortisol.

This study has been approved by an independent Institutional Review Board and all participants completed the approved informed consent prior to enrollment.

The current ongoing clinical study includes women ages 35-65, who are currently experiencing the feeling of hot flashes related to perimenopause and menopause. Prior to the initiation of the Rebalance Health System, participants were instructed not to initiate any new supplements and/or medications during the course of study enrollment. Participants completed a screening/medical history form, and after starting the system completed a daily questionnaire regarding the number of hot flashes experienced; additional feedback was also captured.

Preliminary data was analyzed for the current women enrolled in the study. Differences between the number of hot flashes experienced prior to using the system were compared to the daily reported number of hot flashes post-use of the system for each participant. The chart below shows the mean change from baseline with the number of reported hot flashes decreasing with time. Participants have been reporting fewer hot flashes, less severe, and a shorter duration once they occur. Additionally, participants have been reporting sleeping better, feeling more rested, and less moody. Due to this positive preliminary data, the protocol has been amended to include blood draws, for new participants, that will measure hormone levels pre- and post-use of the system to correlate with the participant assessments.



*Days 1, 5, and 10 n= 12 *Days 15 and 20 n=11 *Days 20 and 29 n=10

Participants were excluded to enroll in the study that were using hormone or peptide therapy within the last 12 months, had a pre-existing history of low cortisol levels, or auto-immune diseases and abnormalities in the buccal mucosa. Additionally, participants were excluded that had used an investigational drug or device within 60 days and use of anti-fungal products within 30 days.

The following attachment has been submitted to a peer reviewed journal, publication date forthcoming.

Preliminary Efficacy Data on a Novel Delivery Method and Its Effect on Surrogate Markers of Cortisol Levels

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ABSTRACT

Multiple studies conducted with males and females examine the benefits of ingredient absorption targeted to help regulate cortisol levels. Cortisol is challenging to measure concretely as even the most accurate tools only capture a moment in time, and cortisol levels vary throughout the day and from day to day. Despite the inability to capture concrete data points of cortisol variance, the studies suggest a correlation between the delivery method and downstream benefits reported by subjects. The clinical benefits were supported by increased biomarkers of testosterone and estradiol and more subjective data, such as reported sleep quality.

In this summary, we present data showing that Rebalance Health delivers key ingredients with higher bioavailability than leading competitors through our patented Directline™ delivery method. Second, we show biological changes measured via serum samples and correlate these changes to the feedback we have received from subjects. Finally, we present subjective data that indicates Rebalance may positively affect the study participants' cortisol balance. The data conclude that the Rebalance Health product significantly influences cortisol homeostasis.

Keywords: Cortisol, Melatonin, Testosterone, EDTA, Menopause, Estradiol

Introduction

Men and women between the ages of 30-65 have a propensity toward consistently elevated cortisol levels due to increased life stressors (psychological stress) and the aging process, chronic illness, and lack of sleep (physiologic stress). The impacts of elevated cortisol can be detrimental to both health span and life span.

When the body engages in a stress event, it has an allostatic response [1] to manage the change internally and externally. The allostatic response is beneficial intermittently as the body's defense mechanism to respond to stressful events. The

ability to return to a baseline resting state within the allostatic system after a stressful event is diminished in most people over the age of 35. People above the age of 35 do not operate in homeostasis due to regularly elevated levels of cortisol, which occur because the allostatic response is constantly taking place. This is referred to as allostatic overload. The shared experience of being "stressed out" has at its core, the elevation of some of the critical systems that lead to allostatic overload – e.g., cortisol, sympathetic activity, and pro-inflammatory cytokines, with a decline in parasympathetic activity. Nowhere is this better illustrated than for sleep deprivation, which is a frequent result of being stressed due to high cortisol production. Sleep deprivation produces an allostatic overload that can have deleterious consequences.[2] The effects include elevated evening cortisol, insulin, blood glucose, proinflammatory cytokines, and the gut hormone ghrelin, which increases appetite. Cravings for comfort foods and increased caloric intake are one result, along with depressed mood and cognitive impairment." [3]

This allostatic overload keeps cortisol high and because cortisol functions as a master hormone it reduces or inhibits the function of other hormones throughout the body. Testosterone is negatively impacted by the allostatic overload.

Production of testosterone decreases when cortisol is elevated for extended periods. [4] When testosterone production is inhibited, there are negative physiological and psychological implications for men and women. [5] Some of the more well-known outcomes are depression, lack of energy, as well as lowered sex drive. Women tend to see an increase in anxiety, mood swings, and a decrease in vaginal health, as well as bone and breast health. While men experiencing low testosterone production may experience a reduction in sperm production, red blood cell production, and reduced muscle growth and strength.

Estradiol is also affected by elevated cortisol and most commonly occurs during menopause, with similar results as reduced testosterone production. It can result in hot flashes and irritable mood, as well as poor sleep, night sweats, vaginal dryness, poor libido, increased risk of UTI, hot flashes, poor temperature regulation, brain fog, depression, and anxiety. [6]

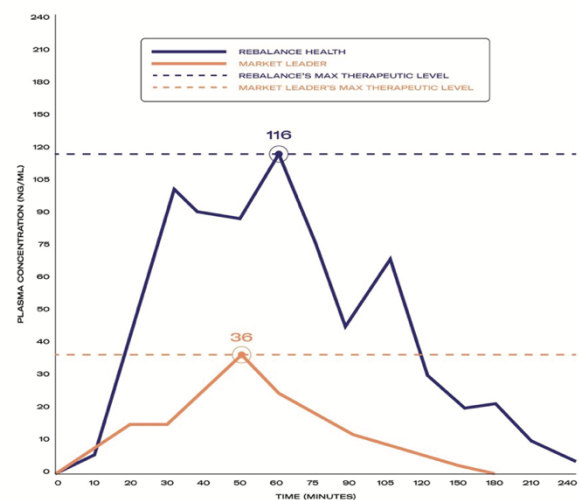
We explored the outcomes of what happens when the body can move back to homeostasis, reducing perpetually elevated cortisol levels and, as a result, the allostatic load. This study looked at the benefits of introducing hormonally beneficial ingredients through a proprietary delivery method, Directline™, with high bioavailability. The studies present evidence that the delivery method plays an integral part in regulating constant fluctuations of serum cortisol levels and realigning beneficial ratios of testosterone and estradiol to reset homeostasis.

Delivery method

Hormone replacement therapy utilizes numerous delivery systems like injections, creams, pills, and capsules, to name a few. Presently only injections lead to predictable and reproducible serum hormone levels, but they are painful, inconvenient, and challenging to travel with. The most common alternative is pill or capsule supplementation. Common practice does not mean best practice, especially as superior delivery methods are developed. The nature of the digestive system is not compatible with pill or

capsule supplementation unless the doses are extraordinarily high, and the delivery mechanism has numerous protective additives to help the ingredients attempt survival in the gut.

A more substantial and viable alternative is to deliver the necessary cortisol-balancing ingredients in a medium that allows for maximum absorption while not being destroyed in the gut. The proprietary Directline™ delivery method utilized by Rebalance Health is a formulation that produces a significantly higher bioavailable outcome via lozenge.



Data/Study

In a controlled study, subjects were administered melatonin through the Directline™ delivery method in lozenge form at 2x the dosage, 5mg, as found in the Dream Catcher™ product. Combined with Astragin®, Ashwagandha, and EDTA, the Dream Catcher lozenge leads to a higher peak and longer-lasting serum melatonin levels compared to a leading melatonin gummy product at a comparable dosage.

Blood serum results showed that the Directline™ delivery method resulted in serum melatonin levels 3-5X higher than the leading competitor. Additionally, the Rebalance Health product maintained significant levels for greater than 100 minutes; far exceeding the competitor's maximum and total serum concentrations. Also,

the Rebalance Health product exceeded the competitor's maximum serum concentration (c-max) for more than 100 minutes.

- a. Melatonin found in Dream Catcher
 - i. 3x more bioavailable than the leading competitor
 - ii. Exceeded the competitor's c-max for more than 100 minutes

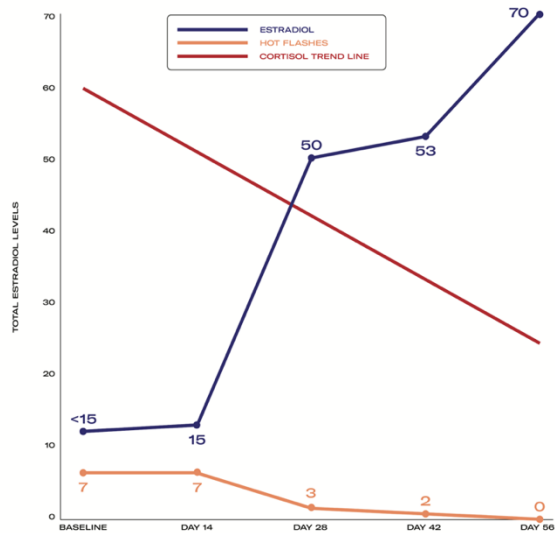
The data suggest Directline™ is significantly more efficient and effective in delivering and maintaining serum concentrations of ingredients into the bloodstream.

Rebalance took the next steps in testing these outcomes over an extended time, utilizing their three-lozenge stress management system. The three lozenges work with the circadian rhythm and are to be taken at specific times of the day to maintain this synchronicity. Each lozenge utilizes the Directline™ delivery method. The three lozenges each have ingredients designed to help the endocrine system achieve homeostasis when used alongside a healthy diet, regular exercise, and consistent sleep.

An area where significant data shows the effects of elevated cortisol is in regard to sleep. Sleep disruption impacts the diurnal rhythm with downstream consequences of what is commonly referred to as "hormonal imbalance". [7] We hypothesized that if you can affect sleep quality and support hormonal repair with natural ingredients working with the diurnal rhythm, sleep becomes restorative at a cellular and hormonal level. The Rebalance Health System not only helps to control cortisol levels, but it also helps to maintain a consistent sleep-wake cycle to maintain the allostatic process further.

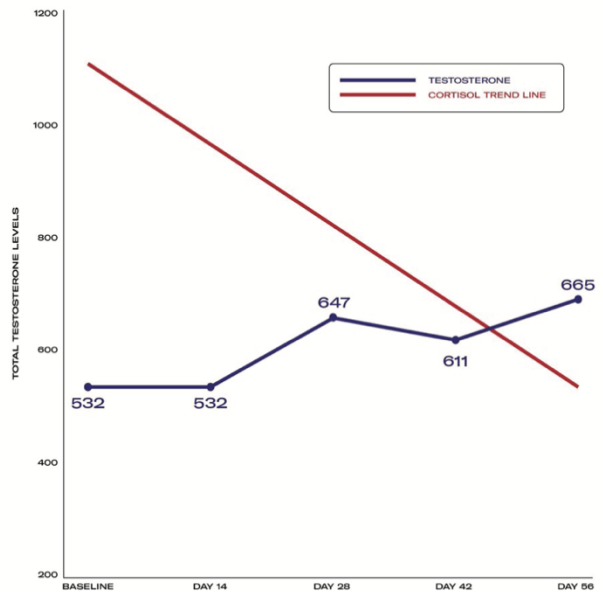
To measure the effectiveness of the increased potency of hormone-balancing ingredients in relation to cortisol levels, we conducted a 60-day study. Both men and women recorded their subjective experience alongside blood serum results taken every 14 days. Of the data markers tracked in blood serum draws, testosterone and estradiol – two hormones that play a significant

role in health span and life span – showed notable increases.



Testosterone Increase measured via serum

- a. Average increase of 100 points in male subjects for Total Testosterone
- b. 25% average increase in Total Testosterone



Estradiol Increase measured via serum

- a. Average increase of 50 points in female subjects for estradiol
- b. 367% average increase in estradiol

In addition to measuring testosterone and estrogen in relation to serum cortisol levels, we analyzed the subjective experience of the study participants via a questionnaire.

The data suggest that cortisol moved toward homeostasis in each subject, resulting in an increase in the production of testosterone in men and estradiol in women.

Regarding the testosterone increase, subjects reported:

- i. Improved endurance during workouts
- ii. Faster recovery time after a workout
- iii. Improved libido

Regarding the estradiol increase, subjects reported:

- i. Improved mood
- ii. Improved libido
- iii. Reduced menopausal symptoms
 - a. Eliminated hot flashes

Hypogonadism and Menopause result in lower levels of testosterone and estradiol. If cortisol is not constantly spiking, the production of key hormones can normalize, and the endocrine system can re-establish healthy ratios and decrease the symptoms of hypogonadism and menopause. Subjects reported reduced mood swings and hot flashes, less brain fog, a better sense of well-being, better sleep and cognitive endurance, and improved exercise capacity.

Conclusions

With an increasing population suffering from the effects of elevated cortisol due to increasing stress events and allostatic overload, there is a need for a systemic approach to reducing cortisol. Allostasis works optimally when the body is in homeostasis. Subsequently, excess cortisol results in numerous positive health benefits such as increased energy, upbeat and more stable mood, higher libido, a stronger immune response, increased athletic performance and recovery, and an overall increase in quality of life. To significantly impact elevated cortisol, the solution must work with the body's diurnal rhythm,

supporting healthy sleep-wake cycles and decreasing excess serum cortisol levels. Only then can the body rebalance other essential hormones resulting in improved clinical experiences. The data suggest that Rebalance Health's Directline™ technology can provide better absorption and naturally assist hormone balance for longer, resulting in clinical benefits. Ultimately, the formulation and delivery system exceeded both bioavailability and clinical expectations.

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