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Identifying the Requirements of Millennials in Workspaces

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Abstract - Since the ascent of 20th century, the design of corporate offices has come a long way. Evolving from packed separate offices to open plan designs, the function and psychology of office spaces has been redefined. Today, the younger generation of employees i.e. the millennials value freedom, creativity, and work-life balance. Hence, in order to suit their requirements, office spaces must be redesigned. This study explores the influence of the design, aesthetic and functional dimensions of architecture on millennials and their perception of a workplace. The aim is to re-design office working spaces as innovative interactive pods that suit the requirements of millennials. This includes incorporating: Experience driven break-out zones, dynamic space structure, biophilic features, homestyle detail, etc. A qualitative as well as quantitative study on office ergonomics and environmental psychology of workspaces is carried out and main design parameters like space, noise, light, environment, character, amenities and flexibility are studied. This paper will identify main themes and findings of workplace design with the objective of defining the basic parameters for the millennial generation in terms of productivity and communication. The evolution of office spaces has been analyzed through a survey of millennials working in various sectors. The concept of co-working, having arrived recently in this field, shows a lot of scope for creating collaborative environments that enhance interaction and productivity of a workplace. Technological advances have changed the way of working and there is a dire need for a 'new space for a new time' in offices. This paper will focus on how such a goal can be achieved.

Key Words: Office spaces, Millennials, Redesigning, Environment, Collaborative, Innovation hubs, Aesthetics

1.0 INTRODUCTION

Commercial offices go long back and there is evidence that suggests that they were originated in the Roman era. Since then, a lot has gone by and changed. Until the late 1950s, work was only limited to the papers and file stocks. But with the technological advancement and boost in digital technology, working patterns changed across the world. In the 1980s, commercial offices went on to computer-based works and the requirements of space changed accordingly. Jumping from the enclosed office rooms to open plan layouts, commercial offices changed the plot. Today, when millennials have entered the workforce, there has been a realization that a workplace is not just a platform for monotonous deadline finishes. A workplace is where a person spends maximum of the time of his day and it is nothing less than a second home. With such requirements at hand, there is a dire need of the time to re-think and re-evaluate workplaces considering the Millennial workforce.

1.1 Hypothesis

With the arising new demands of a millennial workforce, a new approach to office space design incorporating cutting-edge designs and amenities must be created considering the psychological response of millennials to different environments.

1.2 Aim

To identify the requirements of millennials in office working spaces considering the spatial needs and environmental psychology.

1.3 Objectives

- To understand the millennial generation
- To study the requirements of millennials in an office.
- To configure elements of an office space for an open design.
- To study the role of amenities and recreational spaces in offices.
- To create a dynamic design that orients users towards productivity.
- To study how indoor and outdoor spaces in offices can be integrated yet be discrete.
- To study the behavioural pattern of all introverts, extroverts and ambiverts in offices.
- To study the modern and technological needs of an office building.



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1.4 Research Questions

- Can architecture affect the productivity of an office space?
- How can we create spaces that are more inviting to millennials?
- Can co-working spaces increase the work productivity?

1.5 Scope

The paper identifies how offices have evolved over the years in terms of design and how today offices need to be designed in a way where the millennial workforce can attain a work/life balance. A survey of 40 employees has been carried and aspects of design like office ergonomics, interiors, light, ventilation, space design, etc. have been discussed.

1.6 Limitations

The research is conducted on the experiential requirements and design requirements of Millennials in workplaces. The focus is on the interior aspects of design and how they cater to the needs of users and the environment that is created.

Since the past few decades, the world has seen some enormous transitions, be it in the field of technology, standard of living, development and what not! With these changing aspects, the oncoming generational changes have also affected the way this world functions. Over the past sixty years, there have been three generations dominating the workplace: Baby Boomer, Generation X, and Millennials. The Baby Boomer generation is anyone born between 1943 and 1960. Generation X were born between 1961 and 1979. The most recent generation to enter the workforce are the Generation Y/Millennials, who are individuals born between 1980 and 2000.

Today we can see five generations of employees working together under the same roof. But traditionalists are leaving, and Baby Boomers are looking towards their retirement ventures, taking years of experience with them. Generation X are replacing them, slowly moving up in the hierarchy, but the bulk of the people on the ground, the do-ers, are millennials. There are around 426 million people who make up the Millennial Generation Y in India.

As the name indicates, millennials grew up during the Millennium period, a time of rapid change. Naturally events that took place during this period have shaped them, giving them a unique set of priorities and expectations that differ from previous generations.

Generation X hoped for work life balance, Generation Y simply demand it. If it's possible for one, it's possible for all and with so much happening outside of their working lives it's expected as a norm on any job specification. Millennials are the first generation to use the word "fun" to describe their dream job. They really embody the sentiment that life is too short to be stuck in a dead-end job.

Millennials want to have the option to control their own working hours and location. Whereas previous generations only hoped for a work-life balance, these headstrong millennials expect it. They are increasingly social and want to be able to connect with their co-workers both inside and outside of the office. They enjoy being part of a tightly knit community which is bound by strong relations, akin to a "work family". Companies need to engrain flexibility to foster an 'anytime anywhere' work environment to replace the traditional 9-5 mentality.

There is now a huge difference between the habits, requirements and expectations of Generation X and the Millennial generation. Today, 67% of the working population comprises of millennials. The working requirements of millennials have changed a lot. They require spaces that combine comfort and aesthetics, something that encourages communication, cooperation and individual expression. Where previously the employees needed walled offices to work, now the millennials need a more open and collaborative environment. Comfort in terms of environment, recreation and interaction is given more importance. Work/life balance is the main motto of the millennial generation.

Where previously the corporate world was lost in the concrete square offices with no fluidity in spaces, today there is a dire need for people to connect with nature again in a way where it has a positive psychological impact on them. The millennials have a strong resistance to being confined to a desk or a cubicle. Hence more open-planned designs should be incorporated with flexible layouts, meeting pods and break-out zones. To break the monotonous working habit, there is a need to incorporate recreational spaces in offices. Architecture is a major parameter that can improve the work/life balance that the millennials seek today.

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Office design, on a both campus level and a workspace level, needs to be flexible. Architectural parameters like function, form, light, character and space itself must be defined in newer approach to design. The psychology of confined office spaces comes with confined architecture and that needs to be changed for a better future of workplaces. The concept of an office building where a large number of floors are stacked upon one another came when there was a limited area for individual companies to develop and hire new workforce. That was the time when individual rooms and cabins were properly walled and segregated. The head of the company had a large office, the supervisor had a separate cabin, while the employees were stacked in a different room. With increasing demand of workforce came the necessity to fit a large number of employees in limited spaces i.e. an open plan layout with structured compact cubicles. To this day, some offices still follow this layout because of its space efficiency. But today, the upcoming millennial workforce has been known to avert to this idea of sitting in a confined space continuously for many hours. There is a dire need for change in such designs.

Starting from the architectural design of the office campus to the interior space design, every space should be suited according to the requirements of the millennials.

2.0 METHODOLOGY

There has been a use of both qualitative and quantitative methods for understanding how office design has evolved over time and what the millennials expect of the workplace.

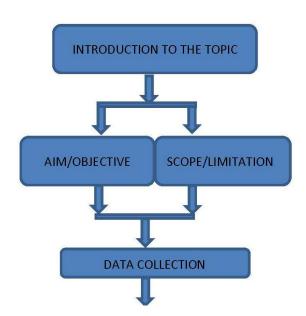
2.1 Qualitative Method

Literature and document reviews have been carried out where the following points have been explored:

- Understanding the Millennial generation
- Co-working spaces
- Social impact of co-working spaces on the millennials of Gurgaon

2.2 Quantitative Method

A survey has been done through a questionnaire targeting the working millennials. This survey concludes on various parameters of behavioral and design aspects of the millennials.



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PRIMARY SECONDARY

SURVEY LITERATURE REVIEWS

ANALYSIS

CONCLUSION

Figure 1: Methodology flowchart

3.0 DATA COLLECTION

3.1 LITERATURE REVIEW

Understanding the Millennial generation

Millennials are the generation born between 1980 and 2000 and are precedents of Gen X. As the generation X retires, millennials will dominate the workforce. They are the next upcoming workforce of the nation and it is necessary to understand what motivates and satisfies the younger generation.

Millennials are family-focused and thus need to have a better work/life balance. The tragic events such as the 9/11 terrorist attacks have helped cause a new shift toward a more work/life balance. They enjoy working in teams are more tolerant. Compared to gen X, they have greater demands, they are impatient and self-important. They are known to choose their personal life over their professional responsibilities. They place more focus on their outside lives.

They prefer a job which is flexible and allows work from home. They prefer a collaborative environment with few rules and regulations. They desire more empathy in their workplace. They prefer meaningful work over well-paid work. They have a high social awareness and prefer work that is socially responsible. They require a structured organization.

Again, these qualities and definitions of Millennials come from secondary sources and literatures. There is a need to look more into this subject of matter to perceive what millennials really are. More research needs to be conducted over time to truly understand the impact this new generation is making.

Co-working spaces

Flexible working is a new concept that has been developed in the western countries. It allows the workers freedom to choose

Workplace is a place where work is produced, may it be making material goods, creating or transforming information or offering a service. Nowadays, there is a demand of workplace as an attractive physical asset and

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innovative designs need to be experimented with to understand its impact on the people. Workplace strategies like hot desking, hoteling, non-territorial office, etc. are being used. Traditionally office spaces were assigned to specific person at a specific location which no longer suit the demands of employees. Flexible spaces offer the option to choose from a diverse range of workplaces. 75 variables can play a role between workplace innovation and performance. They are clustered in 5 groups of: organization, work processes, end products, facilities and external factors. Post Occupancy Evaluation, a system that helps in understanding the impact of the design on users can be done.

The main building of Faculty of Architecture was destroyed by fire, as result of which they moved to a temporary building. The floor area was 32000sq.m. Which was less than that of the previous building. Their work environment was restructured with 800 members of staff. In the building, large spaces couldn't be converted to small spaces without a loss of space. Thus, the workers had to adapt to the space and had freedom in choosing the working environment. The concept of transparent and open office was used to enhance interaction. Spatial arrangements were made that grouped each department at the most adjacent area. Spaces were assigned activities from quiet study areas, communal areas to small meeting counters, lounge areas and coffee parlors. The high ceiling made the building more spacious. Hotdesking was incorporated where if the workstation is left for more than 2 hours, it should be cleared for another person to use. The space was more efficient in less floor area. Workbenches with bar height stools were installed with plug ins for laptops. The architect managed to create a sense of protection, scale and privacy.

A quantitative survey of the users was done which suggested that users found the new environment to be open and vibrant and the dynamic working area suited their requirements. Improvement regarding acoustics, layout, privacy and storage were pointed out. But the concept of flexible open office was somewhat satisfactory provided it gives efficiency over time and location.

Researchers experience that personal workplaces are more appropriate to their work and they need a permanent base to conduct research. Flexible workplace can make more efficient use of space in specific designated units, rooms, desk islands, meeting rooms, pantries, cells, etc. The concept aims to develop a landscape where social interaction is part of the routine.

Social impact of co-working spaces on the millennials of Gurgaon

There has been a tremendous change in the working environment of offices nowadays and the concept of coworking spaces has been introduced. Such spaces encourage the workers and increase their efficiency. They facilitate communication and interaction. Rather than creating a space to keep the users in one place, a space should be created to inspire and facilitate a deeper level of collaboration among the users. For example, widening the hallways so that people can easily stop and talk. The days are gone for when the workplace was a static environment. Today, the workplace must reflect the needs and values of the organisation and its people.

Gurgaon is today a millennial hub with good opportunities. There has been a shifting trend in workplace design in these offices. But does this trend actually meet the need of the millennials of Gurgaon or is just an adaptation of the western culture (Kurian 2017). Parameters like user preference, context of the place, etc. should be carefully considered.

In 2002, two Austrian entrepreneurs put an end to work from home and created a space where like-minded people could gather and work. In 2005, Brad Neuberg launched an official co-working space referred to as "9 to 5 group" in San Francisco. Since 2006, the number of co-working spaces has doubled.

Millennials usually look for meaningful work and great work-life balance. Co-working spaces is the viable solution to such requirements. It was found that in co-working spaces, 64% of users found it easier to get the work done; 91% have better interaction with others.

The start-up trend is boosting up in cities like Hyderabad, Bangalore, Delhi and co-working is the solution for them. Co-working spaces help users stay engaged and de-stress within the space. They cure them of loneliness. They serve the users at odd hours and guarantee independence and flexibility. They support people's motivation, ability, and opportunity to share knowledge and experiences. Wework, the Indian giant reeks of the tremendous growth of coworking industry in India.

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Research conducted by Veitch (2007) found that there are at least seven keys 'practical factors' which should be considered before any work-environment is formally implemented: noise, distractions, degree of enclosure, visual privacy, proximity, size of workspace and function.

In Gurgaon, case studies of 2 such spaces were done, the Whizzo Café and Go Hive Co-working. A survey was done to understand if the co-working space is better than the conventional offices. For collaborative working, users need spaces which are communal and social in nature, and also isolated and silent. Co-working is mainly described as a phenomenon of "working together as equals".

Go Hive Co-working space: Area - 90 sq.m

Features: Comfortable environment with variety in spaces and seating

Strong segregation of spaces into zones

Integration of natural light

Open plan concept used

Although the co-working space was lacking communal spaces, yet interactive environment was found between the co-workers because of small number of users and small size of the space.

Whizzo Café and Co-working: Area – 120 sq.m

18 co-workers were interviewed to understand the social impact of co-working.

Features: Variety in spaces and seating

Customised lighting and furniture

Vibrant colour theme

The space made a statement of collaboration with interactive and spill out spaces for users.

From the case studies, the following assumptions were made,

- Community – Collaborate – Change are three very good, choice words used to help define the social impact of a coworking environment. Co-working spaces encourage members to actively engage in their environment. Millennials prefer co-working spaces due to its flexibility, amenities and the social group provided.

3.2 Survey Analysis

The survey was done on corporate working professionals aged from 20 to 50 years and their idea of a perfect workplace was identified. 40% of the responses belonged to the age group of 21-year olds and around 30% of them belonged to the age group of 23-year olds. This accounts for the optimum 'millennial' age group response that was expected from the survey.

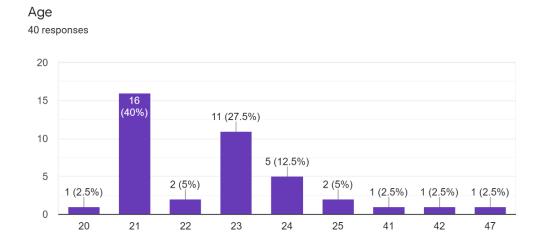


Figure 2

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Title/Position

40 responses

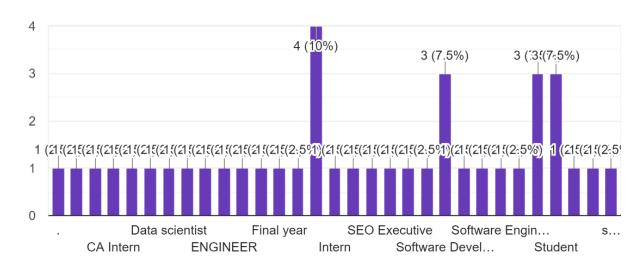


Figure 3

While most of the subjects were officially employed at companies, a certain percentage of them were pursuing internship as students.

Department/Organization

40 responses

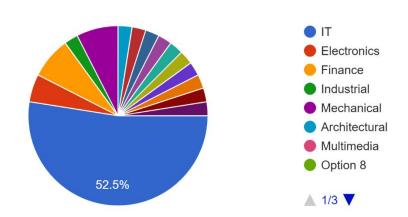


Figure 4

The most upcoming workforce of today's generation belongs to the IT department and this is the sector which spends maximum amount of its time in the workplace. Surrounded by technology and stressful workload in cubicles, the employees' response suggested that they really need to have a work/life balance. Other departments like finance, electronics and architecture also need a change of approach to workplace design.

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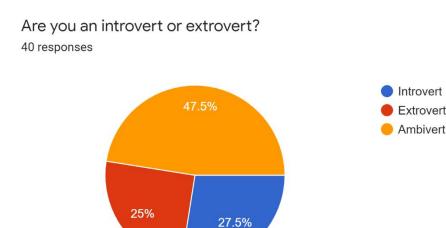


Figure 5

Though the design of a workplace depends on the requirements of the employees, it also depends on the personality of that employee. A space should not only satisfy the physical working requirements of an individual but also the psychological requirements. From the survey, it was found that almost 50% of the subjects are ambiverts i.e. they need a balance between their social time and personal time. 25% of the subjects are introverts who are reserved, and the other 25% are extroverts who are outgoing and usually prefer spending time with others. These personality traits need to be considered while designing a workplace that can provide a comfort space for each of its type.



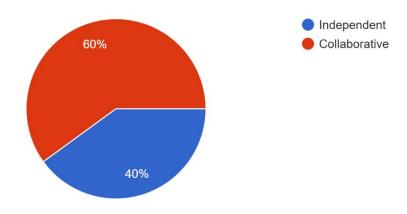


Figure 6

In an office, there are employees who work independently and there are ones who work collaboratively in teams. The space requirements of both vary to a great extent. For a team, it is important to have a common platform for sharing and collaborating, but at the same time each employee should be entitled to his/her segregated space. For an independent employee, it is important to create a space that is segregated but not completely isolated. The style of work of the employee thus has a role in the design.

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Which space would you prefer to work in? 40 responses

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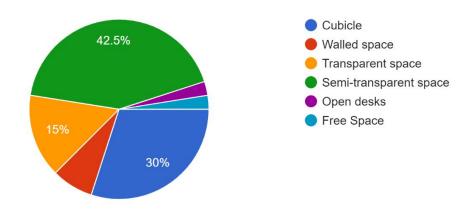
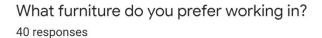


Figure 7

From the survey, it was found that maximum employees prefer working in semi-transparent spaces and cubicles for better productivity. 15% of them preferred fully transparent space while only few preferred walled a space. The personality of the employees reflects the kind of space they need. And it was clear that millennials have gone way far from the concept of walled offices and they prefer open and collaborative environments.



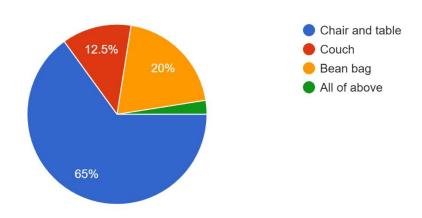


Figure 8

When it comes to ergonomics, it was found that around 30% of the subjects prefer not to work with the traditional chair and table. Rather they opt for comfortable and informal furniture like the couch and bean bag. But despite this, 70% of them do need a chair and table for working, which infers that this furniture maintains the work discipline in the place and helps in getting the work done optimally. Millennials do require the option of changing environments according to will. This not only helps break the monotonous work cycle, but also helps them relax in a way.

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Where do you spend your maximum time other than your workstation? 40 responses

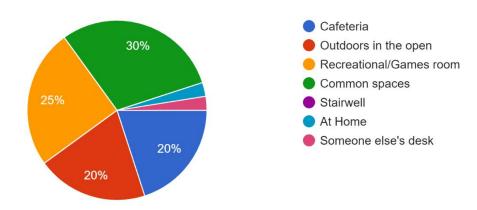


Figure 9

In an office space it is highly unlikely that all employees spend their time stuck in just one space for the whole day. It was found that 30% subjects spend their time in common areas when they are not working. Other spaces include recreational/games room, outdoor spaces and the cafeteria. It is important to design these spaces in a way that they are accessible by all, and do not disturb the other workplaces.



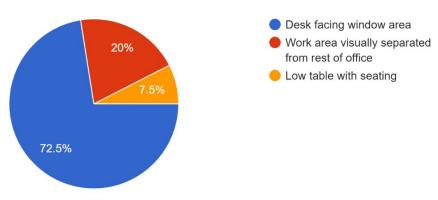


Figure 10

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When it comes to the position of desk or workstation, around 70% of the subjects claimed to have a desk facing the window area. This suggested that no matter what the interior of the office may be, people still prefer to have a visual connection to the outdoors. It makes them susceptible to the changing environment and keeps them connected with the hustle outdoors and time cycle of the day. 20% of the subjects preferred to work in an area that is visually separated from the office. This again defines how environmental psychology comes in play. For some employees, it is very important to create a congenial workplace. If not, their productivity may drop to a low level. Hence it is very important to consider their requirements. Though today the offices have westernized, and everyone prefers a table and chair to work, 7% of the subjects preferred a low table seating i.e. an Indian seating arrangement to work. While for some, this position may cause discomfort, some people feel comfortable working sitting down and working. Nowadays, owing to this requirement of the people, many libraries and book cafes have actually incorporated such seating spaces.

While working, are you happiest in a space buzzing with activity and people, or in a more solitary and quiet area?

40 responses

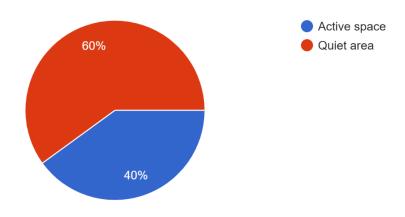


Figure 11

Which space would you like near your workstation? 40 responses

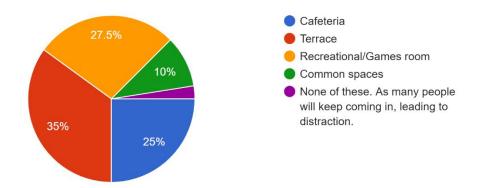
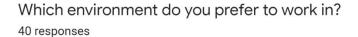


Figure 12

Location of spaces near the workplace matter in design as much as the workplace itself. From the survey, it was found that maximum subjects preferred to have a terrace next to their workplace. Spaces that open into a natural environment account for stress reduction and relaxation. Others wanted the games room, common spaces and cafeteria near their workplace.

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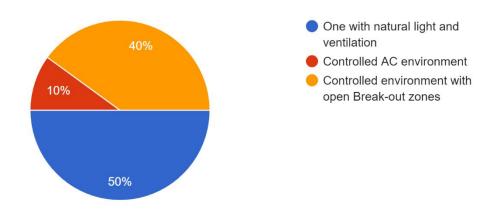


Figure 13

Today, maximum offices have a controlled AC environment for maintaining a neutral working atmosphere everywhere. From the survey, it was appalling that around 50% of them preferred an environment with natural light and ventilation. Today, it has become a trend to create controlled environments in offices, but through thoughtful architecture, natural light and ventilation can be made available using different strategies. From this, it is clear that millennials do prefer natural environments for working. Also 40% of them preferred to work in controlled environments with open breakout zones. This concludes that millennials cannot stay in a controlled environment for 10 hours straight. There is a need to plan floors with open environments.

In a building, which floor would you prefer to work on? 40 responses

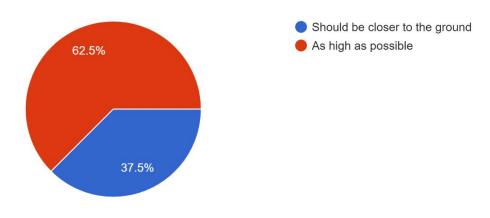


Figure 14

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When it comes to corporate offices, there is a notion that the higher the floor you work on, the higher your status in the building. Well, maximum millennials absolutely agree with this thought. Around 60% of them prefer working on a floor as high as possible. It not only delivers panoramic views around but also boosts the worth of the office. Around 40% of them prefer to work as close to the ground as possible. The closer the connection to the ground, the better the connection with nature.



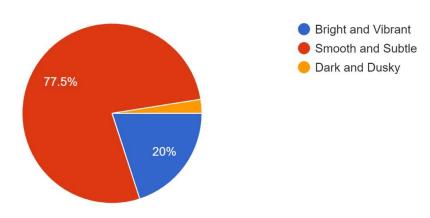


Figure 15

The colour scheme of a space can impact the vibe of the space just as much as the other factors can. Almost 78% of them prefer a smooth and subtle kind of a colour scheme which feels calm and doesn't hurt the eye. Around 20% of them prefer a bright and vibrant scheme that can indirectly impact their mood and working speed. Just a few users opted for a dark and dusky scheme. A workplace should have a color scheme which is generic but unique in its own way and something which evokes the feeling of a lively atmosphere.

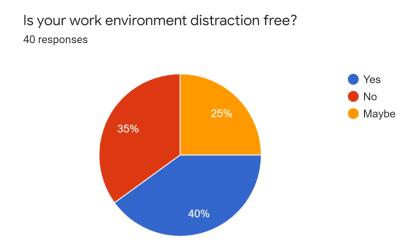


Figure 16

It was found that the work environments in offices are distraction-free in case of 40% of the subjects, while 35% of them don't have a distraction-free environment. It is important to plan out adjacent workspaces carefully. For most employees, main distractions come from the nearby telephone rings and phone conversations. Other distractions include machine noise, printer noise, radios, etc. This is when the layout of an office floor plan matters the most.

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The requirements of the individual users were also asked via open ended questions. Many responses suggested that users have a need to be in contact with nature now more than ever. Almost 70% of them suggested to incorporate natural features and terraced gardens and potted plants in the workplace. Nowadays, a neglected factor in design- natural sunlight was also among the requirements of some users. Other than architectural considerations, emphasis was created on the interior elements of design like furniture, lighting, colour, comfort and experience. It can be inferred that for a creating a good design, the interior spaces in an office require more thoughtful implementation for the better productivity and work/life balance of millennials.

4.0 CONCLUSIONS

Office and workplace design are constantly changing to meet the needs of the times and it has become necessary to consider the habits and expectations of the workforce. Millennials are the future of tomorrow and the workplaces need to be molded accordingly.

The literature reviews and the survey provide the background and details of the workplace design for millennials. Coworking spaces, the upcoming working style has a major role in workplace design. It can be concluded that there are 'n' number of factors to be considered while designing a space for millennials. Their way of thinking and living is very different from that of generation 'X'. Owing to these requirements and design parameters, an optimum workplace for millennials can be designed.

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