

A REPORT
ON
**Measuring the effectiveness and the productivity Of employees in the era of
Work from Home**

BY

Name(s) of the
Student(s)

ID.No.(s)

Teja Kumar Reddy
Nirvan Mundra

2018B3A30890H
2018B3A40718G

AT

Kansai Nerolac Paints Limited A Practice School-I Station of

BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI

June 2020

BY

Name(s) of the	ID.No.(s)	Discipline(s) Student(s)
C Teja Kumar Reddy	2018B3A30890H	M.Sc. Economics and B.E. Electrical and Electronics Engineering
Nirvan Mundra	2018B3A40718G	M.Sc. Economics and B.E. Mechanical

Prepared in partial fulfillment of the Practice School-I Course No.
BITS F211 AT

Kansai Nerolac Paints Limited A Practice School-I Station of

BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI

June 2020

ACKNOWLEDGEMENT

We would like to express our sincere gratitude towards the Practice School Division for providing us the opportunity to work in a well-known and prestigious company like Kansai Nerolac Paints. We further acknowledge our thanks to Dr. CP Kiran sir for helping us in connecting with the company professionals. Special thanks to Mr. Suraj sir and Mr. Gurvinder sir, HR department, Kansai Nerolac Paints for guiding us in the project. We would like to thank everyone who has put their efforts in providing this opportunity.

Abstract Sheet

BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE PILANI (RAJASTHAN)
Practice School Division

Station: Kansai Nerolac Paints Limited **Centre:** Mumbai

Duration: 6 Weeks

Date of Start: 18th May 2020

Date of Submission: 27th June 2020

Title of the Project: Measuring the effectiveness and productivity of employees in the era of work from home.

ID No./Name(s)/ Discipline(s) of the student(s):

2018B3A30890H/ C Teja Kumar Reddy/ M.Sc. Economics and B.E. Electrical and Electronics Engineering,

2018B3A40718G/ Nirvan Mundra/ M.Sc. Economics and B.E. Mechanical

Name(s) and designation(s) of the expert(s): Mr. Suraj Karra, Assistant Manager – Human Resources

Name(s) of the PS Faculty: Dr. CP Kiran

Key Words: Work from Home, Efficiency, Productivity, Secondary Research, Benchmarking Policies, Qualitative and Quantitative Modelling, Appraisal Cycle, Parameters, HR Department

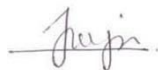
Project Areas: Operations Management, Human Resources Function

Abstract: The COVID-19 outbreak has resulted in millions of people across diverse sectors, working from home. For work from home to be feasible for the industry, it should not affect the productivity and efficiency of its employees than it should. This project report entails the appropriate model of work from home (WFH) with correct parameters and policies to measure the performance of the employees of Kansai Nerolac Paints Limited. From our findings of secondary research and benchmarking policies of WFH, we have come up with a suitable model of both qualitative and quantitative indicators and devised a new appraisal cycle for the HR department of Nerolac Paints. The report also discusses the history of previously imposed WFH practices and its pros and cons.



Signature(s) of Student(s)

Date: 5th June 2020



Signature of PS Faculty

Date:

Table of contents

ACKNOWLEDGEMENT	3
Table of contents	5
Introduction	6
Objectives	7
HISTORY	8
Advantages	11
Disadvantages	12
Work from home policies	13
Analysing WFH Policies	17
Benchmarking some Work From Home Policies	18
Productivity vs. Efficiency	19
How is the performance of an employee tracked?	20
Some HR Employee KPIs and KRAs	21
Mapping the work of employees.	22
Miscellaneous	23
CONCLUSION	24
References	25
GLOSSARY	26

Introduction

World is witnessing the impact of **COVID-19** on all facets of life, in all countries and in all industries. No one is certain about how much and how long the impact of the pandemic will last on the global economy. And Nerolac wants to start its operations with the health of its employees at safety, and in order to do that we need an optimal model of appropriate parameters to measure the effectiveness and productivity of the employees working from home.

The experiences from previous studies on the impact of work from home arrangements do not extend to the present environment as these arrangements were mostly limited to a select group of workers and/or organizations and were often self-selected. In this report we are going to have a detailed look into the concept of Work from Home (WFH), its history, its past application in the industries, the advantages and the challenges faced in adopting this method of working. We will be looking closely into the WFH policies and practices of Nerolac like manufacturing industries and gain perspective.

We will also provide insights about the WFH strategies that can be implied in all the departments in Nerolac – Manufacturing, Sales, Finances, IT, etc.

After doing an extensive secondary research on WFH and benchmarking its policies, we will be coming up with a new set of policies. And finally, we will be deriving a suitable WFH model with appropriate parameters and policies to ensure measurement of effectiveness and productivity of employees of Nerolac. We will also construct a new form of Appraisal Cycle for the employees of the Human Resources Department of Nerolac.

Objectives

- Benchmarking Work from Home policies and practices.
 - Comparing the policies of WFH adopted by Nerolac-like Industries and benchmarking them to form a new set of policies.
- Perform a detailed secondary research in the field of work from home.
 - Study all the previous conventional methods of WFH adopted in different industries and sectors and then extend it correctly for the present scenario of WFH for Nerolac.
- Devise a qualitative and quantitative model to measure effectiveness and productivity in work from home.
 - Using all the suitable parameters, create a statistical and a variant model.
- Construct an Appraisal Cycle for the employees in the HR department.
 - This year the task of giving appraisals to employees is not going to be like previously, we need to make a new form of appraisal cycle that measures their performance and award accordingly.

HISTORY

Work from home is not a new thing to the world, it's just getting popular with technology over the period in response to the needs and situations.

What has happened in the past?

Working remotely was the standard some time before downtown workplaces and driving even existed. Prior to the Industrial Revolution, everybody worked out of their homes. Gifted smithies, woodworkers, calfskin laborers, and potters each set up for business at their habitation and sold their merchandise from that point.

With the Industrial Revolution came a requirement for computerization and the formation of processing plants. Immense machines and huge scope creations expected representatives to be available in-house to finish their work. This is likewise when individuals began driving to assigned "office spaces."

And there after with the advancement in technology and due to demanding situations, the rebirth of work from home culture has taken place.

Here is the time lapse of how technology has bought the WFH culture.

1975: The principal "individual" PC is presented. Representatives are at last ready to work remotely and now they have the opportunity to do work at home and take it in a tablet or pc.

1990: The internet is born and helps the telecommuters to connect through email and virtual assistants.

1990: In a survey conducted by the Federal government proved that workers are more productive, have a better life and balance between work and personal life.

1994-1995: Companies like American Express, IBM, and AT&T begin permitting their representatives to work from home. With progress, the thought rapidly gets on and spreads.

2000s: Wireless web and broadband open the conduits. Remote representatives can at long last work without being attached to a physical area for their ethernet web association. This likewise makes moderate rates from dial up web an awful memory of the past.

2002: LinkedIn dispatches and interfaces a large number of experts over the globe. You can in any case connect with old companions or associates, contact potential businesses, and follow your preferred organizations to perceive what's going on this expert stage flaunting 562 million clients across 200 nations and territories.

2003: A flood of telecommuters motivates Skype, a superior specialized instrument for

virtual workers.

2012: Google presents its set-up of office apparatuses and computerized document stockpiling, known as Google Drive. This turns into the current workspace where representatives, both in-house and remote, get to significant records and documents while additionally teaming up and giving criticism continuously.

2016: Dell reports a yearly reserve fund of \$12 million since extending its working from home and remote work programs.

2018 and Beyond: "4.3 million individuals at present work from home in the United States at any rate half of the time," and this figure has become 150% in the last 13 years.

Which companies/industries have implemented WFH? And what are the jobs available for work from home?

Work from home is no longer limited to Multinational companies like Amazon or Amway. Improved innovation and the need to reduce expenses or potentially minimize costs have supported organizations, everything being equal and in an assortment of fields to make more work-from-home chances.

Health and medical services:

In the health area, the main organizations with work-at-home business incorporate medicinal services giants like Aetna, Magellan Health, Broad Path Healthcare Solutions, Humana, CVS Health, and UnitedHealth Group. The activity titles they have tried to fill included PC or telephone based employments, for example, account administrator, actuarial consultant, business-intelligence manager, case manager, medical writer, patient-education or case advocates, revenue-integrity director, and sales representative. Other recent remote positions include clinical care manager and registered nurse case manager.

Education and training:

With an emerging need for online education and remote learning there is an increased demand for online tutors. Many companies have seen this opportunity way before and already in race. Online learning platforms like Byjus, Coursera, and topper are now operating worldwide. Tutors for advanced subjects, such as calculus and physics, can earn a higher hourly rate. There are also opportunities to simply do standardized test scoring at home. Scoring jobs may require a teaching background or a college degree, at a minimum.

Organizations, for example, Appen, which assesses and arranges interchanges for universal customers—or EF—Education First, a worldwide language preparing and instructive travel organization—need individuals who can fill in as mediators, interpreters, and educational plan engineers.

Computers and Information Technology (IT)

A less astounding work-at-home-accommodating class is computers and IT, which is known for its dynamic way to deal with virtual workplaces. A few managers, for example, Red Hat, Salesforce, and SAP—extend employment opportunity postings in cutting edge (deals being one of the first strategic scheduling callings). Other job title tech organizations frequently look to load up with telecommuters incorporate positions, for example, venture supervisor, website specialist, programming designer, power-frameworks architect, and specialized essayist.

What were the reasons?

Employing qualified personnel to do their jobs remotely has a long list of beneficial aspects. These advantages stretch out to both the organization in general and the representative as an individual

- Offering remote work allows employers to hire qualified people, no matter their location
- Remote companies don't pay for office space!
- Save money on office supplies and furniture
- Employees will feel less stressed, which implies they will be more productive for the business

And many other benefits which have been mentioned in the later section.

In the era of COVID-19

Advantages

Extra time saved by not commuting to the office back and forth.

- Safety for health. A study suggests that people experience 25% less stress when working from home. And in this pandemic, workers need to stay at home for safety.
- Environment friendly. (lesser fuel consumption-less global warming)
- For employers, greatly reduces running costs. (Fewer overheads)

Flexibility of working hours.

- Alignment of your hours, more productive than forced office hours.
- More time for family and relationships.

More employees can be retained in the company.

- Lesser operation costs for the company.

No imposed dress code, you can just wear your pajamas all day long.

- According to a study, any company that enforces a dress code has a seemingly negative effect by 61% of people looking for a new job. Still, we dress to impress, but resent being told what to wear.

No office politics.

- No one is watching you; no colleague is judging you, no more external distractions.

Disadvantages

Workspace cannot be controlled.

- Distracting surroundings. (Ex- Noisy Neighbors, construction site opposite)
- Effectiveness and productivity may decrease.

No constant supervision.

- When you work from home your supervisors can't see that you work hard and put in tremendous effort into some tasks. Then you are judged on tangible results only.
- You procrastinate and move into slackness.

Less or no social aspect of life.

- Sense of solitude.
- Cabin fever.
- Isolation is a big drawback of working from home. You feel alone and get bored in the daily rut.

Lack of (self)motivation, self-discipline, and organization.

- You might become lazy, start neglecting your work routine and as a result fail to deliver your tasks on time.

Blurred boundaries between work time and non-work time.

- It's difficult to separate family life and work life. Sometimes get too engaged in personal chores and ignore work.

Lack of competitive spirit.

- Lack of human interaction and communication with co-employees and employers reduces the competitive spirit as well as it may decrease the productivity of employees.

Work from home policies

The agreement between employer and employee that clearly defines the expectations and responsibilities for employees who work from home is tentatively known as Work From Home policy. It consists of all the information and guidelines to work remotely.

During mandatory Work From Home situations (such as a health or safety crisis like COVID-19), it helps ensure that employees are set up for success and that they can continue to remain healthy and productive.

Having looked at the history, advantages and disadvantages of employees working from home, here is the detailed information of WFH policies of different companies.

OPPO

Before Covid-19, only 2 days per month was allowed prior to that employee had to report to his/her project manager.

but after Covid-19 all the employees were given guidelines to work from home. An employee can either choose to work completely from home or he/she can use the office space provided that they adhere to all the precautionary measures that were instructed by the company.

-Strictly all employees are instructed to remain in their personal cabin through out the working hours and all the meetings can be attended through video interfaces only.

After COVID-19: Guidelines for the employees

- For the employees who chose to work in office space, they can use the security which will be available 24/7. In case of emergency please contact reception.
- Cab requests need to be given one day prior mandatory for official purpose only.
- Please share your WFH-Zoom meeting report and DSR to respective representatives on a regular basis.
- Update daily health status report on TeamTalk.
- The employees who are working in the office during WFH time, please register for lunch by today evening.
- The daily disinfectant activities will be followed as scheduled.
- There is no extra pay for pc or wifi.
- Company will offer a PC to every employee and it's completely the employee's decision whether to use it or not.

TECNICS

TECNICS is a new breed of software concern, committed to catalyzing the competence and competitiveness of its clients by helping them succeed through the power of information technology. TECNICS is headquartered in Houston, Texas (USA) with its India Development Centre in Hyderabad and services in various locations across India.

Before Covid-19

- WFH is sometimes allowable and doable within certain job functions. Therefore, working from home should never be taken for granted or be a spur of the moment decision.
- The decision to WFH must be made with (and approved by) an immediate supervisor. TECNICS has the right to refuse to make WFH available to an Associate and may terminate a WFH arrangement at any time for any reason.
- The decision to approve a WFH arrangement will be based on factors such as the following:
 - Nature of position and job duties
 - Performance history
 - Related work skills
 - Impact of proposed delivery arrangement on the organization
- In a month the associates are eligible to take only 2 WFH (full day) options, 3 WFH (Half day).
- WFH exceeding the same may be considered as loss of pay.

After Covid-19

- Every employee is encouraged to completely carry out their work remotely and the office space will be closed completely until further notice.
- Each employee is provided with a laptop/PC by the company and the employee can use his/her pc provided that all the security and privacy instructions are followed.
- There is no change in basic pay or any other benefits for WFH.
- Everyday there will be 2 meetings
 - at 2 pm : internal standup meeting through zoom call.
 - at 6 pm : mentorship through zoom call
- Employees have to update DSR in google forms by the end of the day.
- All the employees are instructed to follow health guidelines and take care of their personal health, in any case if any employee is in a containment zone he/she may take 2 full pay leaves.(considering the mental health and welfare of the employee).

CERNER

Cerner is the leading U.S. supplier of health care information technology solutions that optimize clinical and financial outcomes. Around the world, health organizations ranging from single-doctor practices to entire countries turn to Cerner (NASDAQ: CERN) for our powerful yet intuitive solutions. Cerner offers clients a dedicated focus on health care, an end-to-end solution and service portfolio, and proven market leadership.

Before Covid-19

There were no special guidelines for work from home.

Only in case of emergency an employee is allowed to work remotely given that project senior is informed about the case.

After Covid-19

- Every employee has given guidelines to work remotely.
- There are no fixed hours for the work provided that he/she has to complete the work before deadline.
- One can reimburse the wifi/internet bill at the end of each month.
- Employees have to update DSR at the end of each day.

TECH MAHINDRA

Before Covid-19

An employee is allowed to work remotely provided that his/her manager approves for the same. There is no limit for the no. of days and the manager's sole decision is final.

After Covid-19

- Employees working with databases and servers are completely exempted from work for a period of three months(march, april, may) with 100% pay.
- Other employees are given guidelines to work remotely
- Each day all the employees are connected through Microsoft Teams.
- Everyday there are about three meetings
 - morning call: what they are going to do today?
 - afternoon : what is the progress?
 - evening : DSR
- There is no change in pay policy.
- Company will reimburse the internet and electricity bill.
- Company will also pay an amount upto 3000/month if a personal laptop is used.

ICICI BANK

Before COVID-19:

There were no specific assigned Work From Home days to the employees, but were given in the case of health issues and other emergencies.

After COVID-19:

- As ICICI Bank is an essential service, around 50% of its staff was working in offices and the rest from home.
- Now, all the employees are required to come to the office but in a rostered manner.
- iWork@home, a first-of-its-kind programme, allows women employees to work from home.

Deloitte

Before COVID-19:

Employees were allowed 90 days per year to work from home.

After COVID-19:

- No Electricity bill will be reimbursed.
- Mobile purchase reimbursements upto ₹25,000 with some terms and conditions applicable.
- Wifi bill can be reimbursed and before covid it was ₹500, after covid it is ₹1500.
- There is no change in basic pay.
- Meetings are held through Microsoft Teams and is decided by clients.
- DTE at the end of the day.

Analysing WFH Policies

COMMON

1. All the employees are connected at least once per day through different mediums and they are constantly monitored.
2. There is no change in basic pay.
3. Employees are offered to work in a laptop/pc which are provided by the company.
4. Employees are instructed to update DSR by the end of each day.
5. They were given strict instructions about the company's confidential data and privacy and other cyber-security regulations.

DISTINCT

1. There are no particular guidelines for an employee working in JPMC , he/she can work remotely as many days as his/her manager permits to do so. While many companies restrict WFH for a max. of 3 days per month.
2. Both CERNER and TECH MAHINDRA offer to reimburse their employees wifi and electricity bill.
3. TECH MAHINDRA also offers to provide a sum upto Rs.3000/month for using personal laptops.
4. TECNICS offer employees to take a max. of 2 days off if he/she lives in a Containment Zone , considering their mental health.
5. OPPO offers to work at their office if an employee faces any issue while working remotely (adhere to the condition that he/she takes all the precautionary measures).
6. An employee working with TECH MAHINDRA in databases and servers division are completely exempted from work for a period of three months(march,april,may) with 100% pay.
7. ICICI bank offers women to work remotely completely for one year.
8. Deloitte uses Automatic business Process Analytics Tool (APAT) to enable working from home with efficiency and security.
9. ICICI Lombard offers regularization of attendance for its employees.

Benchmarking some Work From Home Policies

Company Policies	OPPO	CERNER	TECNICS	TECH MAHINDRA	DELOITTE	ICICI BANK
Before COVID-19	2 Days per month	Supervisor's decision	2 Full days, 3 Half days	Manager's sole decision	90 days a year	Supervisor's decision
Meeting Timings	12pm and DSR at end of each day	No fixed time but has to update DSR	at 2 pm : at 6 pm :	Morning Afternoon Evening (DSR)	Not fixed (According to Clients)	Not fixed, according to employer
Electricity/WiFi Bill Reimbursement	No	Yes	No	Yes, upto Rs. 3000.	Yes, upto Rs. 1500	No
Change in Pay	No	No	No	No	No	No
Distinguishing Policies	Offers to work at their office with condition that all precautionary measures are taken	There are no fixed hours for the work provided that he/she has to complete the work before deadline.	employee can take a max. of 2 days off if he/she lives in a Containment Zone.	Employee working with databases and servers are paid fully with no work for 3 months	Automatic business Process Analytics Tool (APAT)	Around 50% employees were required to work at the offices.

Productivity vs. Efficiency

Productivity

In lowest terms productivity is defined as Output/Input.

- output per unit of labor, capital or equipment.
- in service sector it can be measured by {(amount of revenue generated)/(salaries)}

Factors determining productivity:

1) quality of machines

2) workers skills

3) speed of delivery

4) effective management

❖ Boosting productivity

- A. Innovation - productivity and innovation are linked to each other in such a way that increased will increase. Invention of new techniques increases productivity and increased productivity directly suggests that there is an area for innovation.
- B. Self confidence
- C. Higher engagement - Engagement in work, engagement with staff

Efficiency

Efficiency signifies a peak level of performance that uses the least amount of inputs to achieve the highest amount of output. Efficiency requires reducing the number of unnecessary resources used to produce a given output including personal time and energy. It is a measurable concept that can be determined using the ratio of useful output to total input. It minimizes the waste of resources such as physical materials, energy, and time while accomplishing the desired output.

- Best possible utilisation of resources under given circumstances.
- Lower unit costs.
- Eliminating waste and maximizing quality.

How is the performance of an employee tracked?

Key Performance Indicators (KPI)	Key Result Areas (KRA)
<ul style="list-style-type: none"> Key Performance Indicator (KPI) means a system, used to represent how well the business can achieve its goals. It exhibits the factors leading to the success of an organization. 	<ul style="list-style-type: none"> Key outcome area (KRA) refers to the business organization's outcome sector for which the department or unit is responsible. They define the major areas that require outstanding performance in order to survive and gain a competitive market position.
<ul style="list-style-type: none"> It is a metric. 	<ul style="list-style-type: none"> It is a strategic factor.
<ul style="list-style-type: none"> Quantitative in nature. 	<ul style="list-style-type: none"> Qualitative in nature.
<ul style="list-style-type: none"> Evaluates the success of goals at various levels. 	<ul style="list-style-type: none"> Outlines the scope of the job or product.
<p>E.g-</p> <ul style="list-style-type: none"> Sales growth from previous month Average profit margin on sales Outreach contacts per sales representative. 	<p>E.g -</p> <ul style="list-style-type: none"> Increase sales from the previous period. Increase profit margin from previous period. Increase sales contacts per sales representative.

Some HR Employee KPIs and KRAs

No.	Key Result Areas	Key Performance Indicators
1.	<i>Recruitment</i>	Average lead time to recruit employees.
		Performance score of new employees within 6 months.
2.	<i>Training and Development</i>	Training Hours per Employee/Year.
		% difference in the rate of productivity before and after training.
3.	<i>Performance and Career Management</i>	% of employees that fully execute their Individual Development Plan.
		% of employees that participate in a career coaching program.
4.	<i>Employee Retention and Productivity</i>	% of employees that leave the organization in a given time period.
		Profit per employee.

Mapping the work of employees.

Companies use various software tools to track and measure productivity.

-What does a software do and track?

- They track the task on which team is working.
- Time spent on projects. And Turn Around Time(TAT) for tasks.
- Time spent on different applications.
- Block sites that are distracting.
- Also help in effective scheduling of time.
- Updates about the work/project.

Software tools that are being used by companies

TECH MAHINDRA - SCCM(System Centre Configuration Manager)

- Reduces manual tasks and lets us focus on high value projects.
- Maximize hardware and software investments.
- Empower user productivity by providing the right software at the right time.
- Gets real-time actions on managed devices.
- Enables cloud-powered analytics and management for on-premises and internet based devices
- Also enables comprehensive management of servers, desktops and laptops.

JPMC and CERNER - JIRA tool

- JIRA is a project management tool used for issue tracking, bug tracking and project management purposes.
- Plan-Create user stories and issues, plan sprints, and distribute tasks across your software team.
- Track-Prioritize and discuss the team's work in full context with complete visibility.
- Helps with total spent versus the estimation, which helps us to understand the budget very precisely.
- **issue tracking** - allows to record and follow the progress of every problem or "issue" that user identifies until the problem is resolved.
- Similar softwares:VersionOne,PivotalTracker,WorkZone

TECNICS- GitLab

- GitLab is a single application for the entire DevOps lifecycle that allows teams to work together better and bring more value to your employees, faster.
- It provides all the options to pull and push a code and it is best in terms of commits.
- Allows users to easily store their code projects and files in a safe and secure environment, allowing easy collaboration amongst users.
- Delivers a flexible and powerful issue tracker that scales from small teams to large complex organizations.
- Alternatives for GitLab:Bitbucket,Jira,Jenkins,CircleCI.

Miscellaneous

- Talking about other companies, most of the use their own in-house management systems like -
 - Deloitte has specific dedicated pages for WFH employees and to track their activities.
 - ICICI Bank uses its app “Universe on the move”, which uses Geo-tag technology, that marks the location of the employees working location. The app also offers Calender and other management tools.
- Other Project Management softwares are- Slack, Trello, Microsoft Project, Asana,etc.
- Uberagent is a browser activity tracking software.

CONCLUSION

While telecommuters of the pre-Industrial Revolution days may share nothing for all intents and purposes with telecommuters of the present, it's despite everything confirming that remote work has been discreetly advancing since the start of the workforce. What's more, since the advantages exceed the cons, remote work gives no indications of fading away.

Because of progressions in innovation, which just keep on improving and quicker, it will just get simpler for employees to work remotely and team up essentially and companies will try to hire and retain more capable employees. Be that as it may, this additionally implies the two gatherings should adjust to the evolving times.

Employees should get settled with remote tools and have the control required to be gainful out of the workplace. Without aching these critical abilities, remote work won't be as pleasant or productive.

Also, businesses who make approaches advancing remote work must encourage a domain that guarantees virtual representatives can flourish. Doing so will likewise pull in top ability from everywhere throughout the world.

In this report, we have done extensive secondary research in the field of Work From Home and found out the policies of different companies and benchmarked them for easier use by Nerolac. At the end of this report, we are finding out the major parameters that can be analysed to measure the productivity of employees working from home and also their efficiency. We also have researched the different types of softwares that are being used by these companies for mapping the manpower productivity of their employees and also found some alternatives or similar softwares or better ones that can be used for mapping productivity. The different KPIs and KRAs we have mentioned above can be recorded in these softwares and used in evaluating the performance of an employee and also used in the Appraisal cycle.

References

<https://www.freecodecamp.org/news/my-personal-tips-on-working-from-home-during-this-covid-19-season/>

<https://economictimes.indiatimes.com/magazines/panache/work-from-home-has-been-successful-during-covid-19-lockdown-what-next/articleshow/75470580.cms?from=mdr>

<https://www.thehindu.com/opinion/op-ed/work-from-home-in-the-time-of-covid-19/article31207008.ece>

<https://www.theweek.in/news/biz-tech/2020/04/29/the-work-from-home-culture-will-likely-outlast-covid-19-lockdowns.html>

<https://www.salary.com/passages/5-ways-to-create-an-effective-work-from-home-policy/3/>

<https://www.fundera.com/resources/working-from-home-statistics>

<https://workingfromhomeinsider.com/10-reasons-why-companies-offer-work-from-home/>

<https://www2.deloitte.com/us/en/insights/focus/human-capital-trends/2017/redesigning-performance-management.html#>

<https://technologyadvice.com/project-management/>

<https://www.smartsheet.com/content/key-result-areas>

<https://keydifferences.com/difference-between-kpi-and-kra.html#:~:text=KPI,department%20or%20unit%20is%20responsible>

<https://www.indiatoday.in/technology/features/story/working-from-home-due-to-covid-19-these-are-all-software-apps-and-hardware-that-you-will-need-1657235-2020-03-19>

<https://about.gitlab.com/blog/2018/06/11/why-move-to-gitlab/>

<https://docs.microsoft.com/en-us/mem/configmgr/core/understand/introduction>

https://www.atlassian.com/software/jira?&aceid=&adposition=&adgroup=93058443100&campaign=9124878600&creative=415542634732&device=c&keyword=jira%20tool&matchtype=e&network=g&placement=&ds_kids=p51242180612&ds_e=GOOGLE&ds_eid=700000001558501&ds_e1=GOOGLE&gclid=EAlaIQobChMlueiXpbWa6gIVmgsrCh2MswzUEAAYASAAEgJc3_D_BwE&gclsrc=aw.ds

GLOSSARY

Telecommuters- known as working from home (WFH), working remotely, or e-commuting—is a work arrangement in which the employee works outside the office.

Sustainable development- that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Appraisal Cycle- A performance **appraisal** is a regular review of an employee's job performance and overall contribution to a company. Also known as an "annual review," "performance review or evaluation," or "employee **appraisal**," a performance **appraisal** evaluates an employee's skills, achievements and growth, or lack thereof.

Benchmarking- Benchmarking is the practice of comparing business processes and performance metrics to industry bests and best practices from other companies. Dimensions typically measured are quality, time, and cost.

Secondary research- Secondary research involves the summary, collation and/or synthesis of existing research. Secondary research is contrasted with primary research in that primary research involves the generation of data, whereas secondary research uses primary research sources as a source of data for analysis.

Quantitative- relating to, measuring, or measured by the quantity of something rather than its quality.

Qualitative- relating to, measuring, or measured by the quality of something rather than its quantity.