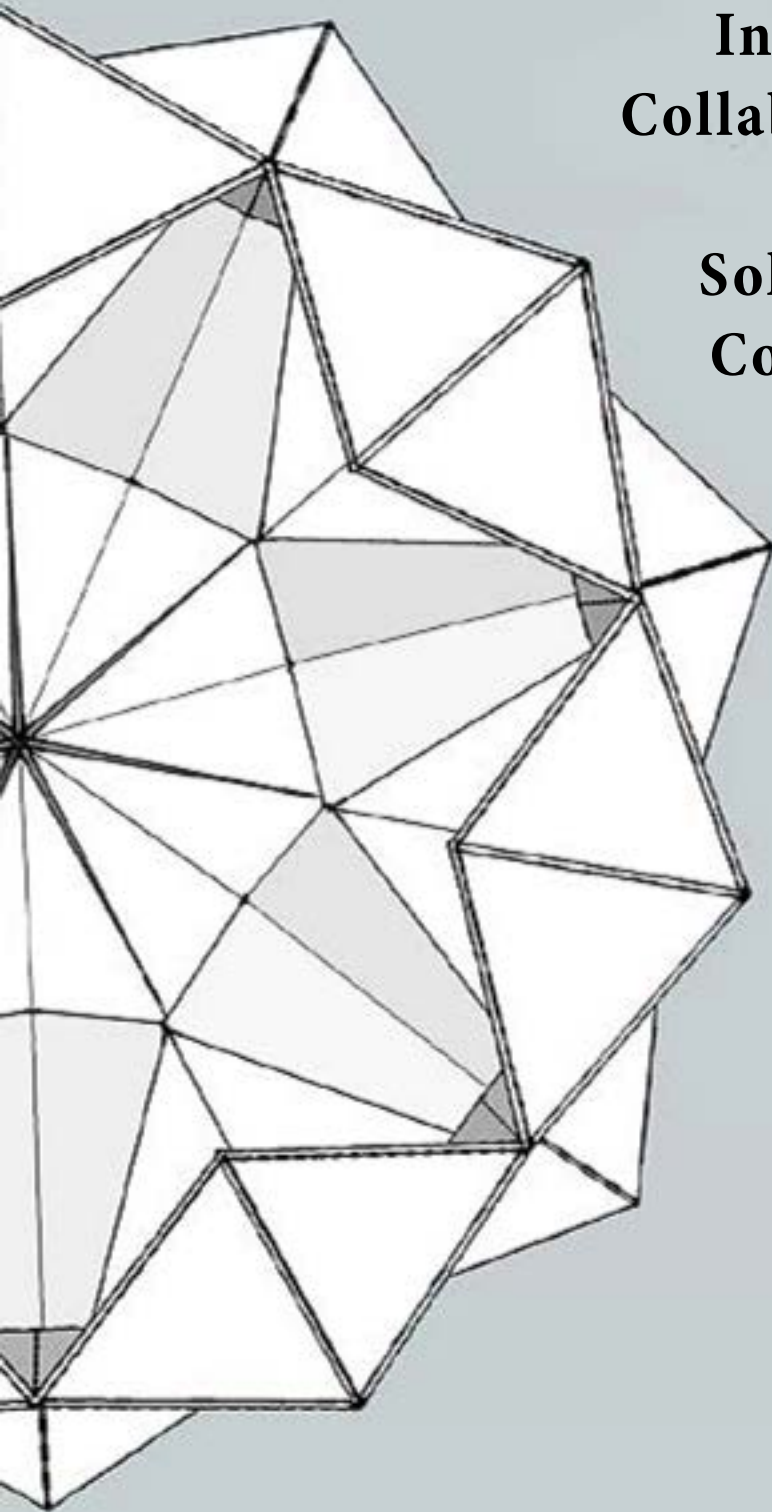


**Instant
Collaboration
or
Solitude
Cocoon**



Intro

A series of former warehouse and factory buildings in the Chelsea neighborhood of New York City, owned by tech giant Google, were renovated to become the most innovative office space in the city for, purportedly, the most advanced technical workforce in the world.

Google owns the building, located between Eighth and Ninth avenues, and 15th and 16th streets, and rents out a few more buildings to the west between the same streets. Chelsea contains a number of examples of post-industrial architecture, which were renovated to become modern residential or commercial real estate by preserving an appealing industrial style. Google has made massive renovations to the former warehouse and factory buildings as well.

Despite the company's mission to keep its employees happy by providing cool design features that include an innovative approach to work area layout, as well as on-site entertainment, all of Google's progressive efforts still leave workers stressed and depressed, according to a set of interviews with employees in the Winter of 2017.

Ironically, people who work there feel like automated machines.

This booklet will propose a design intervention to improve the well-being of this elite tech workforce.

Google is a giant tech company, and it is famous for trying to make its workers happy. Google isn't just a search engine, they spent roughly \$28 billion to buy more than 160 companies in 2001. They own YouTube, Zagat, Nest Lab, Waze and Android OS. Each year they earn about \$20 billion dollars from advertising, which is more the combined revenues of CBS, NBC, ABC and Fox.

Work hours are long, salaries are big. Software engineers starting salaries are around \$80,000 - \$140,000 based on skill level, plus bonus and stock options. They also pay moving expenses for people to relocate, and the first few months of the rent for new workers.

Some of the favorite Googler's perks include free never-ending gourmet food and snacks, doctors, gyms, yoga, Pilates, massage and laundry services that are available on premises. There is on-campus day care, and you can bring a dog as well.

New dads receive six weeks of paid leave, and moms can take 18 weeks, and employees' stock continues to vest (and they continue to receive bonuses) while they are on leave.

Google provides great death benefits. If a Googler passes away while working there, all their stock vests immediately, and, on top of the life insurance payout, their surviving spouse continues to get half of the Googler's salary for the next 10 years. There's also an additional \$1,000/month benefit for any of the Googler's children.

There is a library, and Google talks, which were attended by Obama and Conan O'Brien.

Googlers can take up to one three-month leave of unpaid time off, under specific circumstances. Healthcare benefits continue for unpaid leaves of up to three months. Googlers can use their time off to work with nonprofit organizations, political campaigns, and other community-oriented projects they're interested in.

No wonder they get more than 2 million applications per year.

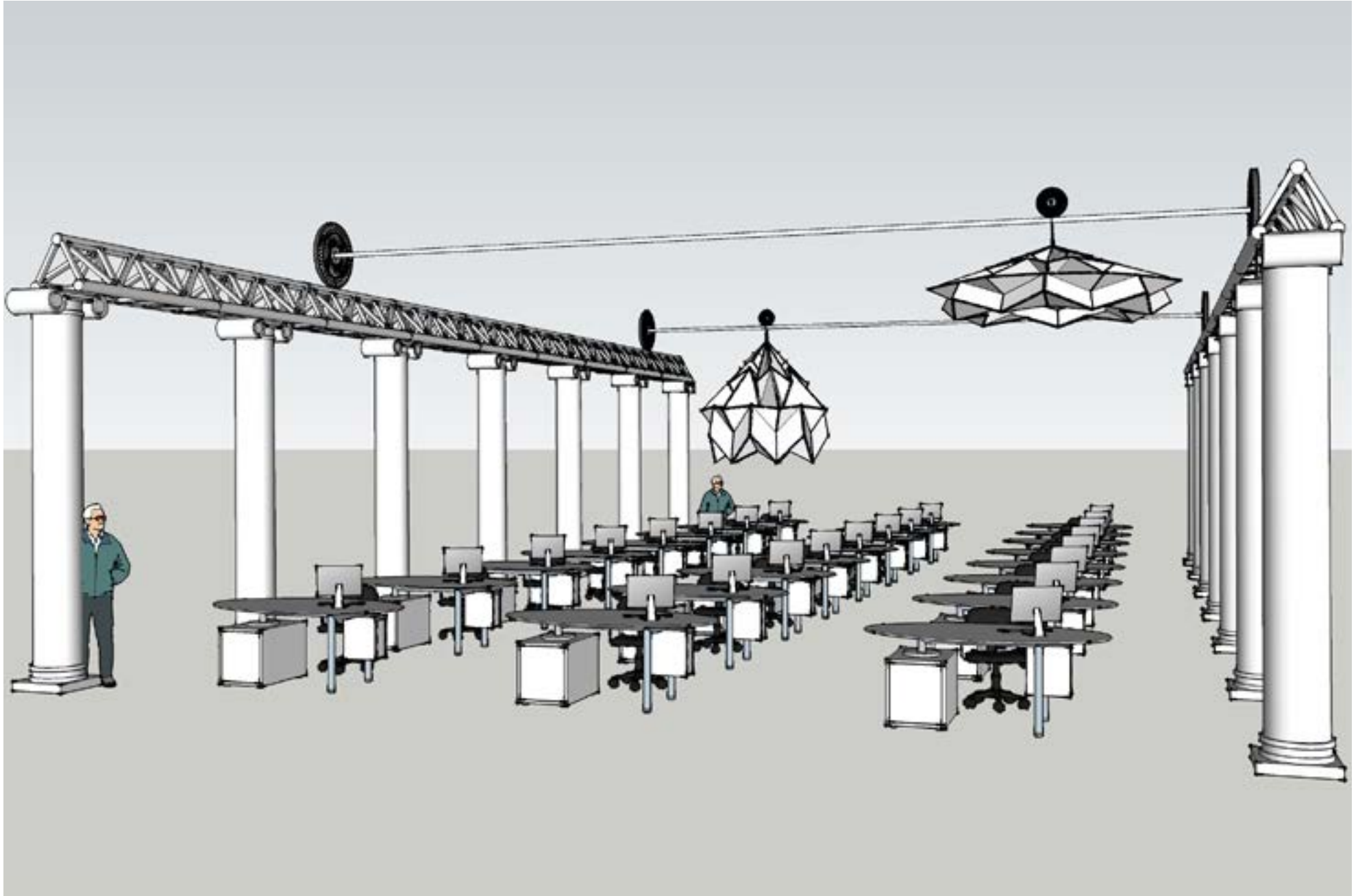
The building the company bought in NYC follows the company's innovative design standards. The building was renovated multiple times, with different design themes and approaches applied as experimentation for improvement.

The building is designed to maximize the productivity of the employees time; one could live in this building for weeks without a need to go outside at all. The moment you walk into the space, the amount and quality of the interior design blows your mind away. It feels like walking through an immersive art gallery. A lot of wall murals and installations represent maps and topography. A lot of art installations that decorate walls have conceptual meanings. When Kimberly Sacramone, HLW principal and director of interior architecture, started to work with Google back in 2006 she first flew to their California headquarters to educate herself on design principles of the company, then she closely worked with New York facilities manager Adam Lutz. Interior design evolved a lot, as Google kept acquiring more floors inside the building. Teams constantly grow and shuffle around. Googlers are invited to participate in design development and successfully propose a lot of design strategies. They love to solve challenging problems.

Ironically you'd never guess it if you walk inside these offices now that they used to be factories and warehouses, where industrial machinery used to perform automated tasks. The building Google owns used to be the Port Authority Inland Terminal, and the building that Google rents used to be a Nabisco Factory. The Union Inland Terminal was built by the Port Authority to be a warehouse to handle less than carload (LCL) shipments, consolidating the shipping functions of the Hudson River piers two blocks west of the building. The Nabisco factory was a manufacturer of cookies. In the past, workers provided physical labor within these spaces; today knowledge workers produce code and tech products for Google. Factories were not the best places to work because of long hours, little pay, unsafe work conditions. Workers fought against exploitation for years to get the work conditions under which we work now.

It is truly ironic, that today's office workers still feel overworked and powerless. They are cleverly motivated to be productive. It is done with such techniques as encouraging motivation through promotion, but design of the building that has everything inside helps as well.

An example of a cocoon system installed in regular open-space work area.



Challenge #1

Besides all additions to the office space, the actual work area is innovative in the sense that it provides flexible layouts.

Offices of the future are neither cubicles nor open floors, they are a hybrid between private offices, cubicles, open floor, communal areas and soundproof rooms. Google is trying to implement them quite well.

Engineers do various tasks; sometimes they work alone, sometimes they need to collaborate. When they work alone, they prefer minimal visual and sound distractions. There are times they need to collaborate, and for that they go to some designated areas like meeting rooms or lounges, so they don't distract colleagues who work alone. When engineers work alone on their coding they reside in an open space common area. There is a debate in the field whether open workspace is good or not, as it can be distracting, especially the sound, but cubicles are proven to make people more depressed. That is why Google provides the hybrid of both.

Taking into consideration that people work in an open area, they need to relocate for collaboration. There are times when it happens fast, and there is a meeting room nearby, but sometimes people have to walk pretty far, because there are some hours when meeting rooms are all full.

Since there are already a lot of meeting rooms, and not a lot of space, it doesn't make sense to create more of them, because in some hours they stay empty.

Instant collaboration cocoon used for a fast meeting:



Challenge #2

The office has multiple entertainment areas, such as game rooms, where Googlers can play pool, Pac-Man arcade, and a Lego Area. The building provides stellar views from multiple balconies, yet my interviewees claimed that they don't use these "fun areas", and sometimes are so busy that don't even notice beautiful sunsets for weeks. From my interviewees I also learned that they don't ever go outside of the building to interact with neighbor businesses. That seems pretty logical to me, they have multiple restaurants, mini-kitchens with coffee and snacks, post-office for packages deliveries, library, entertainment, all that inside the building.

What is interesting is that psychologically people like to have choice, they like to know that if they need something, they can have it. That seems like it successfully keeps workers inside, and being productive. You leave apartment to go to the gym, and end up walking around the area after. If you go to the gym inside your building, you go straight back. It seems to me that all these perks are a nice way to keep people productive, without using any force. They believe it's their conscious choice to stay inside all the time. Google's clever design strategies help with that; no one wants to be productive in the set of white cubicles. Some of the meeting rooms have different design themes, there is even one that was designed to look like a NYC apartment. If you attempt to work long hours it may be nice to spend some time in surroundings that imitate your apartment. There are multiple sofas, hammocks, sleeping pods, and the most fascinating relatively new addition to the office are sleeping pods in walls that provide private rest environments behind little curtains. It seems first like an ultimate dream, so convenient. At the same time, all that becomes a leash that keeps you inside, locked out from external world. One of my interviewees gave an amazing outlook on design strategies. He as a manager who works closely with a design team and helps to set up work space areas. I can see that he is trying to create peaceful environment without distractions for all types of work. Yet, even he admitted he feels like an automated machine sometimes.

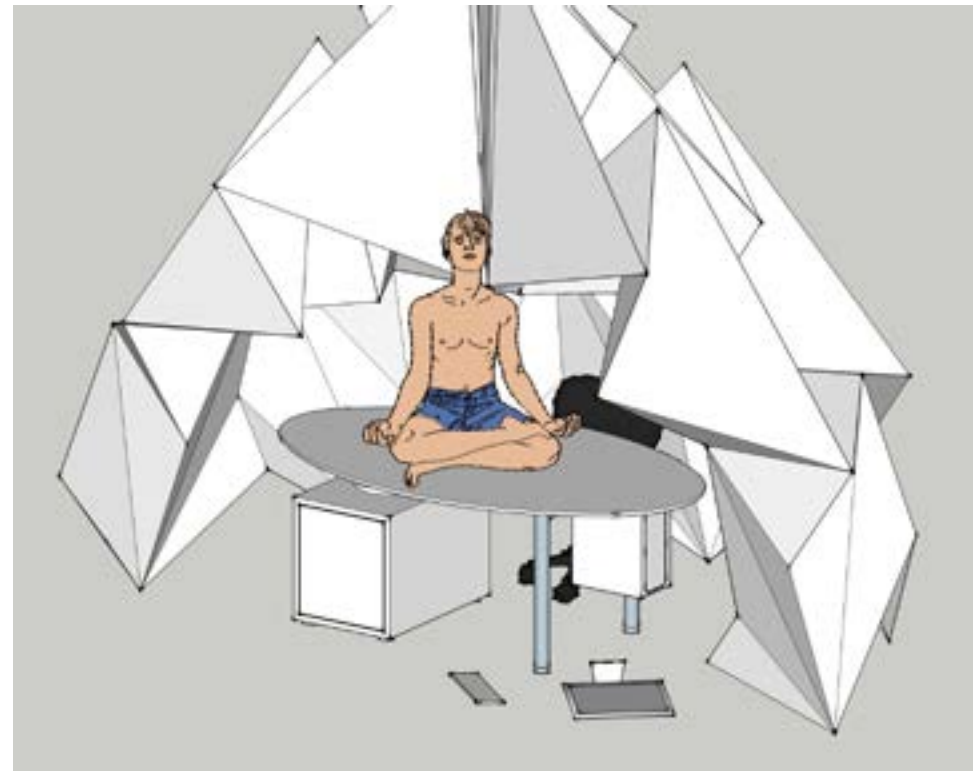
The abundance of resources and perks company provides, leaves people without personal lives, which makes them feel, in the end, like intellectual machines running in this new century factory. It is not a fault of architecture, nor design. And even if it is the fault of a giant corporation that wants to keep people productive, it is still done in what seems like a positive way.

A couple comments from Quora from former Googlers really explain the situation pretty well.

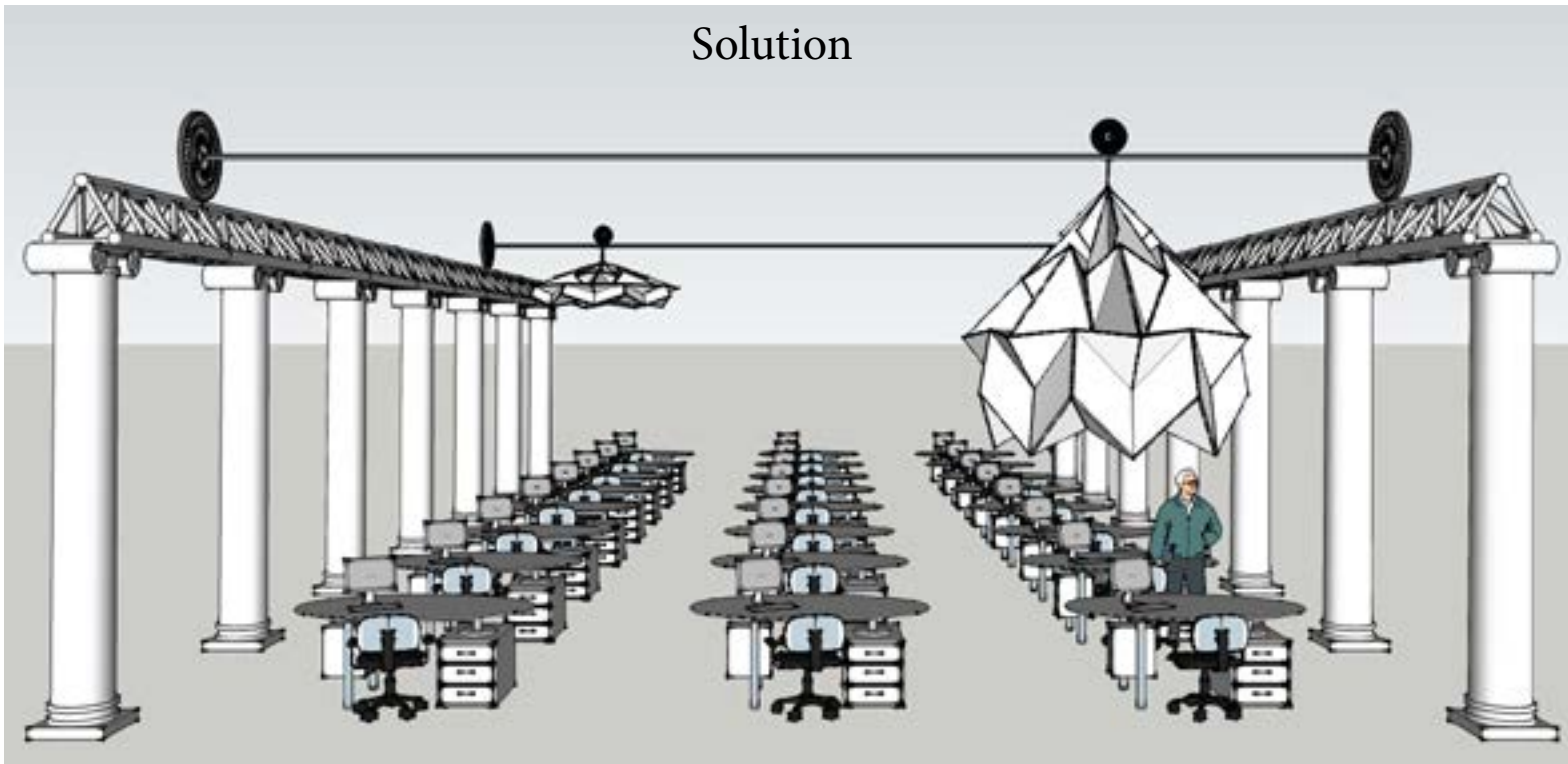
Adrian Carballo, a former Software Engineer wrote: "You do have free food available all the time, and many cafes, gyms, laundry rooms, etc. but over time as you start using all these perks (because it's just too convenient) you spend more and more of your time at the office. You start making the same choices day in and day out. You hang out more and more with the same people you work with. I ended up deciding it was time to move on to more freedom. ... even if I have to pay for it."

Joe Cannella, a former senior account manager wrote: "Basically, you end up spending the majority of your life eating Google food, with Google coworkers, wearing Google gear, talking in Google acronyms, sending Google emails on Google phones, and you eventually start to lose sight of what it's like to be independent of the big G, and every corner of your life is set up to reinforce the idea that you would be absolutely insane to want to be anywhere else. To which the majority of folks will say 'boo-hoo, poor spoiled Googler'. But that's sort of the point. You are given everything you could ever want, but it costs you the only things that actually matter in the end."

Instant solitary experience:



Solution

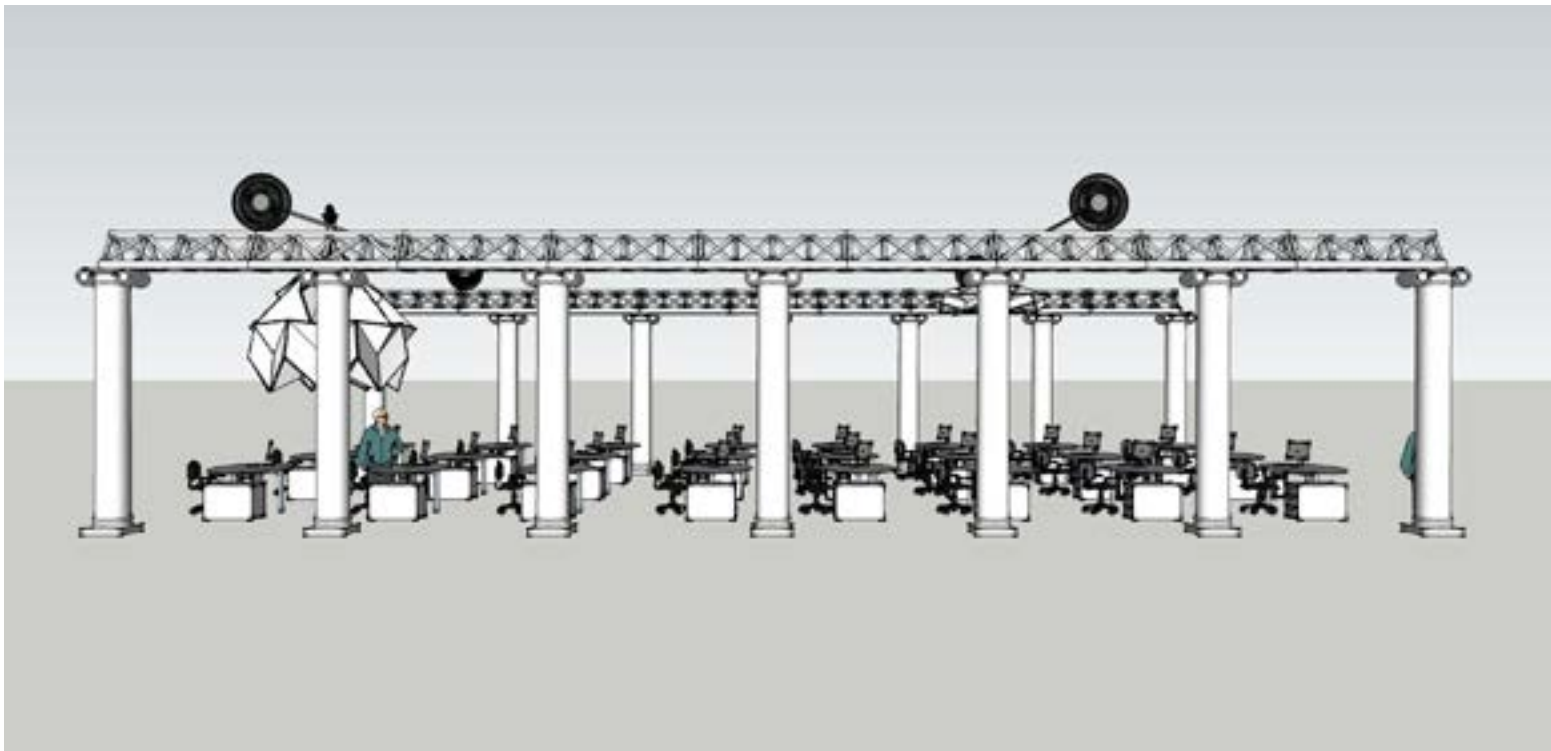
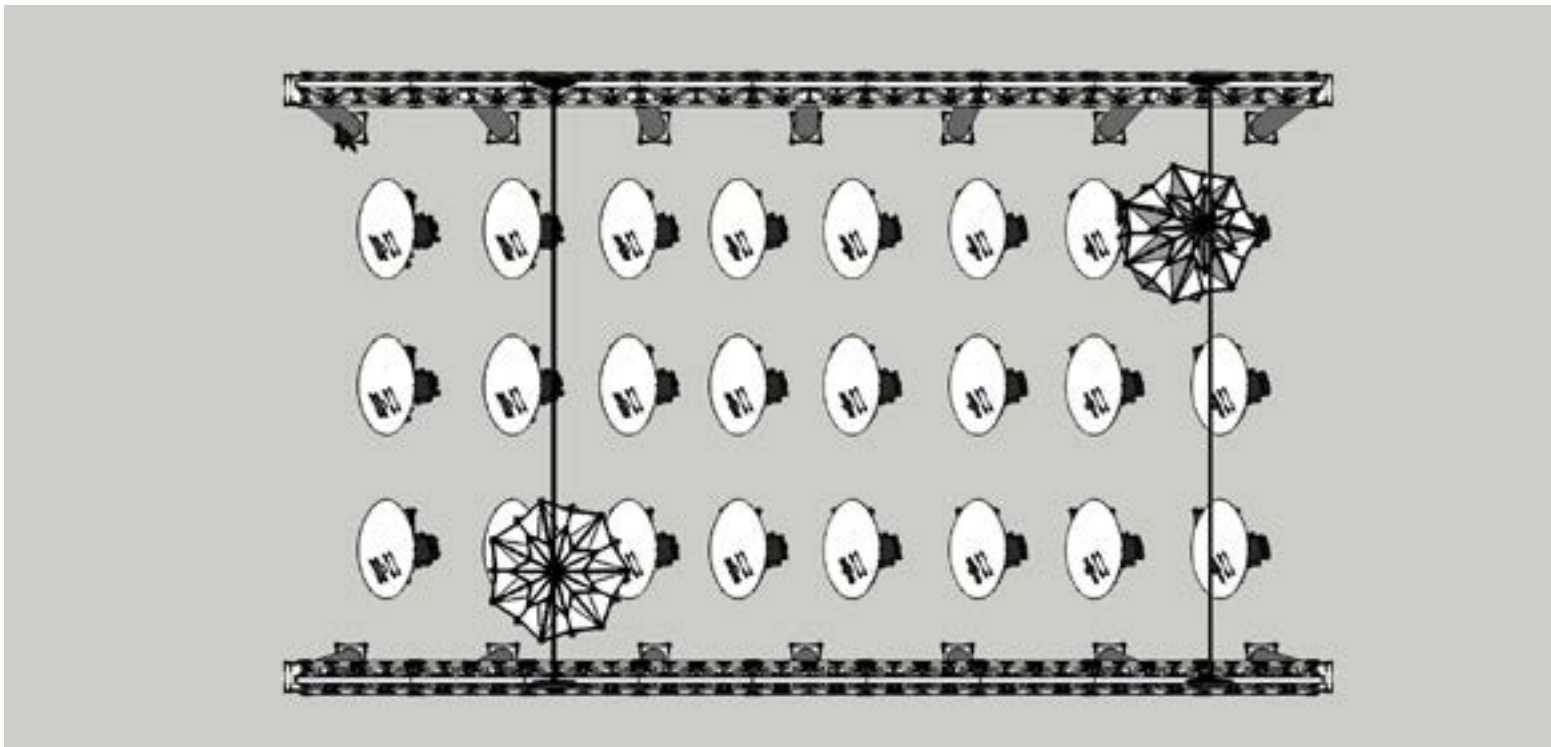


A contemporary design - such as a suspended cocoon that descends from the ceiling to provide workers with instant access to a collaborative or solitary space - can effectively disrupt the sense of automation and efficiency by providing a sense of individual control and agency. Cocoons will reside within an open space rooms, which I found to be the most problematic space. They will resemble big origami flowers and will remain hanged from a ceiling in folded condition while not in use. The 111 8th avenue has tall 10 feet ceilings that can easily accommodate such design. Each of the Googlers will have a software, that will allow them to call a cocoon when one is needed. Cocoons will use a system of coordinates and will come to any location within the room, drop down, unfold, and hide one or few people. Soundproof walls will keep participants confident that they can have a free discussion or private time.

The first desire for improvement that my interviewees expressed was an instant access for collaborative space without sound or visual distractions for those who are working in an open space room. Google is doing already a great job by implementing a hybrid layout, and cocoons can help to push it further.

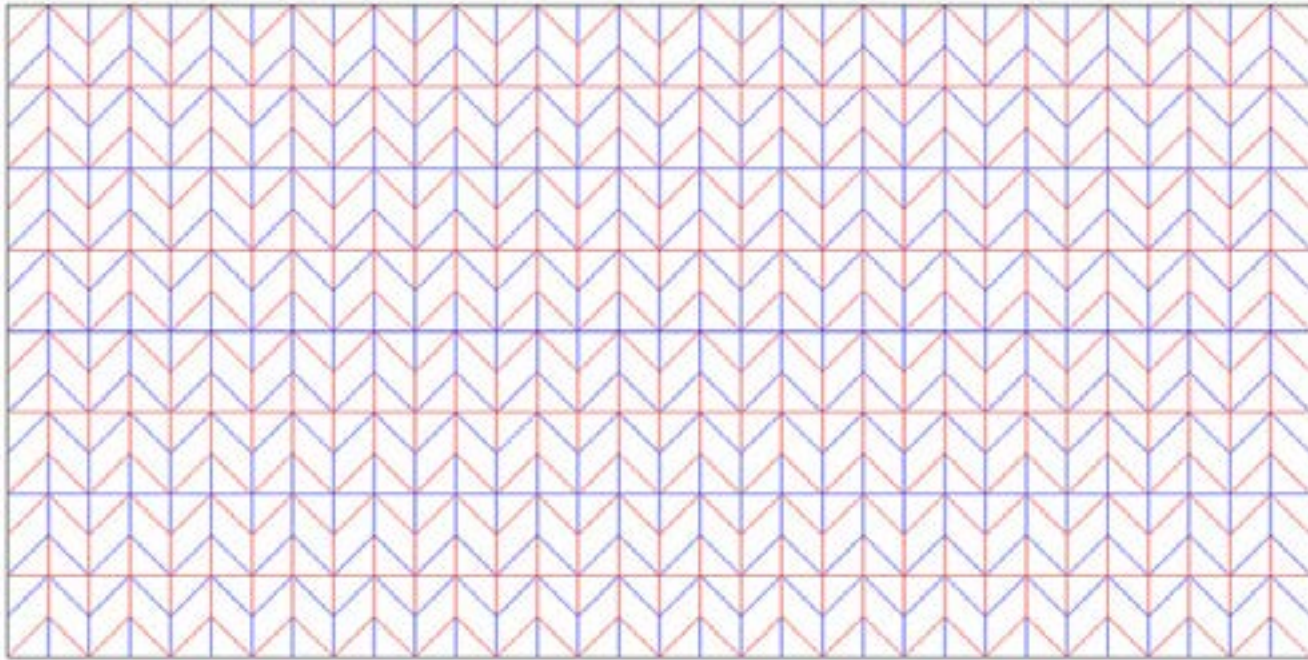
Cocoons can provide an instant collaborative environments, that doesn't require a long walk to meeting rooms during rush hours. Team of 2-4 people can quickly collect and discuss their work, while not distracting their colleagues.

The second issue I found within the site is a lack of personal life - highly successful overachievers so preoccupied with productivity that they forget to take time to rest, or relax. There are some lounge areas or private pods within the building, but again they aren't instantly accessible, and some people don't want to walk far. Some people simply aren't fans of big open space work areas, but sometimes they have to be there. When a worker feels stressed or overwhelmed, desiring some private space, one can easily call a cocoon to have a private break to relax or meditate. Cocoon software also will monitor workers who are run down and don't realize that they need a break. A system of sensors can measure worker's heartbeat, and a length of time he spent at his desk. If a worker is at risk of overworking himself, a cocoon will come to the rescue and force the worker to have a rest. Cocoons will be equipped with different lights and sound profiles for different scenarios.



Origami Magic Ball Pattern

The geometry is based on the folding pattern of an origami 'magic ball'.
This structure has ability to expand and contract



Materials



Corrugated plastic could be used for the structure.
To create folds a router could be used to precut pattern
over the surface of the plastic.
There is a possibility to use connectors instead of precut-
ting a surface of material.



Soundproof foam panels are soft and flexible.

