

DEGREE PROJECT

Enhancing productivity in Corporate Functions for Incedo Technologies

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PROGRAMME : Masters of Design (M. Des)

GUIDE : S.GURUPRASAD

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INDTERDISCIPLINARY DESIGN FACULTY (STRATEGIC DESIGN MANAGEMENT)



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NATIONAL INSTITUTE OF DESIGN

The Evaluation Jury recommends KRASHAGI SAINI for the
Degree of the National Institute of Design
IN INTERDISCIPLINARY DESIGN (STRATEGIC DESIGN MANAGEMENT)

herewith, for the project titled "ENHANCING PRODUCTIVITY IN CORPORATE FUNCTIONS"
on fulfilling the further requirements by*

Chairman

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Acknowledgements

I had wonderful group of people who have helped me in this journey of successfully completing my graduation project. Firstly, I would like to thank my parents for always trusting me and motivating me in whatever I do. I thank them for their constant support.

I would like to thank my college National Institute of Design for giving me this opportunity to pursue my graduation project along with my guide S.Guruprasad, who is the course co-ordinator of Strategic design management who approved my Graduation Project and my co-guide Jitender Rajput.

I would like to thank Neha Saraswat, Director of Design at Incedo Inc. for giving me the opportunity to do my Graduation Project with the organization. Also, under her mentorship, I got exposure to a lot of things professionally and personally which helped me grow as a person.

I would like to thank the entire team of Digital and Analytics especially Incedo Design studio. I am extremely grateful to all the people at the Incedo family who helped me in the successful completion of this internship.

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Last but not the least, I am grateful to my siblings Keshav and Nimanshu for their support, help and love.

Preface

In today's VUCA world, work pattern is changing drastically and therefore organizations need to leverage themselves so that they can be competitive in the marketplace and make a profit. To achieve the same organizations constantly reinvent, renovate and 'design' their business strategies, processes, tools and techniques. Thus, my graduation project was based on "Enhancing productivity in Corporate Functions".

The objectives of the project are as follows:

Exploring the ways and opportunity to :

1. Enhance productivity by ensuring transparency and Inclusivity in the system.
2. Exploring new ways to collaborate and making people more accessible for the project to complete on time.
3. Design a framework to allocate people to projects as per skillset.
4. Analyzing corporate culture to identify creative capabilities that leverage the company's best practices leading to productivity.

All my learning from strategic design management helped me in navigating through the project. Different modules at SDM like Leadership, System design, Understanding Human Behaviour, Understanding Social Behaviour and Designing for Behaviour Change was put to application.

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1.1 The Institute - NID

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1.3 The Organisation - Incedo

1.4 The Team @ Incedo Design Studio

1. Introduction



National Institute of Design, PG Campus- Gandhinagar

The Institute - NID

The National Institute of Design (NID) is internationally acclaimed as one of the foremost multi-disciplinary institutions in the field of design education and research.

The establishment of NID was a result of several forces, both global and local. The late 1950s saw a confluence of these forces, and this time would be a significant one for Indian culture and education. This was a time of reappraisal and reconstruction in a newly independent India. The Modern Movement, the philosophy of Machine Aesthetics, and revolutionary experimentation in the arts, architecture and design were all taking place at the same time. There was a search for the Indian identity across all aspects of life.

Based on the recommendations made in the India Report, the Government of India with the assistance of the Ford Foundation and the Sarabhai family established the National Institute of Industrial Design, as it was originally called as an autonomous all-India body in September 1961 at Ahmedabad. Gautam Sarabhai and his sister Gira were played a major role in the establishment and early years of NID. This unique curriculum and revolutionary educational philosophy remain part of NID to the present.

It is also recognised by the Department of Scientific and Industrial Research, Government of India as a Scientific and Industrial Research Organisation.

The Business Week, USA has listed NID as one of the top 25 European & Asian programs in the world. The institute functions as an autonomous body under the Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, Government of India.

NID has been a pioneer in industrial design education after Bauhaus and Ulm in Germany and is known for its pursuit of design excellence to make Designed in India, Made for the World a reality. NID's graduates have made a mark in key sectors of commerce, industry and social development by taking role of catalysts and through thought leadership.

NID has been declared 'Institution of National Importance' by the Act of Parliament, by virtue of the National Institute of Design Act 2014.



SDM batch of 2017

The Programme - SDM

In today's rapidly changing VUCA world, businesses are increasingly required to have the ability to create opportunity out of the ambiguous, tangibility out of the intangible and create worth and wealth out of the constraints.

Strategic Design Management as a discipline is about finding new business opportunities. SDM is about redefining and redesigning management processes, strategies and leadership paradigms through strategically designed interventions.

It applies a design-based creative, systemic and holistic approach to business, organizational and management processes. Re-inventing tools and techniques to make them more efficient, effective and human-centric.

Enables a deeper understanding of the human, social and organizational behaviors, motives, intents, desires and drivers and how these can be used to design strategies that help achieve the organizational goals and deliver the legitimate value, worth and wealth.

This can only be achieved by the capability and the capacity to continuously contextually reinvent, renovate and 'design' their business strategies, processes, tools and techniques.

The competitive edge of the enterprises of the future will be dependent on their ability and agility to dynamically steer and realign their modes of operation and further increasingly on their ability to master the intangibles and the multifarious.

The courses range from the basics in design and management to design research, social behaviour, cognitive neuroscience, multi-sensory processes, entrepreneurship, playfulness and gamification, designing strategies, aesthetic appreciation, behavioural economics to neuro-marketing, experience design, design audit to service and systems design, creative strategic leadership that ultimately lead to an ability to design contextually effective strategies, policies, business processes, tools and techniques for any and all sectors.



Vision

A World-Class Digital and Analytics firm that is a trusted, long-term partner for global enterprises, is recognized as an industry leader in chosen emerging technologies, is an employer of choice, and delivers superior growth and financial performance.

Mission

Enable our clients to maximize business impact from technology by:
Harnessing transformational impact of emerging technologies and Bridging the gap between business and technology.
Become an employer of choice by being '**employee first**' in all processes and practices.

Image source: www.incedoinc.com

The Organisation - Incedo

Incedo is a Bay Area headquartered digital and analytics company that enables sustainable business advantage for their clients by bringing together capabilities across Consulting, Data Science and Engineering to solve high impact problems. Incedo believes in blurring the boundaries between services and products and delivering unified solutions that are designed to maximize adoption, impact and client success.

Incedo is a Latin word - pronunciation: **"in-see-doe"**, meaning: **"advance"**, **"march forward"**. An Incedoer gets things done in our spirit of innovation and our passion to help our clients grow leaps and bounds.

We deliver business impact to our clients from strategy to execution, using our best-of-breed business, technology and product solutions.

We put digital at the core of your enterprise and enable exceptional customer experience.

8 CORE Values of Organization

Client Impact

- Put Client's interest first
- Trusted Partner - always deliver what we commit
- Take Ownership - be Proactive not Reactive
- Go Beyond - make gamechanging difference for clients

Long term

- Take long-term bets on clients, capabilities & people
- Be audacious and think big, and then stay the course
- Focus on right methods over outcomes

Excellence

- World-Class - highest quality in all we do
- Focus - do few things but do them well
- Positive attitude – solution oriented, bias for action
- Relentless dissatisfaction - continuously raise the bar

Embrace Change

Understand and adapt quickly to external changes

- Be entrepreneurial
- Invest in continuous learning and innovation
- Be a change agent for our clients

Commercial Focus

- Ensure commercial rigor in decision-making
- Price for Value
- Be frugal but effective
- Spend like its your own money

Grow Leaders

- Hire hi-quality talent
- Commit to growing leaders
- Provide stretch opportunities
- Hold high performance standards

One Team

- Commit to common purpose
- Break silos, Collaborate - bring the best of Incedo
- Transparent communication
- Respect for each other
- Be fair, not political

Integrity

- Uphold high ethical standards
- Do the right thing, not the easy thing
- Empower but zero tolerance for breach of trust



Incedo design Team

The Team- Incedo Design Studio

Incedo India design team is based in Gurugram. The design team in Incedo is under Digital and Analytics horizontal. Group of data engineers, data scientists, digital product designers and Data Analysts work together to create impactful business solutions.

Incedo design studio was established in 2016 when they realized the potential in digital products and apart from being a service consultancy firm they wanted to deliver delightful digital experience.

Incedo has two design teams one based out of Bay Area which is in close proximity with the leadership, which makes most of the design decisions. On the other hand design team in India takes care of project delivery.

There is close interaction with data science team and developers. Incedo design team is led by Neha Saraswat who is Director of Design at Incedo India. Apart from that there are several other designers who are located in different locations like Chennai, Pune and Bangalore. Each individual in the team is equally talented.

- 2.1 Initial Problem Brief
- 2.2 Research Approach
- 2.3 Project Journey Mapping
- 2.4 KPI Tree
- 2.5 Systems Map
- 2.6 Findings
- 2.7 Problem with Initial Brief
- 2.8 Re-Defining the Brief

2. Project Brief

Journey from Initial Brief to Final Brief

Initial Project Brief

Finding benchmark patterns in the three verticals i.e life sciences, financial services and communication industry.

The company recommended the end output of the project in the form of a kit, framework or a model that can be used universally across the three verticals i.e Life science, financial services and communication.

Also, the end deliverable could be used by the company which defines a process that can be followed when a new project is undertaken and delivered to clients. It should explain every aspect of project in a holistic way in one canvas to all the stakeholders involved in the process. It should also be helpful for organization to onboard new clients.

Decoding the Brief

What does benchmarking means in this context

In simple terms benchmarking means setting a level that must be followed. Benchmarking is a process of measuring the performance of a company's products, services, or processes against those of another business considered to be the best in the industry, aka "**best in class.**"

The point of benchmarking is to identify internal opportunities for improvement. By studying companies with superior performance, breaking down what makes such superior performance possible, and then comparing those processes to how your business operates, you can implement changes that will yield significant improvements.

Getting into the details

1. Internal process improvement in terms of efficiency: If a process takes 10 steps to finish how can it be done in 8 steps or less.
2. Identifying problem without going into the solution.
3. Competitor analysis / Trend analysis in market.
4. New client acquisition, business expansion, showing capabilities in different domains.

It is a process of measuring :

- Performance of products
- Service
- Processes

This is then followed by identifying Internal opportunities for improvement and comparing processes to know how business operates. To accomplish this it was further divided into three levels :



Research Approach

I used TEDW method, Tell me about..../Explain...Describe...Walk me through.

These open ended questions led to stories and conversations, giving me much needed context and right insights, rather than having to ask a continuous stream of yes/no questions. The research was divided into two phases. Exploratory phase was about 'looking for something' and discovery phase was 'when I found it'.

I. Exploratory Phase

In the exploratory phase, I carried out research in order to know "Who are our users and what are they trying to do?"

Exploration phase involved Understanding the organization in terms of **metaphors**.

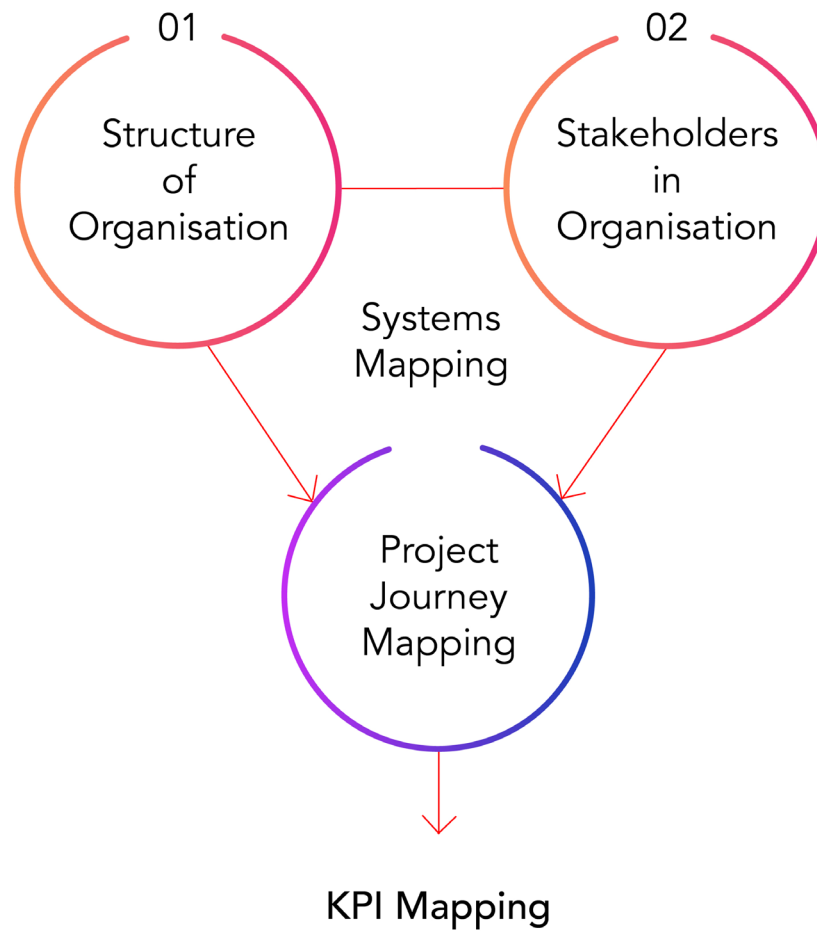
The exploratory phase was more about exploring the **structure of the organisation** along with **stakeholders**, one thing that is binding both i.e structure of organization and stakeholders is the **project** which comes within the organization.

II. Discovery Phase

In this discovery phase, I started with secondary research followed by Primary research but after a point of time Secondary research and Primary research went hand in hand. Also, it was like a loop that primary research led to secondary and secondary led to primary.

The discovery phase was understanding the system in a more holistic way and doing '**Systems Mapping**' along with '**Key Performance Indicators Mapping**.'

Somewhere between Exploration phase and Discovery phase '**Project Journey Mapping**' emerged.



I. Exploratory Phase

Metaphor for Organization structure

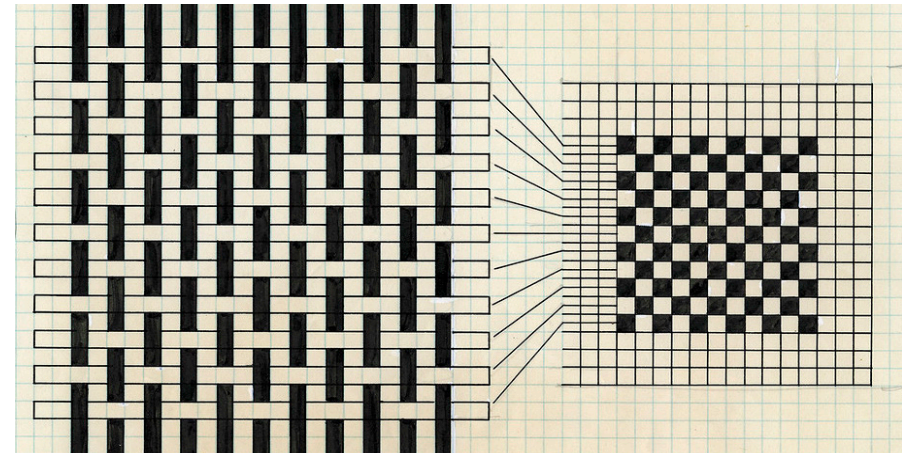
Organizations are many things at once - they are complex, multifaceted and paradoxical. That's why the challenges facing management are often so difficult.

In any given situation there may be many different tendencies and dimensions, all of which have an impact on effective management.

Metaphors provide a comprehensive view of the organization and management from the perspective created through the metaphor.

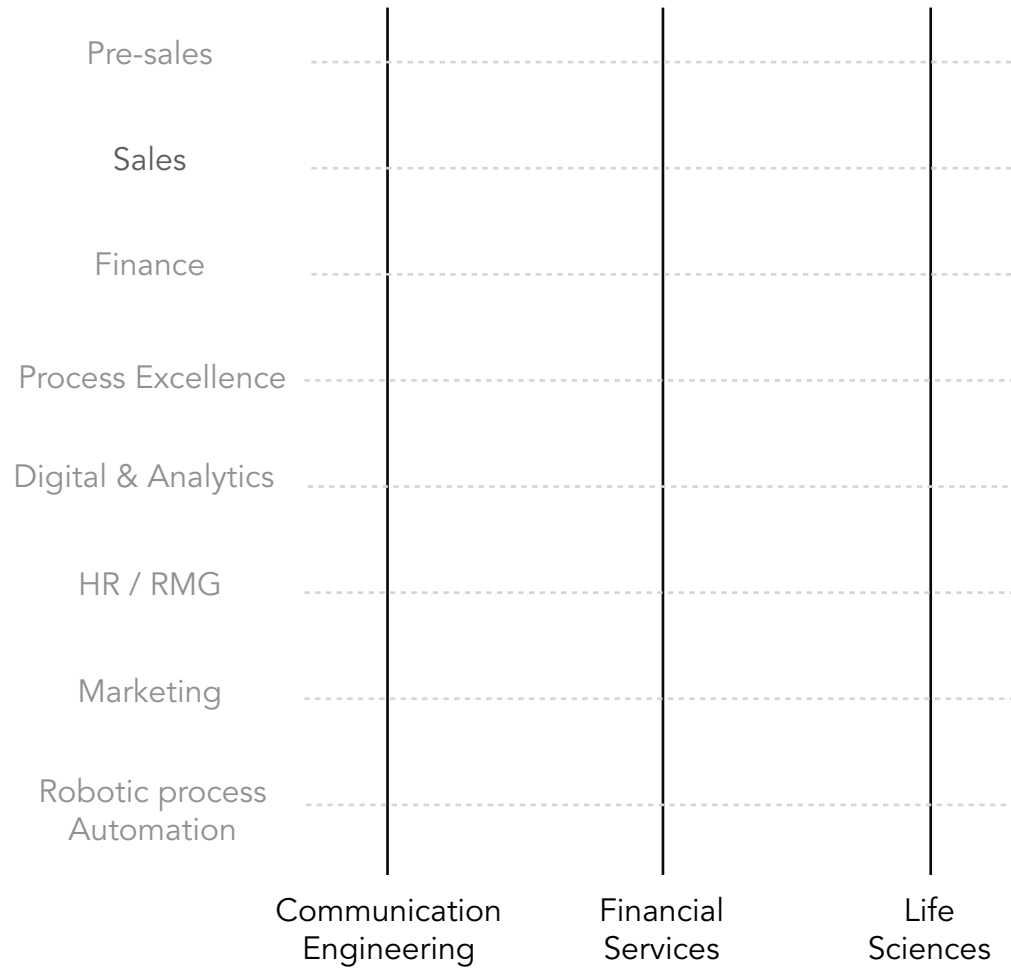
Each generates important insights. But taken to an extreme, these insights encounter severe limitations.

'Fabric weaving' is one such metaphor that is most relatable to this organization.



Warp and weft are the two basic components used in weaving to turn thread or yarn into fabric. Same way different horizontals and verticals constitutes an organization. This analogy helped me in mapping the organization structure further.

Structure of organisation



Client Landscape



Source: Incedo Hub

Organization Capabilities

Financial Services

1. Wealth Management (WM)

- Experienced in digitization of broker dealer platforms.
- Automation of underlying processes to unlock operational efficiencies.
- End-to-end analytics transformation with underlying flexible data architecture build out.

2. Payments

- Deep expertise in payments aggregation platform development.
- Alternative networks, currencies
- Real-time payments.
- Digital wallets, payment tokenization.
- Payment insights & analytics.

3. Digital for Consumer Banking

- Effective personalization and customer journey enhancement for upsell/cross-sell.
- Seamless enablement of omni-channel experience for customer.
- Single view of customer using AI/ML engine on multiple datasets (internal & external)
- Digital customer onboarding.

Communication Engineering

1. Core Networking & Security

- Industrial Switch and Router development for Transport, Utility & Mission Critical Applications.
- Deep experience in increasing network routing performance.
- Cloud-based Enterprise Cyber Security Solutions.

2. Digital, Analytics & Data

- Digital transformation in wireless retail.
- Data modeling, design and architecture for integrated operations at scale.
- Cognitive framework for one-click and Voice/ NLP solutions using ML/AI.

3. Cloud Enablement & Virtualization

- Platform & security implementation for Cloud based Radio Resource Management at 4G/5G scale.
- Development of SDN, NFV, and Service Orchestration stack.
- Modernization of OSS/BSS functions at scale for cloud-consumer.

Life Sciences

1. Digital Engagement & Analytics

- Personalized targeting across physician and patient touchpoints (omni-channel enablement)
- Multi-channel targeting of physicians to improve their access and engagement.
- Use of patient journey mapping and ML-base recommendations to personalize.

2. R & D Productivity / KM

- KM Platform (Interpret TM) to boost R & D productivity.
- AI-based utilizing NLP, ML
- Automated acquisition of data from varied sources/formats. and preprocessing leading to NLP & ML-driven extraction.

3. Commercial & Data

- Deep experience in E2E solution development in different commercial data scenarios
- Marketing operations & analytics – measurement & tracking of marketing program effectiveness
- Sales ops & analytics – sales data onboarding, managed market reporting and Veeva CRM

Stakeholders in Organization



Saurabh Mittal
Chairman



Nitin Seth
CEO

Executive Leadership



Anupam Wahi
Head - Communication
Engineering & Media



Ashish Choudhary
Head – Life Sciences



Vikram Chandna
Head – Financial Services



Shailaja Iyer
CHRO



Vishal Gauri
CSO



Roger Castillo
CTO



Manu Lavanya
COO

Capability



Pratul Chopra
Digital & Analytics



Subhasheesh Anand
Product Management

Delivery



Pratyush Kumar
Communication
Engineering



Manish Gupta
Communication
Engineering



Anand TN
Financial Services



Amit Sharma
Life Sciences



Kumar Ashish
IMS



Ashish Gupta
Analytics



Pamela Sharma
Business Operations

Enabling Functions



Manish Saxena
Finance & Accounts



Kiran Acharya
IT Infrastructure &
Information Systems



Ajay Dheer
Process Excellence



Anuj Duggal
PMO and Pre-Sales

Source: Incedo Hub

The hierarchy of business consists of 3 levels:

1.Top Level Management:

Control and direction of the overall organization.

2.Middle Managers:

Execution of organizational plans in accordance with company norms. Intermediator between the top and first level.

3.First Level Managers:

Role models of employees and staffs. Control and direction of day to day activities.

While those on the higher level are bestowed with more decision making and controlling power, those on the lower level in hierarchy take direction from the top level and work their way up by complying with the corporate laws set by the higher level management.

The employees are stationed at the base, directed and controlled by a small group of supervisors or senior level executives who in return are administered and directed by managers or team leaders and this way, each level of staffs is directed by their immediate senior level until the highest level is reached the CEO or board of directors.

1.Top Level Management

The CEOs, COOs, Managing Directors, Chairman, Presidents and Vice Presidents of an organization form the Top Level Management. They are accountable for the growth of the company and hold the maximum responsibility.

Owners are also part of the top level management in the business hierarchy. The personnel of this level are involved in creating the vision of the company, setting the long and short term goals, and hiring the senior managers.

Their decisions and actions reflect in the overall performance of the corporate. They deal with the totality of the business system. They majorly engage themselves in scanning, navigating, and mobilizing the external and internal business environments.

They are accountable to the stakeholders of the company and general public. The profits and losses are distributed among the top level management on the basis of their share percentage. They should possess extraordinary decision making, leadership, and reasoning and cognitive analysis skills.

2. Middle Managers

The second level of the hierarchy of business includes the managerial designations such as assistant managers, regional managers, senior managers, deputy managers, managers etc. They are the most important part of the company and are bestowed with huge roles and responsibilities.

Middle managers coordinate with the top level and proceed to execute organizational goals set by them. These managers are accountable to the CEOs and Board members of the company.

They are, in fact, the backbone of the corporate as they devote the maximum time in organizational development. They are also the minds behind yearly, quarterly and monthly operational and financial objectives. They have following responsibilities:

- Execute plans
- Reports to top level
- Directs lower level managers
- Define and discuss information
- Create and implement project and project groups
- Monitor group level performance
- Solve grievance
- Implement reward system and incentive plans

3. First Level Management

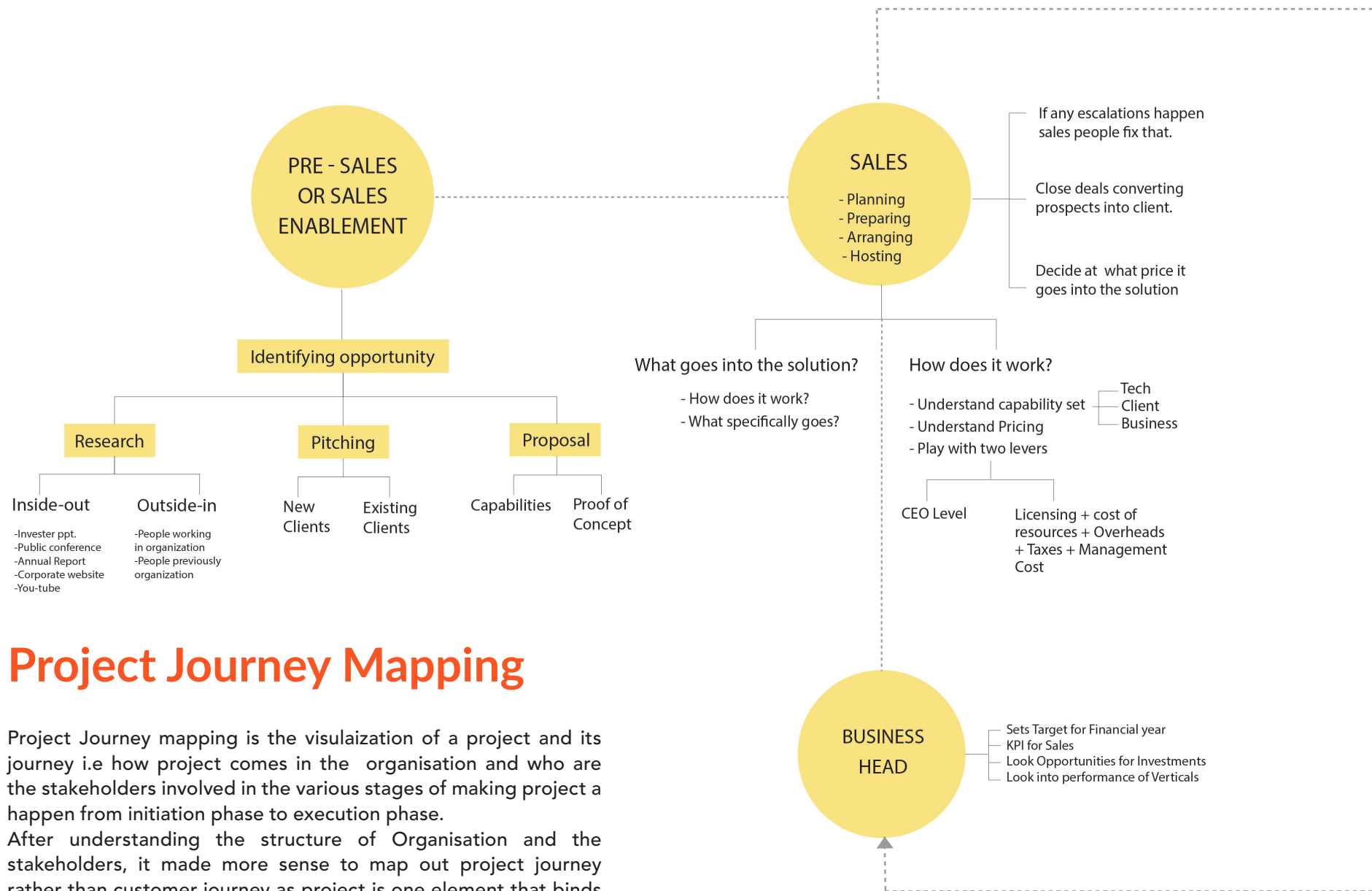
The front line employees who perform the day to day activities and deal with various units of operations constitute the first level of management.

Team leaders, office managers, crew head, department head and supervisors fall into this category. They are directly accountable for the working operations and daily objectives of the organization.

They take directions from the middle managers and work directly with the employees and staffs. They talk to the employees, workers, laborers, and staffs on a daily basis, take updates, solve internal issues and are part of grievance and complaints department.

They have following responsibilities:

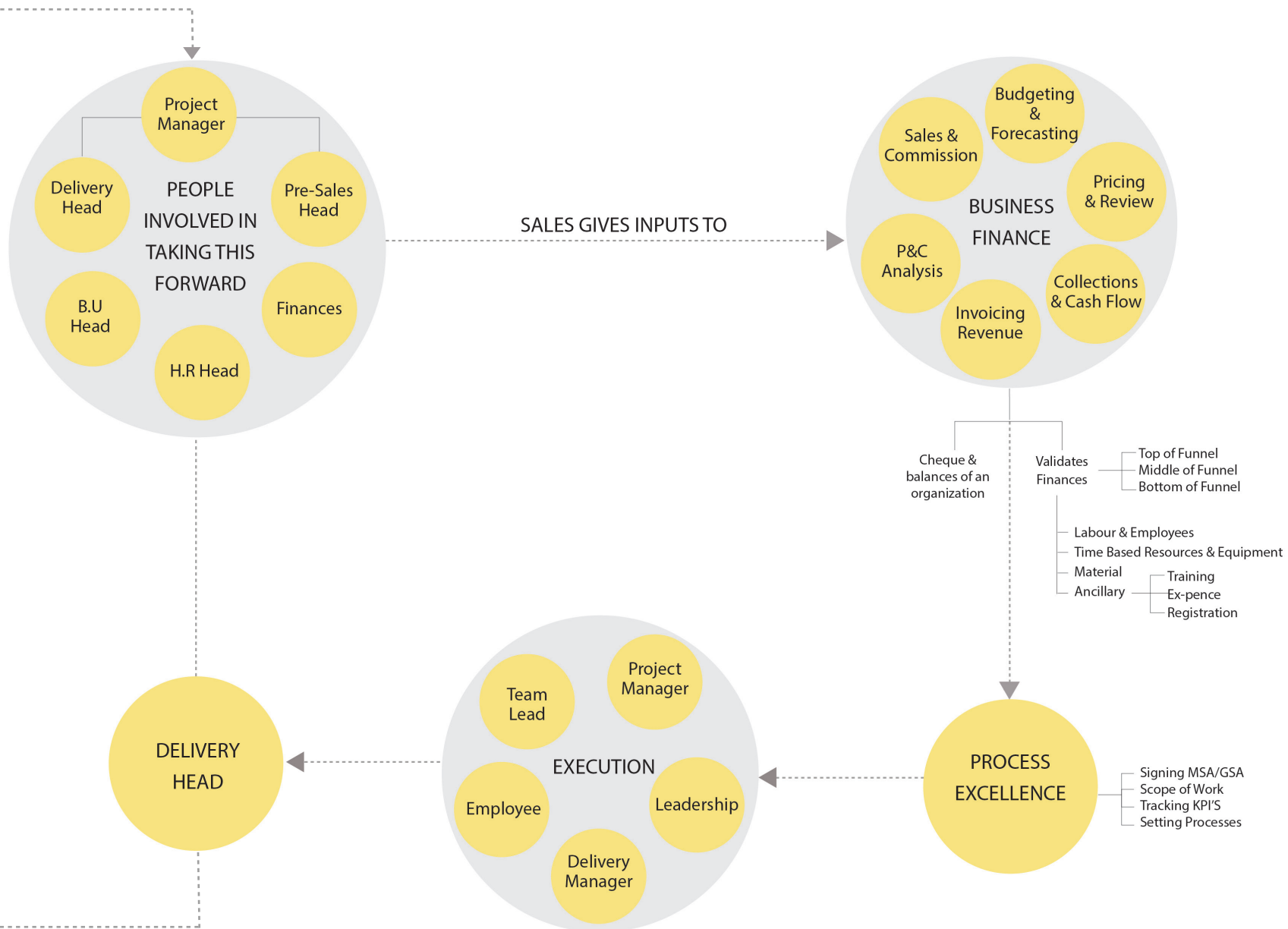
- Basic staff supervision
- Ensure product quality and quantity
- Assign and delegate task
- Career planning
- Recruiting
- Performance feedback
- Recommendations and suggestions
- Report generation and updates



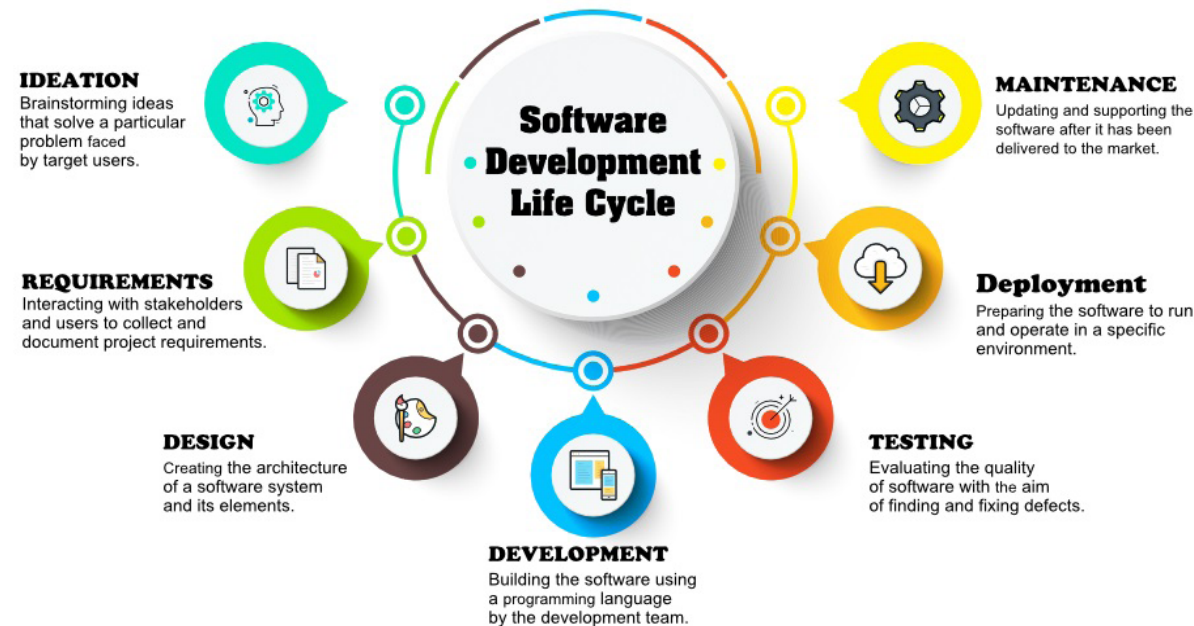
Project Journey Mapping

Project Journey mapping is the visualization of a project and its journey i.e how project comes in the organisation and who are the stakeholders involved in the various stages of making project a happen from initiation phase to execution phase.

After understanding the structure of Organisation and the stakeholders, it made more sense to map out project journey rather than customer journey as project is one element that binds the various departments within the organisation together along with the people.



SOFTWARE DEVELOPMENT LIFECYCLE (SDLC)



It is a systematic process for building software that ensures the quality and correctness of the software built. SDLC process aims to produce high-quality software that meets customer expectations. The system development should be complete in the pre-defined time frame and cost. SDLC consists of a detailed plan which explains how to plan, build, and maintain specific software. Every phase of the SDLC life cycle has its own process and deliverables that feed into the next phase. SDLC stands for Software Development Lifecycle.

SDLC Phases

Phase 0: Ideation

Phase 1: Requirement Gathering

Phase 2: Design

Phase 3: Development

Phase 4: Testing

Phase 5: Installation/Deployment

Phase 6: Maintenance

Phase 0: Ideation

If a product is to be developed from scratch then ideation is done by entire team.

This is generally in case where a new product is being developed for pitching.

Otherwise SDLC generally starts with the phase of requirement gathering.

Phase 1: Requirement Gathering:

The requirement is the first stage in the SDLC process. It is conducted by the senior team members with inputs from all the stakeholders and domain experts in the industry.

Planning for the quality assurance requirements and recognition of the risks involved is also done at this stage.

This stage gives a clearer picture of the scope of the entire project and the anticipated issues, opportunities, and directives which triggered the project.

Requirements Gathering stage need teams to get detailed and precise requirements. This helps companies to finalize the necessary timeline to finish the work of that system.

Once the requirement analysis phase is completed the next step is to define and document software needs. This process conducted with the help of 'Software Requirement Specification' document also known as 'SRS' document. It includes everything which should be designed and developed during the project life cycle.

There are mainly five types of feasibilities checks:

- Economic: Can we complete the project within the budget or not?
- Legal: Can we handle this project as cyber law and other regulatory framework/compliances.
- Operation feasibility: Can we create operations which is expected by the client?
- Technical: Need to check whether the current computer system can support the software.
- Schedule: Decide that the project can be completed within the given schedule or not.

Phase 2: Design:

In this third phase, the system and software design documents are prepared as per the requirement specification document. This helps define overall system architecture.

This design phase serves as input for the next phase of the model.

There are two kinds of design documents developed in this phase:

High-Level Design (HLD)

- Brief description and name of each module.
- An outline about the functionality of every module.
- Interface relationship and dependencies between modules
- Database tables identified along with their key elements
- Complete architecture diagrams along with technology details.

Low-Level Design(LLD)

- Functional logic of the modules
- Database tables, which include type and size
- Complete detail of the interface
- Addresses all types of dependency issues
- Listing of error messages
- Complete input and outputs for every module

Phase 3: Development

Once the system design phase is over, the next phase is coding. In this phase, developers start build the entire system by writing code using the chosen programming language. In the coding phase, tasks are divided into units or modules and assigned to the various developers. It is the longest phase of the Software Development Life Cycle process.

In this phase, Developer needs to follow certain predefined coding guidelines. They also need to use programming tools like compiler, interpreters, debugger to generate and implement the code.

Phase 4: Testing

Once the software is complete, and it is deployed in the testing environment. The testing team starts testing the functionality of the entire system. This is done to verify that the entire application works according to the customer requirement.

During this phase, QA and testing team may find some bugs/defects which they communicate to developers. The development team fixes the bug and send back to QA for a re-test. This process continues until the software is bug-free, stable, and working according to the business needs of that system.

Phase 5: Installation/Deployment:

Once the software testing phase is over and no bugs or errors left in the system then the final deployment process starts. Based on the feedback given by the project manager, the final software is released and checked for deployment issues if any.

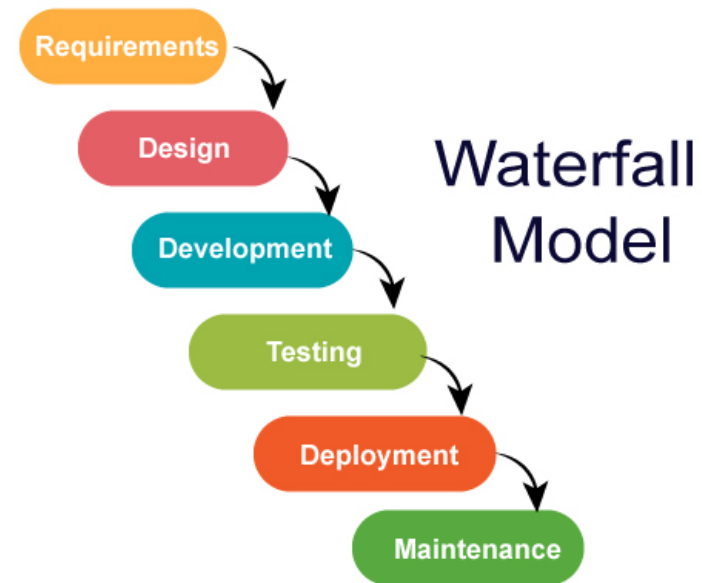
Phase 6: Maintenance:

Once the system is deployed, and customers start using the developed system, following 3 activities occur

- Bug fixing - bugs are reported because of some scenarios which are not tested at all.
- Upgrade - Upgrading the application to the newer versions of the Software.
- Enhancement - Adding some new features into the existing software.
- The main focus of this SDLC phase is to ensure that needs continue to be met and that the system continues to perform as per the specification mentioned in the first phase.

SDLC helps developers to understand what they should build and why. All the associated parties get involved and agree upon common goals and can get a clear plan for achieving that goal. It also helps all the parties involved in understanding all the costs and resources required.

Earlier SDLC model that was followed in the Organization was Waterfall Model

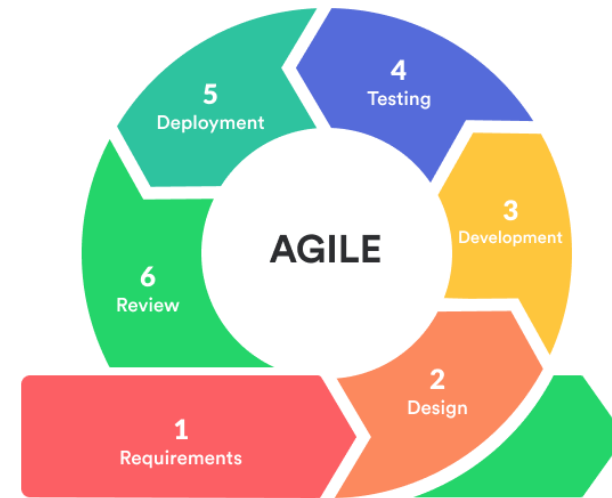


The conventional Waterfall development method follows strict phases, sticking to the original requirements and design plan created at the beginning of the project. A project manager spends time negotiating milestones, features, resources, working at length in the planning stages of a project, usually developing a full-blown project plan that details how the work will be moved through many gates to completion.

Now, the SDLC model that is followed in the Organization is Agile

The history behind Agile software development is one of frustration with the traditional waterfall methodology. Agile is designed to accommodate change and the need for faster software development. The project leader typically facilitates the work of the development team, eliminates bottlenecks, and helps the team stay focused in order to deliver software iterations on a regular basis. It is less about milestones than it is about hours, feature selection, prioritization, and meetings.

Unlike the Waterfall model, the development team ultimately decides at the beginning of a sprint (or iteration) what can be accomplished in the timeframe and sets out to build a series of features, delivering working software that can be installed in a production environment at the end of the sprint. Since Agile software development methods (such as Dynamic Systems Development Method- DSDM) are flexible, most are suitable for method tailoring – where development teams can adapt the flow to meet the needs of the product.



The overall goal of each Agile method is to adapt to change and deliver working software as quickly as possible. However, each methodology has slight variations in the way it defines the phases of software development. Furthermore, even though the goal is the same, each team's process flow may vary depending on the specific project or situation. As an example, the full Agile software development lifecycle includes the concept, inception, construction, release, production, and retirement phases.

The Agile Process Flow

1. **Concept** - Projects are envisioned and prioritized
2. **Inception** - Team members are identified, funding is put in place, and initial environments and requirements are discussed.
3. **Iteration/Construction** - The development team works to deliver working software based on iteration requirements and feedback.
4. **Release** - QA (Quality Assurance) testing, internal and external training, documentation development, and final release of the iteration into production.
5. **Production** - Ongoing support of the software.
6. **Retirement** - End-of-life activities, including customer notification and migration.

This view presents the full Agile lifecycle model within the enterprise.

The Agile Iteration Workflow

The Agile software development lifecycle is iterative. Each iteration results in the next piece of the software development puzzle - working software and supporting elements, such as documentation, available for use by customers - until the final product is complete. Each iteration is usually two to four weeks in length and has a fixed completion time. Due to its time-bound nature, the iteration process is methodical and the scope of each iteration is only as broad as the allotted time allows.

A typical iteration process flow can be visualized as follows:

- **Requirements** - Define the requirements for the iteration based on the product backlog, sprint backlog, customer and stakeholder feedback.
- **Development** - Design and develop software based on defined requirements.
- **Testing** - QA (Quality Assurance) testing, internal and external training, documentation development
- **Delivery** - Integrate and deliver the working iteration into production.
- **Feedback** - Accept customer and stakeholder feedback and work it into the requirements of the next iteration.



KPI Metrics For Agile Team

1. Planned-to-Done Ratios:

This ratio compares the percentage of tasks delivered as per specific guidelines.

it gives you an overview of the complexities, casting a shadow over tasks in terms of time, scope and budgeting constraints, thus helping you identify the ones that overran original estimates.

2. Escaped Defects:

If the goal is to find and fix bugs before your customers do in the release environment, the escaped defects curve lets you contain 90 percent of the bugs pre-production.

The first step to measuring defects is to consolidate all faults identified. Once you have an accurate count of the bugs you'll categorize the extent of risk.

3. Actual versus Committed Stories:

User stories is the step that documents points gathered during the requirements analysis stage. This is where client briefs are represented digitally to begin task prioritization and sequencing. Teams get clarification on their work packages. The measure itemizes the number of stories committed to in the sprint planning and assesses how many of them are marked as completed.

4. Accelerating Team Velocity:

Acceleration is the simplest metric that uses data relevance to monitor project health continuously. Measuring team velocity via velocity charts lets you know how different sized teams are faring in individual sprints.

The first step to accelerating your teams' velocity is to create points that estimate the work in each iteration. Measuring team performances is akin to comparing snowflakes, i.e. no two are alike owing to the fact that points conceived based on their line of work. New velocities can be estimated from the initial velocities.

Acceleration Formula: $(\text{new velocity} - \text{initial velocity}) / \text{initial velocity}$

5. Cycle Time:

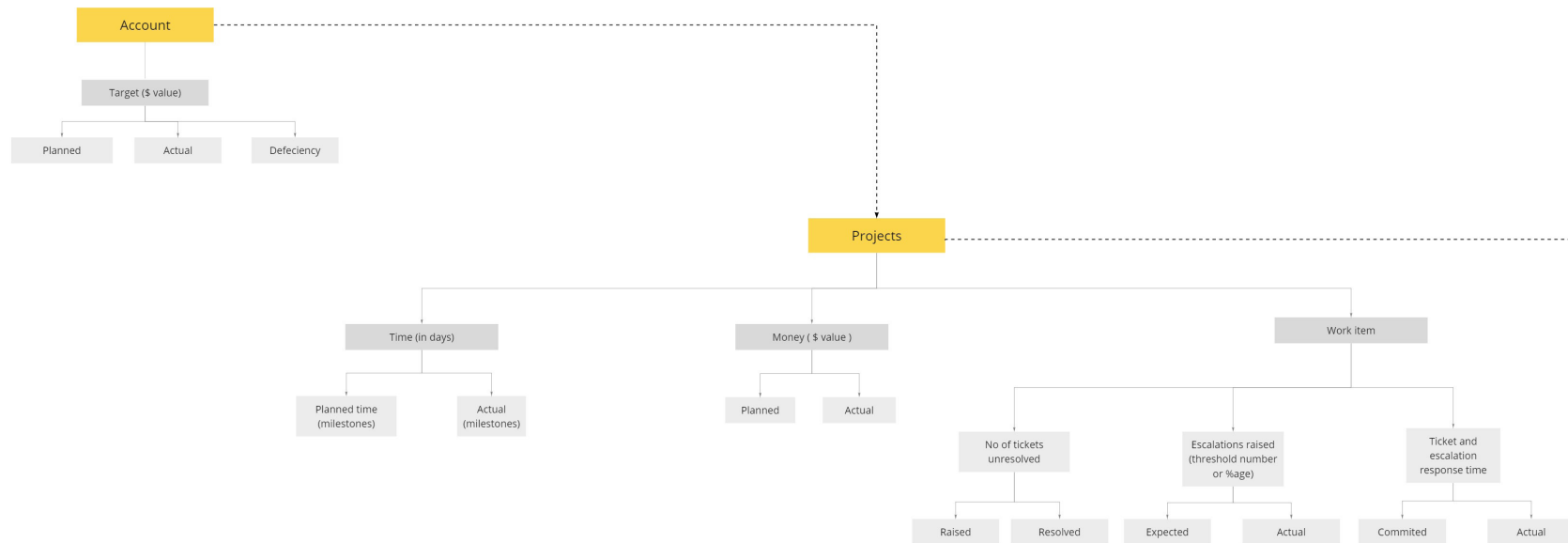
Shorter cycles within individual sprints ensures that everyone on the team is aware of short and long-term targets. Subsequently, there's no lapse in productivity down the chain. With deadlines approaching sooner, a shorter cycle time lets your team get more work done. This is because complacency settles in with extended timelines. Teams forget to prioritize pending tasks and end up underestimating their criticality. As a result, the wrong things are measured without an overview of the project's priority log.

Projects carry varying degrees of value to different stakeholders, based on their vested interests and the outcomes they hope to get out of it. From the project manager responsible for planning and strategizing a project's execution to the team whose efforts are tied to the final product delivery, we need to entrust high-profile projects to the right people. After all, you have a symbiotic relationship to consider: the people creating the end-product and the end-user benefiting from its creation.

With expectations riding high on several promising opportunities, one can't afford costly mistakes arising from projects falling into the wrong hands.

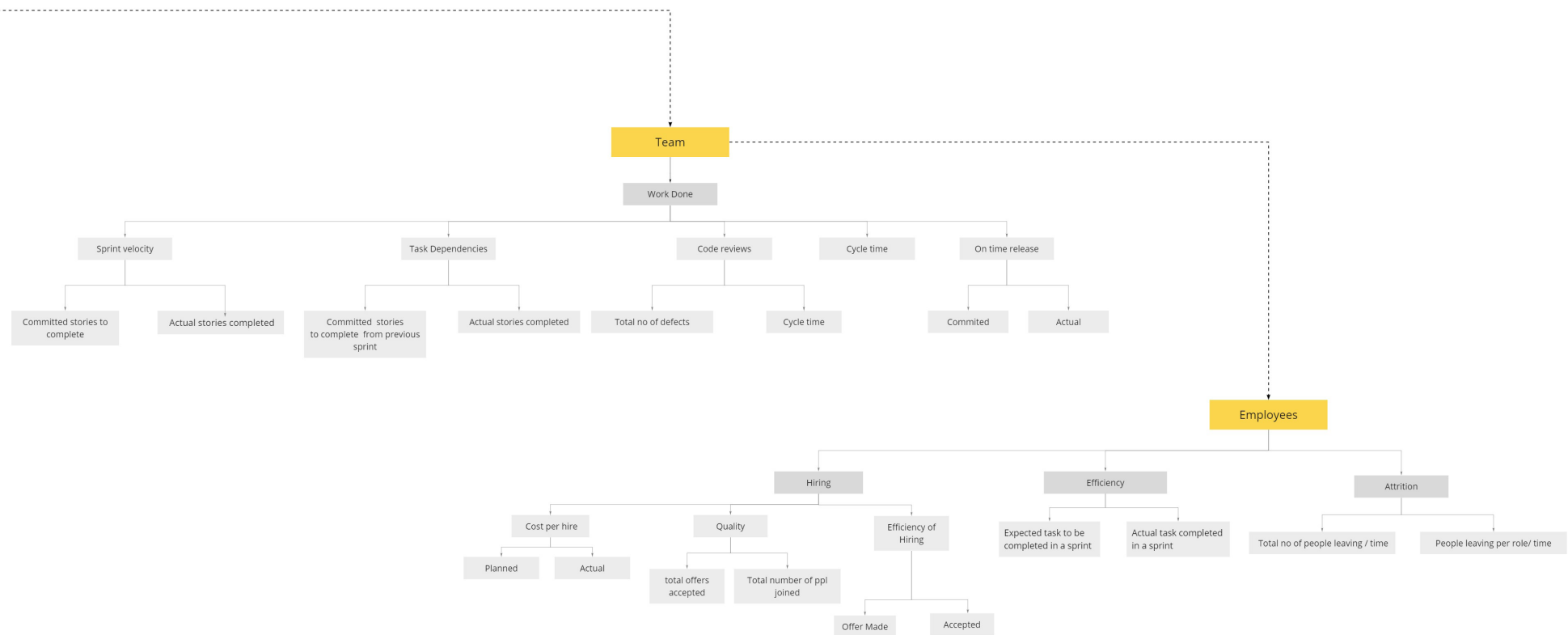
Besides creating inefficiencies that hinder the learning curve, managing your resources through unscientific means bore holes into the bottom line.

Agile metrics quantify human capital investments while keeping your team's learning journey clear of obstacles.



KPI Tree

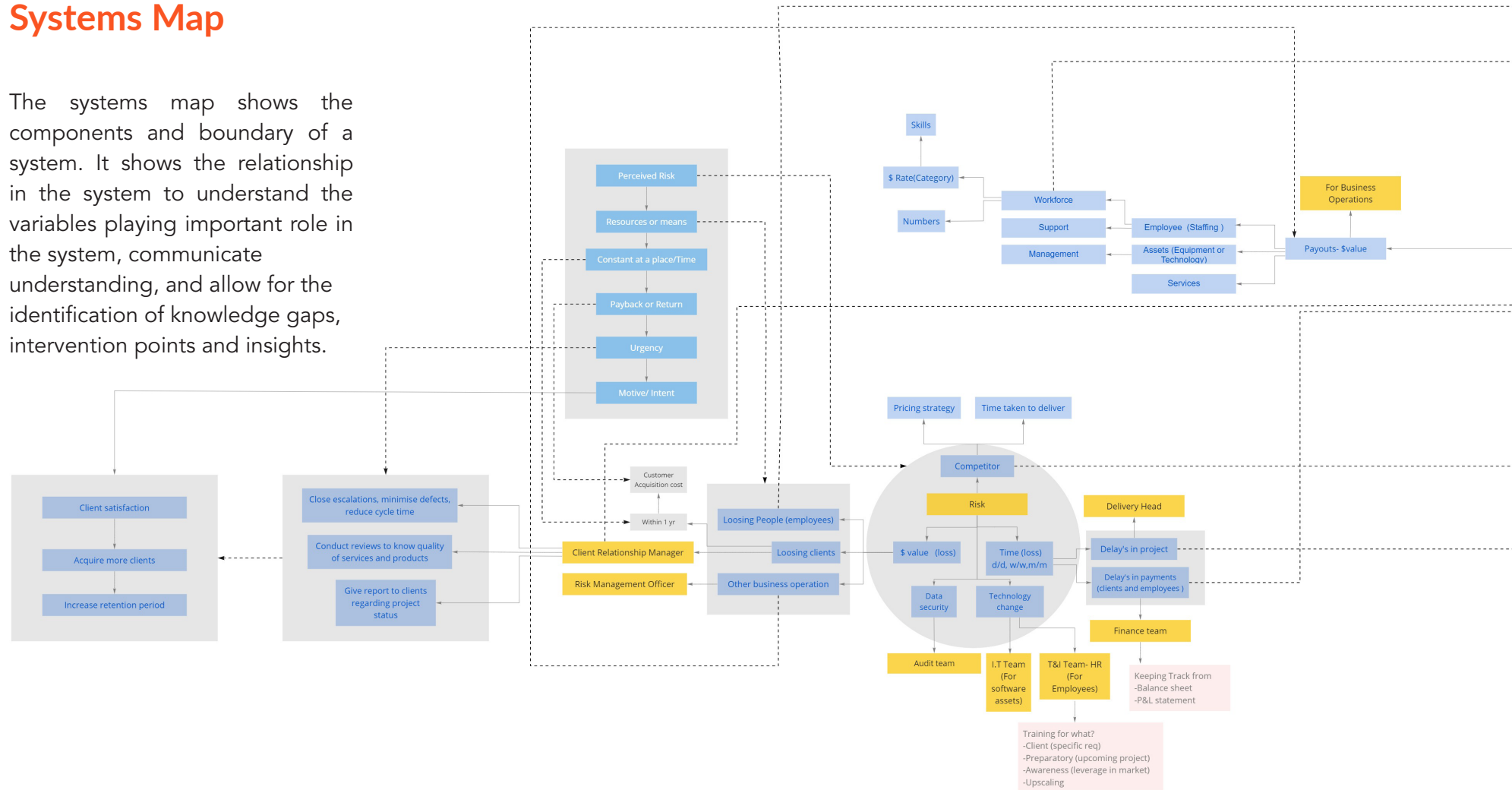
key performance indicator' to measure performance at each level i.e Account, Project, Team and Employee level.

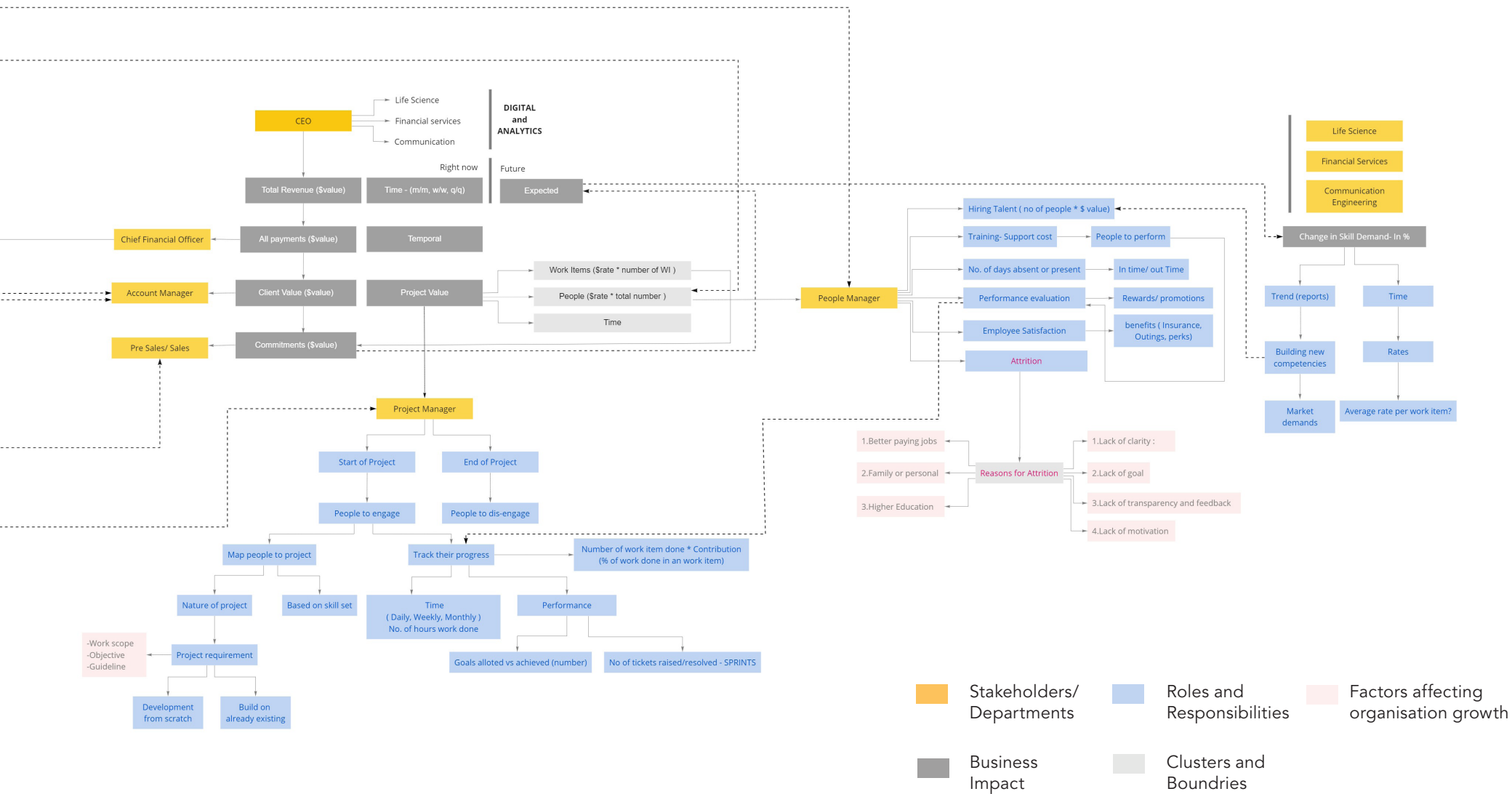


II. Discovery Phase

Systems Map

The systems map shows the components and boundary of a system. It shows the relationship in the system to understand the variables playing important role in the system, communicate understanding, and allow for the identification of knowledge gaps, intervention points and insights.





Findings

I started working with the limited information I could get within the organisation and started my Secondary research followed by Primary research. Meanwhile, there were other research methods that I discovered, one of them being Project journey Mapping. Keeping the Project journey Mapping as the anchor point, the Systems Maps were developed/created. After mapping out the system I found that Project is one thing that is binding the entire organisation. While doing that I found opportunity areas that were really promising. There were certain Key Performance Indicators that were used to measure the performance of the project and its success.

After doing systems mapping I had following findings:

- Organisation functioned in silos where employees lacked clarity on the nature of project they were working on.
- Shortage of bench strength and difficulties in talent acquisition.
- High attrition rates leading to delays in projects.
- People felt undervalued regarding the kind of work they did and sometimes felt that they were just working as a machine doing mechanical tasks.
- Frequent delays in projects.
- Project delay also questioned regarding the productivity of employees.

The reason for project delays were endless.
(which are mentioned further in the document).

Problem with the Initial brief

The initial brief was about benchmarking verticals, which required data from the organization, most of which organization failed to provide which was confidential information.

After doing level 1 research I realized that benchmarking was not possible since '**Data within the organization is not accessible**', so outside the organization it would be much more difficult.

The Leadership team sits in US and it was difficult to work closely with them.

Since, this was a tech firm, the design was heavily interface oriented, compromising on user research.

Level 1 was easy to achieve but going further to level 2 access to most of the data was restricted within the organisation. Then I realized that since most of the data within the organisation is not made available so it would be really difficult to understand similar organisational offering outside.

- 1.Unavailability of data with organization for benchmarking.
- 2.Close proximity with leadership was not made accessible.
- 3.Design was all about UI not about User research and Experience design.

Re-defining the Brief

Enhancing productivity in Corporate Functions

The reason for delay in project raised a direct question towards productivity of employees. This gave a trigger towards Productivity within the organisation.

Therefore, referring to a term called 'productivity quotient' which translates as 'Efficiency Quotient' at leadership level.

At higher level translating this to 'meaning quotient' percolating down from the CEO to employees at the ground level.

3.1 Hypotheses

3.2 Primary Research

- a). Product analysis
- b). Ergonomic analysis
- c). Observation
- d). Focus Group Discussion
- e). Contextual Enquiry

3.3 Secondary Research

- a). Precedent study
- b). Literature Review
- c). Case Study

3. Research Strategy

Final Project Brief

“Enhancing productivity in Corporate Functions”

Decoding the Brief

Understanding productivity in this context

Productivity is defined as the quantity of work produced by a team, business or individual. Productivity is also defined as Output over time.

Within the organization, individual workers performing specific jobs form the base level for all productive endeavor. In modern, complex organizations, however, the linkage between individual productivity and the productivity of organizational systems becomes blurred. For a variety of reasons, the linkages are seldom one to one.

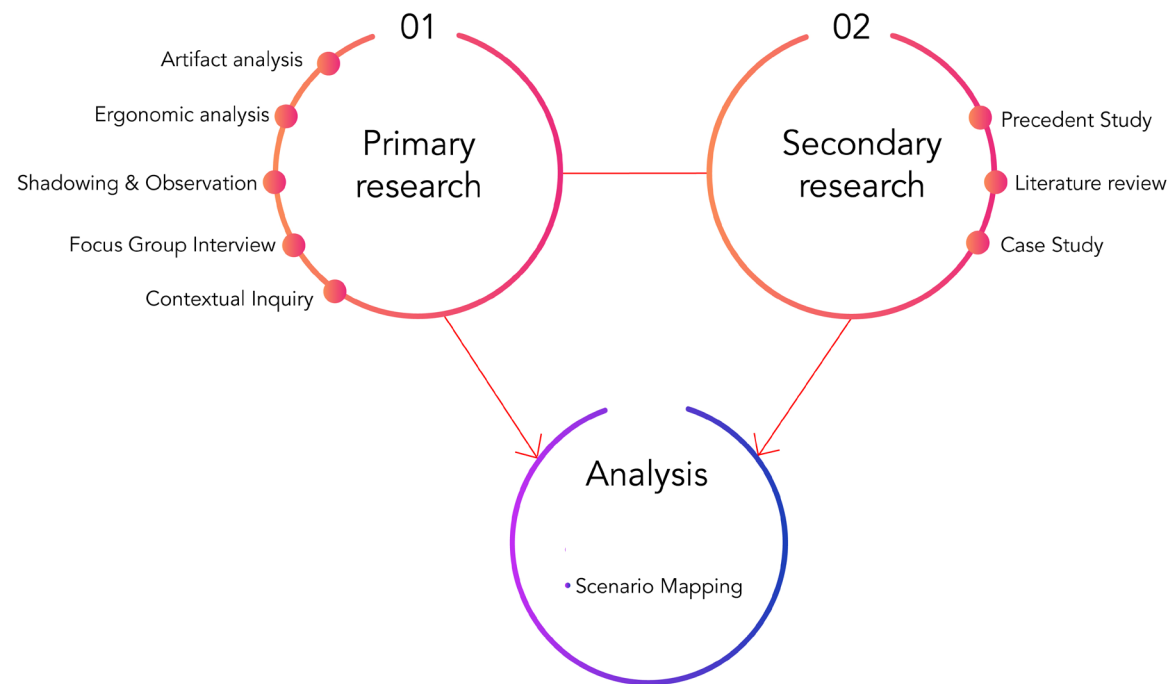
The outset that focusing on individual productivity measures provides a myopic view of the organizational world. Organizations are set in the context of a changing, competitive environment in which strategies are developed to guide the efforts of management and workers toward a common vision and set of objectives. Following hypothesis are generated based on decline in productivity of employees.

Hypotheses

Productivity in the organisation seem to be affected by the following:

1. Employees feeling undervalued and underutilized in their roles
2. Lack of transparency and inclusivity within the organization
3. Undefined tasks and lack of clarity by managers

Research Strategy



Research Strategy

Since level 1 research was done which laid as the foundation to the final brief. Research strategy that was made to accomplish final brief is in continuation with research done in the Level 1 of Initial brief. Following research methods were applied now.

Primary Research:

It involved following methods:

- 1.Artefact analysis
- 2.Ergonomic analysis
- 3.Shadowing and Observation
- 4.Focus Group Discussion
- 5.Contextual Enquiry

Secondary Research:

It involved following methods:

- 1.Precedent study of productivity softwares
- 2.Literature Review
- 3.Case Study

Analysis

Scenario Mapping- Use cases

Primary Research

1. Artefact analysis: Artifacts helped me in understanding the corporate environment and how people function in that environment.

Artefact analysis in this context is symbolic interpretations and incorporating artifacts into the analysis of organizational processes at the individual, intergroup, and interorganizational levels.

Artefacts helped me understand about the organization in detail and the connotation of productivity in the organization.

There were a couple of artefacts that I have referred to, which involved

- Incedo Hub: Organization's internal portal
- Skill portal
- KPI matrix for project

1. Product Analysis

	A	B	C	D	E	F	G	H	I	J	K	
1	Back											
2	Project Details:											
3												
4	Client Name											
5	Project Name (As per SOW)											
6	Function											
7	BU Head											
8	Delivery Head											
9	Account Manager											
10	Project Manager											
11	Current SOW#											
12	Project Start Date (as per SOW)					Actual Start Date					For any variance in start and end dates (wrt document communication approving the san	
13	Project End Date (as per SOW)					Forecasted End Date						
14	Project Type											
15	Pricing Code											
16	Billing Type											
17												
18												
19	Project Summary					Assumptions and Constraints						
20	Project Summary:					Assumptions:						
21												
22												
23												
24												
25												
26												
27												
28	Project Success <u>Criteria</u> s (inputs to KPI's):					Constraints:						
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												

This is one of the artefacts that I came across while working closely with 'Process Excellence Team'. Source: Incendo Process Excellence Team

Process Excellence team keeps record and track of all the projects that are on going within the organisation.

This artefact shows the information that is being received by Process Excellence team from the Leadership at the beginning of a project which mentions the Client name, Project name, Function, Business Unit Head, Delivery Head, Account Manager, Project Manager, Statement of Work, Project Start date and Project End Date.

Pricing and Billing section is also mentioned which is taken care by Finance team.

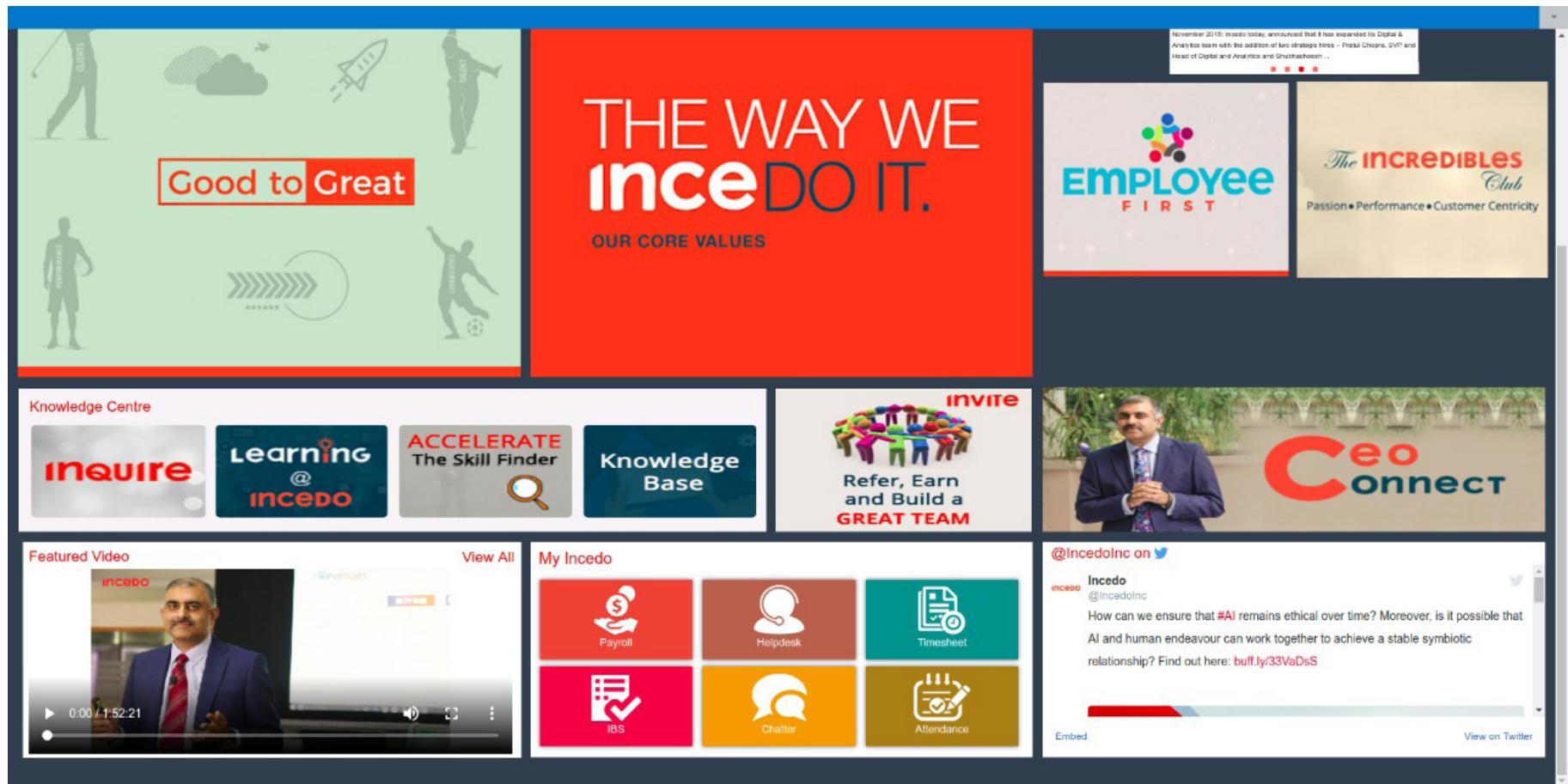
There is a section mentioned which contains Project Summary, Project success which is defined by the KPI's.

Also, the assumptions and constraints related to the project.

	A	B	C	D	E	F	G
1	Back						
2			Project Size				
3			Criteria	Description	Size	Score	
4			Elapsed Duration (Months)	>24 months	Large	3	#NAME?
5			Budget (In \$)	<\$250 K	Small	1	#NAME?
6			Anticipated Effort (Man Months)	<30	Small	1	#NAME?
7			Average Team Size	<6	Small	1	#NAME?
8				Overall Score		6	
9							
10			Project Complexity				
11			Criteria	Description	Complexity	Score	
12			Requirement Complexity	Straightforward and well understood by project team	Low	1	#NAME?
13			Technology Risk	Unknown Technology or Known Technology with very niche / very Limited Knowledge Pool	High	3	#NAME?
14			Application Criticality to Client	Less critical; RTO of 7 days or more	Low	1	#NAME?
15			Client Risk	Existing Client > 1 years of engagement	Low	1	#NAME?
16			Domain Risk	Known Domain; Readily available Knowledge Pool	Low	1	#NAME?
17			Data Risk	Not directly working on Clients data	Low	1	#NAME?
18			Hiring Risk	Critical roles require hiring	High	3	#NAME?
19			Financial Risk	Current forecast within budget (no impact to margins)	Low	1	#NAME?
20			SLA/ KPI Risk	Well Defined	Low	1	#NAME?
21				Overall Score		13	
22							
23				Total Risk Value		19	
24							
25			Actions To be Taken:				
26							
27				Suggested Governance/Intervention: Manage By Exception			
28				• Review of Weekly Status report			
29				• Review of Monthly Status report			
30				• Delivery Review – Review of slidepack , On Need Basis			
31							
32				Suggested Governance/Intervention: Hold Monthly Review or on need basis			
33				• Review of Weekly Status report			
34				• Review of Monthly Status report			
35				• Delivery Review – Monthly			
36							
37				Suggested Governance/Intervention: Hold Fortnightly Review or on need basis			
38				• Review of Weekly Status report			
39				• Review of Monthly Status report			
40				• Delivery review – Fortnightly			
41							

Source: Incedo Process Excellence Team

Getting further into the details of KPI of the project, this section shows that how project complexity is being calculated for a project. Different kinds of risks that take place while executing a project like technology risk, Client risk, Domain risk, Data risk, Hiring risk, Financial risk etc are calculated in advanced. There is a score which calculates total risk value based on which a project is categorized into High, Medium and Low Complexity. Everything which is calculated is quantifiable here.



Source: Incedo Hub

This is online portal called 'Incedo Hub' which is accessible to all the employee's within the organization. It consists of certain sections that are helpful for employees. The organization talks speaks about 'Employee First' and 'Good to Great' journey, further details of the same are mentioned in the Hub.

The screenshot shows the 'My Profile' section of the Incedo Hub portal. It features a navigation bar with links to Home, Policy Corner, Human Resources, Process Excellence, and Image Gallery. The main content area is titled 'My Profile' and includes tabs for 'My Skills' and 'My Certifications'. Under 'My Skills', there are input fields for Skill, Experience (in years), and Proficiency (a dropdown menu). To the right of these fields are sections for 'Tell us more about the selected skill proficiency' (a text area), 'Upload supporting document' (a file upload button and a 'No file chosen' message), and a 'Quote examples/scenarios where you've used this skill in your area of work' (a text area). Below these fields is a table titled 'Added Skills' with columns for Skill Name, Proficiency, Experience(Yrs), Status, Supporting Documents, and Action. The table currently shows 0 entries.

the **HUB** * incedo

Home Policy Corner Human Resources Process Excellence Image Gallery

My Profile

My Skills My Certifications

Skill

Experience (in years)

Proficiency --Select--

Tell us more about the selected skill proficiency

Quote examples/scenarios where you've used this skill in your area of work

Upload supporting document

Choose file No file chosen

Submit

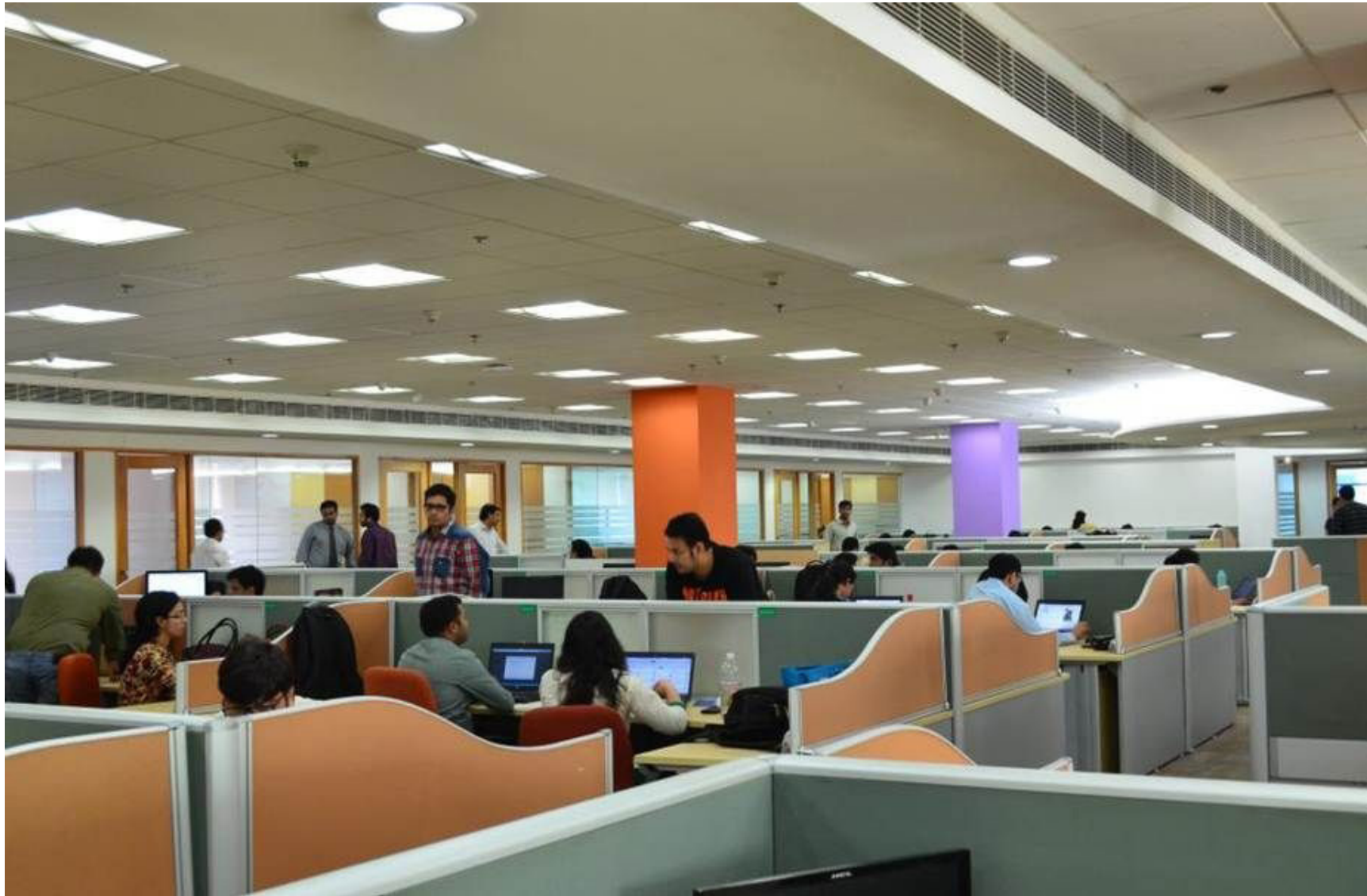
If any (e.g scanned copy of certificate ,training , appreciation mail etc.)

Added Skills

Skill Name	Proficiency	Experience(Yrs)	Status	Supporting Documents	Action
Showing 0 entries					

Source: Incedo Hub

This is Skill Finder section in the Incedo Hub portal where employees enter and update their skills every quarter. It is a corporate function, where employees are asked to enter their skill which gets saved into the company's repository. Visibility of employee skills helps in encouraging employees to train in relevant subjects and applications — an advanced course in a software program they use daily. It also has an immediate effect on productivity. Professional development can also help raise overall staff expertise when employees with vastly different backgrounds and levels of experience are encouraged to share information.



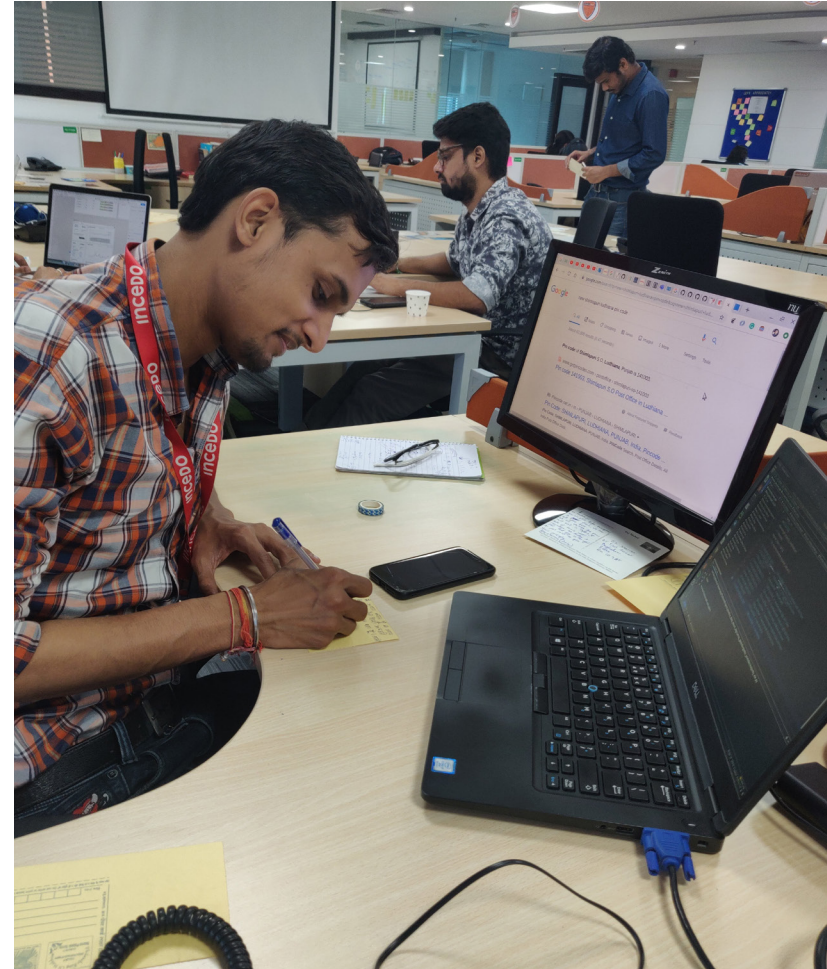
2. Ergonomic Analysis

The office ergonomics plays a considerable role in the motivation and productivity of the employee. The office ergonomics comprising the cubicle workspaces have been observed to cause very limited interactions with the fellow employees. The colleagues have to enquire or communicate in a very uncomfortable manner which cannot be prolonged because the setup is designed for employees to work in their isolation.

These in-office setups and lack of appropriate meeting rooms have been seen to affect the collaborative work environment.

The space lighting and office environment can play a critical role by regulating the mood and can act as an energizing agent or draining agent as well. The mood has been observed as an indirect agent that affects the motivation and productivity of employees.

The purpose of ergonomics is to make workplace improvements that remove risk and promote maximum human performance.



3. Observation

Shadowing and observation was more of action based research which involved interviewing users about how they behaved in the past and spending time observing how users are behaving now.

Unsurprisingly, the results are variable and often have little predictive value, despite the fact that sample sizes are often huge.

- How are people solving this problem at the moment?
- What is the workflow across multiple channels?
- What systems, tools or processes do people use?
- How do people collaborate?



In terms of collaboration it was observed that:

1. Most of the conversations happen over slack and tasks are updated over JIRA.
2. Documentation is done over Confluence. Mostly Outlook is used to send mails which communicate important and confidential information.
3. GitHub is used for code collaboration.
4. Zoom is used for video calling across states and with the team present outside India.
5. Drop box is used for sharing files.

There are also other packages such as Office 365 which provide an integrated solution so everyone can collaborate more effectively with team chat, online meetings, co-authoring and sharing files securely – as well as group email and social network for work.

Apart from that meetings happen in meeting room if everyone is present under one roof otherwise Zoom is used for video calling across states, where Project Manager gives brief about the project and project is taken forward by employees as per the direction.

Stand-ups and follow up take place regularly to know the status of the project. Monthly and Quarterly reviews take place based on the availability of leadership team and milestones that are to be achieved for a project in specific duration.

It was also observed Team members have little choice to choose what they want to work on. Instead most of the times work is assigned to them. Individually also employee has less autonomy to choose the kind of work they want to do. Whatever is assigned to them has to be done in a specific time. Also, when it came to speaking about kind of work they want to do people were more comfortable in sharing it in one to one communication as compared in a group meeting.

4. Focus Group Discussions

Focus group interviews were conducted with couple of project manager's and employees.

Focus group interview helped me in understanding the various activities, interactions, thoughts, feelings, perceptions, and opinion of people.

Various open-ended questions were asked to understand point of view with which project managers operate and what are their roles and responsibilities which are as follows:

1.Project planning:

Setting benchmarks for scope, budget, and timeline. Identifying project requirements, divide requirements into smaller deliverables/milestones, outline tasks, estimate time and resources required. Plot a project's tasks, phases and milestones against the schedule.

2.Project tracking:

Track the progression of work items after kick-off, e.g., percentage completed. Monitor at-risk tasks and any deviations from the schedule. Track estimates versus actuals.

3.Resource management:

Identify a resource's suitability to a given task based on required skill set and availability. Avoid scheduling conflicts by forecasting staffing needs and viewing only relevant resources who are available during a task's duration.

4.Task management:

Assign tasks to users. Users are alerted to new assignments and can view their assigned tasks as a to-do list with start and due dates.

5.Collaboration:

Centralize project requirements and participants so users are working off of the same knowledge base on assignments, progress, status updates etc

Verbatim from Project Managers

“

I have to pull in employees in my team who have been mostly **sitting on bench and are not competent** enough and thus productivity is always issue with them.

“

Employees don't take work seriously or feel inadequate in terms of skills because of which they slack.

“

I acknowledge the missed deadline and act quickly to avoid project delays whenever possible. But, once a deadline can't be met, and the delay seems inevitable I accept the responsibility, avoid blame, and get ready to respond.

“

I ensure everybody in the team has great opportunities, and that they feel they're having a meaningful impact and are contributing to the good of society.

Verbatim from Employees



The idea that I bring on the table is rejected and there is **no benchmark that I can look upto.**



Negative motivation was given to me to finish my work which usually felt like personal attack.



There is **no second mentor or point of contact** I can speak to about my idea apart from my manager.



There is **lack of trust** shown to me by my team and my manager in terms of my work.



I found **lack in ability** of my manager to hear me out instead he is always imposing his point of view about things and ideas on me.



I get critical feedback from my manager in front of my colleagues, instead in person which makes me feel embarrass creating negative impact on my performance.



There is **lack of inclusivity** in the meetings. Its always people who have loud voice raise their opinions and judgemwnt is based on that what needs to be done in a project.



The perks that are provided by the organization are not motivating enough be it referral program or cultural events or any other CSR activity.

“ There was no written evidence of how much work is to be done, things were told mostly in air.

“ Always a why why analysis is done regarding my work that I do, **without giving the actual direction or goal** that is to be accomplished for the project.

“ There is lack of proper team and **people who are there in a team donot have competency** for the kind of work they are asked to do, which in turn leads to bad quality of work by entire team.

“ I was shown a growth graph during induction but when I joined I didnot find any relevant opportunities existing for me and therefore I was **not allocated on project as per my skillset.**

“ The profile for which I was hired, or my **strengths were not being utilised** in the most effective manner.

“ I find **lack of clarity** in the project brief and also restricted access to the material that I have to work upon that is given to me and my manager itself takes very less initiative to explain me the project.

“ The is **lack of transparency** within the organization functions. Most of the appraisal and promotions that my colleaguesI have got have no transparent process that I can see through.

“ I attend every townhall presentation, where they speak about 'employee first' and 'journey from good to great' but most of it is not reflected in cultural practices within the firm.

5. Contextual Inquiry

Contextual inquiry is a semi-structured interview method that was used to obtain information about the context of use, where users are first asked a set of standard questions and then observed and questioned while they work in their own environments.

I interviewed a couple of participants to understand how they work, amongst them major focus was on the Project manager as **most the delay in the project took place during the execution phase.**

It was still difficult to figure out that delay in project led to decline in productivity or productivity lead to delay in project. It was mostly related to the following reasons:

a) Employees

1. Lack of availability of bench strength.
2. People took holidays and did not show up.
3. People did not spend enough time on project during office hours.
4. Combination of team members within a team is not the best fit as per work.
5. There are several new people joining the team who are taking time to adapt and adjust as per the work.
6. Lack of communication within teams.
7. Project required more manpower than expected to finish project on time.

b) Project Related

1. Task dependencies on multiple teams.
2. Code was done but testing was not done on time.
3. Project is complex as there is no prior experience.
4. The workload is increased on team because of 4-5 people left immediately after the increment.
5. The standup's didnot take place properly and wasted a lot of time.
6. The KPI's were not clear for the project.

c) Client Related

1. Client approval is not received to work on project.
2. Client did not show up on time for meeting/Client response was not given within specific time.
3. Client requirement is not clear
4. Client sent project for re-work as quality was not upto the mark.
5. The feedback not provided by the client after first delivery
6. The person co-ordinating at clients end got replaced and he changed the project KPI.

d) Constraints (due to organisation Rules)

1. Background Verification of employee has not been cleared.
2. Sending update to finance team about 'bill to client' employees to start his work.
3. Approval and budgeting process of a project wasting a lot of time.
4. Contract failure in the middle of the project.
5. Poor leadership or support from higher management.
6. Performance evaluation (process requires major attention in decision making.

e) Updating status and delivering on time

1. Task was done but not updated timely.
2. The milestones were not clearly marked for delivery.
3. The work planned in a sprint is not completed on time.
4. The cycle time was longer than expected.
5. There are multiple projects running at one time and two-three projects have delivery on same day which requires attention.

f) Reviews and Feedback

1. A project did not perform well in Quarterly review when presented to client.
2. The quality of work provided to the client was not upto the mark and sent for re-work.

Secondary Research



1.Precedent Study

Productivity tools are becoming more and more integral to companies as the pace of business changes, and competition heightens. Employees have to be content with providing immediate responses and high quality service to customers – coupled with the strain of working with teams across different locations and often across the world in different time zones.

Purpose of these tools is to save time, alleviate stress and to bring everyone on the same page. It involves discussing a project proposal and project plan or a tricky task that needs to be completed – all in a shared work space.

A Work Breakdown Structure is a hierarchical decomposition of the deliverables needed to complete a project. It breaks the deliverables down into manageable work packages that can be scheduled, costed and have people assigned to them. A Work Breakdown Structure is a standard project management tool and the basis for much project planning.

But if more time is spent fiddling with them and if they are not integrated across all devices then people don't find them user friendly, and more importantly if employees don't fundamentally understand which jobs are important and which aren't, then the tools on their own are not going to help.

Features provided by productivity tools



Task Lists

View, manage & prioritize work in personal and team task lists.



To Do Lists

Add personal to do lists and mark complete in one click.



Calendar Sync

Sync tasks with Google calendars to keep up-to-date everywhere.



Collaboration

Share tasks and assignments with anyone to get work done faster.



Gantt Charts

View & manage task progress with interactive Gantt charts.



Reports

Track task and project status with one-click reporting.



Dashboards

See real-time views of task and project performance.



Alerts

Set up automated alerts when tasks are due or overdue.



Subtasks

Define subtasks and task dependencies across projects.



Assignments

Create task assignments in multiple places.



Time Tracking

Manage time spent on tasks according to schedule.



Roadmaps

View project and task roadmaps to view work completion rates.



Discussions

Create discussion threads on any task or project or theme.



File Storage

Get unlimited file storage that updates when you attach files to tasks.



Import/Export

Seamless importing and exporting of MS Project, Excel or .csv files.



Cloud Based SaaS

Update task status anywhere on any device.

Why softwares do not work efficeintly to enhance productivity?

Why data that is entered do not yield results ?

Project management software tools provide all the features but still they fail to prevent delays because:

1. People avoid using software because they don't want to take headache of entering data.
2. Even if they enter data, they fail to keep them updated. It is very difficult to change the pattern in which they work.
3. Sometimes data that is entered is not actual data, instead it looks good to see on paper but it doesnot speak about actual reality.
4. Sometimes training for the best practices to use software management tool is not provided by the organization.

Why internal portals do not work efficiently?

Why people leave using software in the middle even if they are provided all acesss and training?

Internal portal donot work efficiently because people donot enter data. Seeing the deeper reason that why people donot enter data can be multiple like:

- Procastination
- Cognitive load
- Convenience

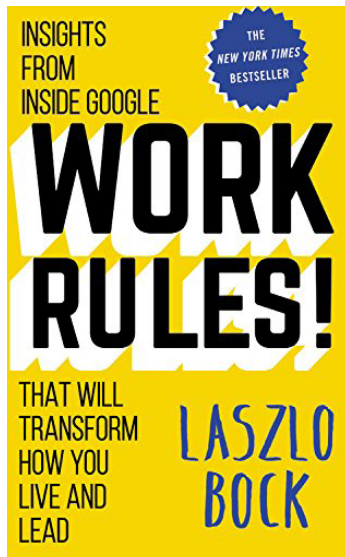
Seeing from neuroscience perspective, brain is a lazy organ. Brain wants to procrastinate all the time. It tries to take the shortest route possible to finish a task.

Entering data is a tedious process and involves a lot of cognitive load, thus entering data is not the shoretest thing to do. In this case the brain becomes lazy. Brain looks for convenience.

Why Project Manager do not enter data in software?

Because he feels that he is the only one seeing the data but when he knows that there are other people as well who would be seeing the data then he would definitely make an entry.

2. Literature review

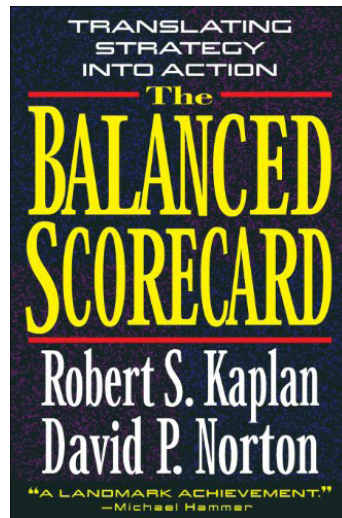


Laszlo Bock leads Google's people function, responsible for attracting, developing, retaining, and delighting "Googlers." He believes that giving people freedom and supplementing our instincts with hard science are steps on the path to making work meaningful and people happy.

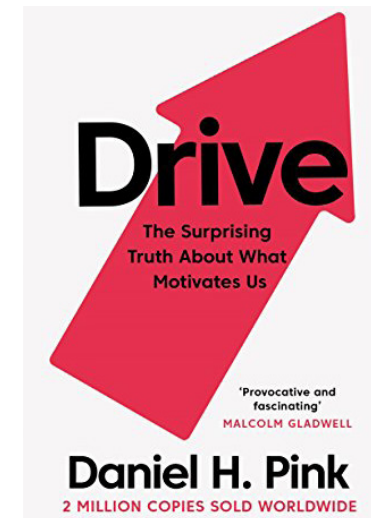
WORK RULES! also provides teaching examples from a range of industries-including lauded companies that happen to be hideous places to work and little-known companies that achieve spectacular results by valuing and listening to their employees.

Performance improved only when companies implemented programs to empower employees (for example, by taking decision-making authority away from managers and giving it to individuals or teams), provided learning opportunities that were outside what people needed to do their jobs, increased their reliance on teamwork (by giving teams more autonomy and allowing them to self-organize), or a combination of these. These factors "accounted for a 9% increase in value added per employee in our study." In short, only when companies took steps to give their people more freedom did performance improve.

Bock takes us inside one of history's most explosively successful businesses to reveal why Google is consistently rated one of the best places to work in the world, distilling 15 years of intensive worker R&D into principles that are easy to put into action, whether you're a team of one or a team of thousands.



The Balanced Scorecard translates a company's vision and strategy into a coherent set of performance measures. The four perspectives of the scorecard--financial measures, customer knowledge, internal business processes, and learning and growth--offer a balance between short-term and long-term objectives, between outcomes desired and performance drivers of those outcomes, and between hard objective measures and softer, more subjective measures.



Drive book is the secret to high performance and satisfaction in today's world is the deeply human need to direct our own lives, to learn and create new things, and to do better by ourselves and our world. It reveals the three elements of true motivation: AUTONOMY - the desire to direct our own lives; MASTERY - the urge to get better and better at something that matters; PURPOSE - the yearning to do what we do in the service of something larger than ourselves.

3. Case Studies

3.1 How Google implements OKRs, Objectives and Key Results

Most famous and well known case study of OKRs comes from Google. They implemented this management technique already in 1999 and have been using it ever since.

OKRs are a popular method of setting goals within an organization. By connecting company, team, and personal objectives to measurable results, we'll go over the basics of OKR methodology to help get you on the right path.

According to Klau, partner at Google Ventures, Google does OKRs on an annual basis and on a quarterly basis. The annual OKRs are big goals that might change as the year evolves. The quarterly ones, on the other hand, never change.

Setting up objectives and a number of key results that are quantifiable help them hit the mark. Having OKRs at a company, team, managerial and personal level, Google is able to work together and keep the company on track.

Every Google employee should have around 4-6 OKRs per quarter. Having more than that, might get you fired. Each of these objectives are measured at the end of the quarter on a scale of 0 – 1. Most employees at Google aim for 0.6 – 0.7. If you've gotten a 1 on any particular key result, then you've created it too simple. But if you get under 0.4, then you're doing something wrong. Therefore, keeping the evaluation process simple, Google employees are able to spend more time to work on their goals rather than on worrying about the grading procedures.

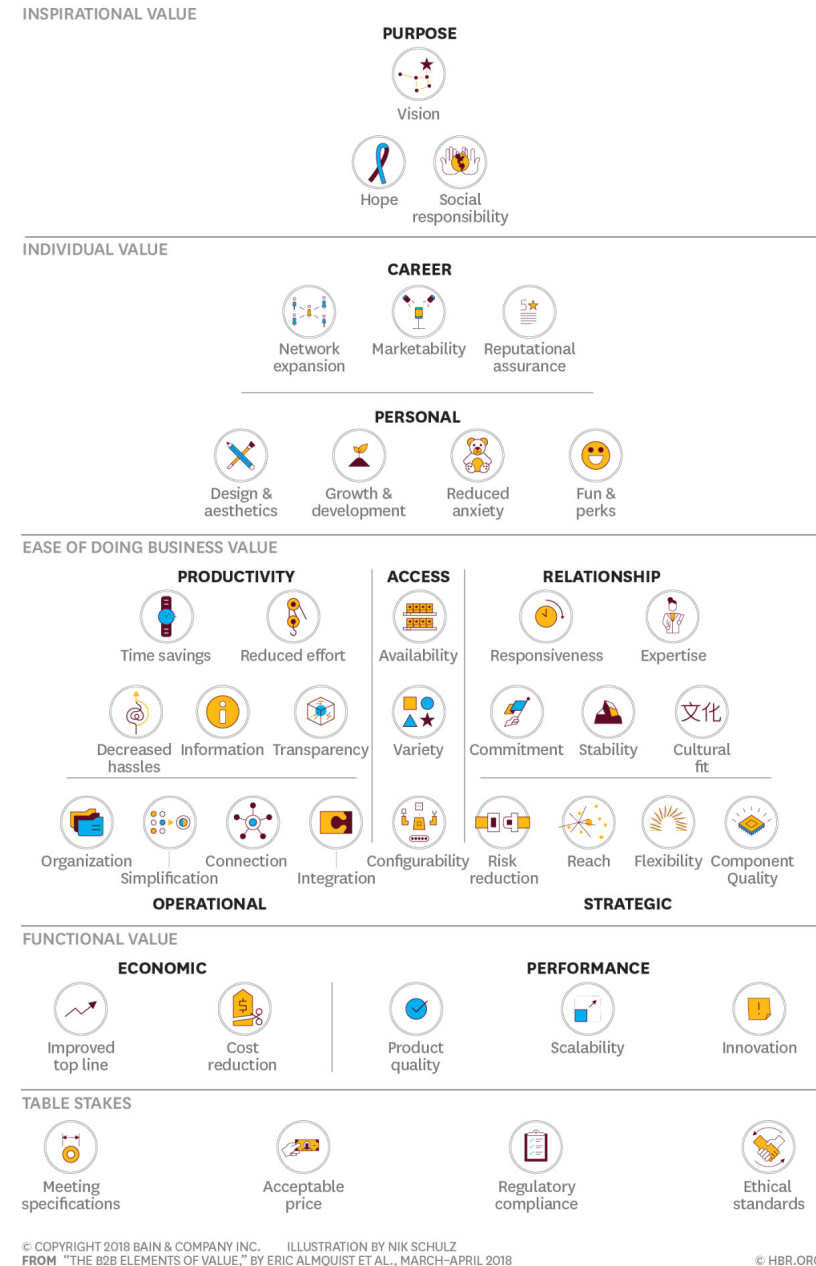
All the OKRs at Google are public. Even Larry Page shares his goals. This helps the community to understand what everyone's working on. But these OKRs aren't used to determine promotions. Rather, their for the purpose to keep an eye on what the employees have accomplished. With these systems in place, Google gets a short list of objectives to work against, which increases focus and productivity. Keeping it simple and straightforward is the key to success.

3.2 HBR Elements of value

B2B model sorts the elements into the levels of a pyramid, with those providing more objective value at the base and those that offer more subjective value higher up. The model traces its conceptual roots to the hierarchy of needs that the psychologist Abraham Maslow first described in 1943. Then on the faculty at Brooklyn College, Maslow argued that human actions are motivated by an innate desire to fulfill needs ranging from the very basic (security, warmth, food, and rest) to the complex (self-esteem and altruism). The elements of value approach extends those insights to people in corporate roles.

Using this pyramid in the context of productivity for Corporate functions:

Focusing on the productivity aspect it is not just completing a specific unit of work in specific amount of time but it is also related to transparency, decreasing hassle and reduced effort.



Source: <https://hbr.org/2018/03/the-b2b-elements-of-value>

4.1 Process of Analysis

4.2 Scenario Mapping

4.3 Analysis

4.4 Insights

4.5 Directions for the Solution

4. Analysis and Insights

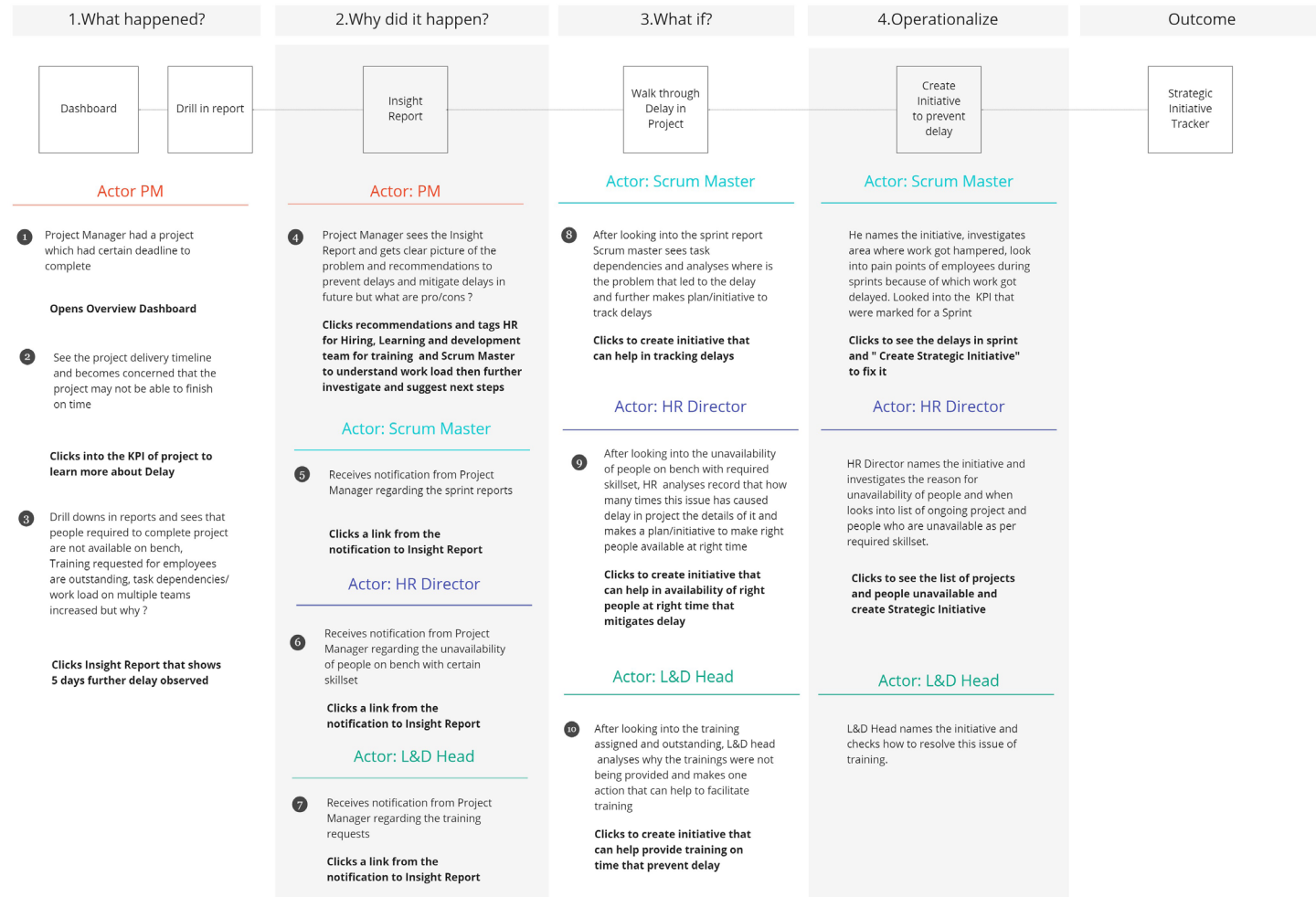
Process of Analysis



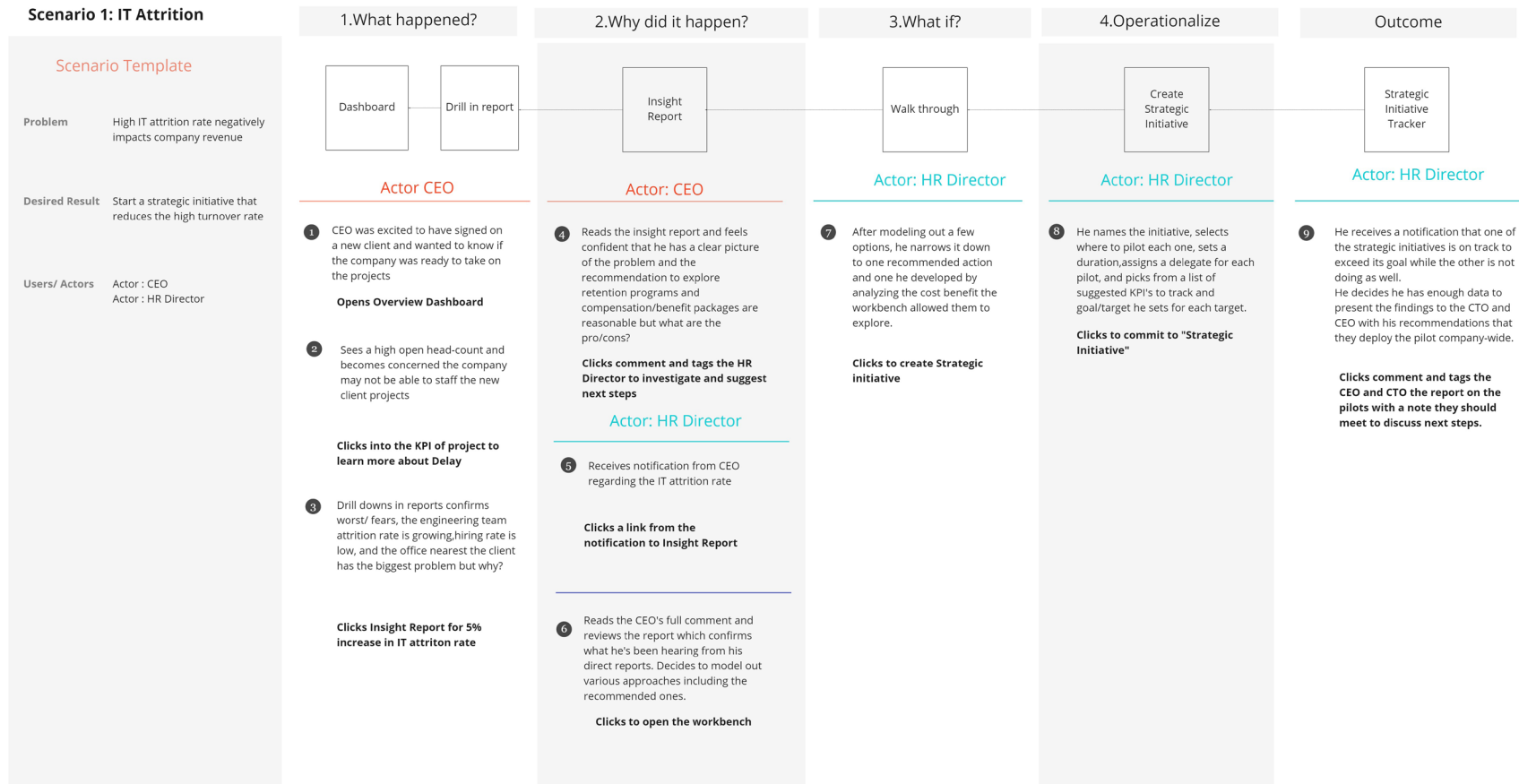
Mapping Project Delay Scenario

Scenario 1: Project Delay

Scenario Template	
Problem	The Delay in project impacting the business
Desired Result	Start a strategic initiative that prevents project delay
Users/ Actors	Project Manager Employees
Facilitators	HR L&D Scrum Master

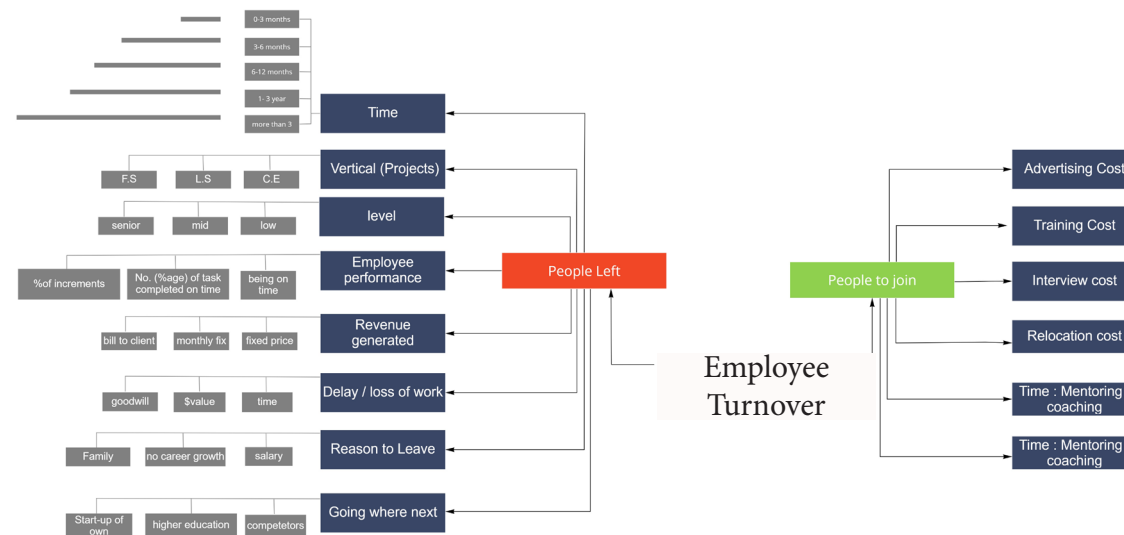


Mapping IT Attrition Scenario



Employee Turnover within the organisation is 30% per year.

Source: Townhall presentation
at INCEDO, (Sept 2019)



Employee turnover is one of the major factor that affects productivity within the organisation.

Organisation wants to:

1. Retain Top talent/ High Quality Talent and retain existing talent.
2. Bring new talent that grow with them and see long term career
3. Enhance opportunities for career development for employees and build better employee engagement
4. Strengthen and Build engagement talent Impact.

Cost, time and other resources at stakes that are involved, during employee turnover.

Analysis

The parameters to determine productivity are based on KPI's. There are different KPI's at different levels.

At project level,

- No. of hours worked
- No. of tickets resolved
- No. of stories completed
- No. of bugs resolved
- Releases per month
- On time delivery
- Reduction in time cycle
- Tracking KPI

Everything that is measured in the project is based on certain KPI which are only meant for accomplishment of a project. There is no measure or matrix to measure Human factors like employee happiness, motivation, Trust.

Employee Performance is measured based on its Productivity and Productivity is measured based on number of sprints done, number of stories finished, number of hours worked etc.

During Artefact analysis I observed that project details included relevant details regarding project but it failed to address the allocation of people as per skills who are required to finish the project. It was totally dependent on project manager. This was another issue why employees had less autonomy to choose a project.

This was also one of the reason why people were not clear about their end goal and were functioning in silos because for them the point of contact is just their manager.

There are certain sections present on the portal which are not updated or even if they are updated they are not utilized effectively. Amongst them one is 'Accelerate Skill finder'

Before any productivity tool can be effective, leaders need to address the wider issues. The workplace as we know it is changing. Technology, data, and the way we work have collided to reshape human resources. Just as Personnel evolved to become HR in the 1980s, so HR is now changing to become a people function. HR teams need to complete tasks quicker, more efficiently and more accessibility, so they can focus on their people and employee experiences to boost productivity. Companies which do this are People Companies.

Productivity tools can help employees prioritize, streamline, and stay focused on their work. Yet, tools alone won't solve the productivity problem. There are day-to-day work practices that can be used alongside these to help, such as:

1. Clarity around role priorities rather than specific task priorities:

For example, how does the task in hand fit into their overall role in the company?

If it doesn't, then it's not important

2. Improving management skills rather than time management skills:

Shifting the focus on to whether something warrants attention in the first place and if so, then it warrants time spent on it.

3. Ensuring you're using a comprehensive workflow management system:

The basis of a useful workflow management methodology is the ability to make tasks and responsibilities easy to organize, track, and act upon.

Scenario Mapping

Employee Use Cases

Use Case 1: Employee aspirations and Project requirements do not match at the skill level

During one of the interviews, it was discovered that an employee working in one of the Telecommunication projects wanted to switch the project but the vertical. But eventually, she was transferred to another department with Robotic Process Automation. While working with the Robotics team, she did not enjoy working with the team and was transferred to another department with Digital and Analytics. These transitions happened within the interval of one year each. The employee did not have any freedom to choose her next project or team. After a while, this employee thought that its already been 3 years and there hasn't been any prominent appraisal. So, she planned to switch her job and applied to some other company for a job interview. Later, she realized that she does not have the competency or a major area of strength for the intended job.

She also stated that "I always fill that survey which asks for skillset but it never helped me match with the kind of team I want to work with or on kind of project".

This made her feel inadequate with a lack of options to explore within the organization which was her choice. She felt really uninspired about the kind of work she was doing there. She believed that she was incompetent despite the number of skills that she possessed, which really got her demotivated.

She had trust issues with the organization and stated that "Are they really capable of allocating me the work that I enjoy doing and have developed skills related to".

She had a fear of not getting a better job since she believed that she did not develop competency in any particular field.

Use Case 2: Uncertainty in project pipeline

The second case discusses a person who has worked on a project which was running for the past 1.5 years as part of the R&D initiative but later, the project was put on hold and never resumed back.

This project's objective was to develop a capability that could be used to pitch to the client. But, on the contrary, this project never reached the client.

The leadership paused the project without informing the group of people working on the project. The employees were really demotivated and felt helpless that they never got the opportunity to present their project to the client.

There was no feedback or acknowledgment after investing so many number of human-hours and energy into the project. This directly displays and implies that the organization works in silos.

Use Case 3: Lack of Recognition for initiative

One of the employees took an initiative to represent the organization in the tech community and she wanted to take it forward. But, this proactive initiative was not appreciated or acknowledged by the manager or her team. This really affected the motivation and made her think about her dedication to the company and the environment in negative sense.

Insights

- 1.The empowerment of an employee in terms of the kind of work they wanted to do was negligible.
- 2.The allocation of work is purely on the Project Manager's discretion and not based on the skillsets of employees..
3. The visibility of employees skill set is not made actionable across organization.
- 4.Employees were not aware about the existing opportunities across the organization that matches their skillset.
- 5.Concerns were raised in casual conversations but not on appropriate open forums.

6. Employees were unable to openly express their creative ideas which could be put to use for the organization's benefit.
7. Employees strongly desire being a part of and wanting to contribute to strategic initiatives within the organization.
8. A lack of clarity on goals adversely effected the performance of employees.
9. Employees felt that they were working like machines without any proper feedback being provided about the outcome of a project.
10. Lack of transparency and inclusion contributed to employee attrition.

Directions for the solution

Analysis and Insights led to following directions for the solution

1. Enhancing productivity by ensuring transparency and Inclusivity in the system.
2. Exploring new ways to collaborate and ensure availability of talent for timely completion of projects
3. Design a framework for organisation to ensure skillset based project allocation.
4. Leverage available organizational data creatively to establish best practices in the company's culture to increase overall productivity.

5.1 Ideation

5.2 Context for Solution

5.3 Solution

- a). Level 1
- b). Level 2
- c). Level 3

5.4 Impact

5.5 Validation

5. Ideations and Solution

In the system it was observed that:

- Employees did not know about the available opportunities and if they were eligible for them.
- Employees were not encouraged to look out for opportunities.
- The employee engagement levels were low

Possible vision directions for the employee:

- Raise employee encouragement levels across organizational hierarchy.
- Employee should not feel challenged about their opportunity and feel equitable.
- Employees should be rightly allocated as per skillset.
- Employee should have autonomy to choose the kind of project they want to work on.

Possible vision for Project Managers:

- Reduce cognitive load on project manager.
- Help project manager to prepare better to mitigate the delays.

What do I vision for the system?

- Create a system of interrelated mechanisms(s) for better state of people for business benefit.
- Reach out to each individual and provide an equitable state of power, not discourage, not trouble and also empowered.
- Changing the organisation design and facilitating current practices to enhance productivity in digital space and integrating it in physical space as well.

Design is the rendering of intent which in this case is to help users be productive and feel more empowered, making the system more transparent and inclusive.

Organization as a Machine

People who see organizations as machines want a profound sense of order and control. They strive for neatly partitioned roles and seek interchangeable people to fill those roles. Above all, they expect logic and reason to always win the day.

- **When this metaphor works:**

It works in the same context as when machines do, i.e. when there is a straightforward task, a stable environment, a repeatable outcome, and a focus on precision.

- **When this metaphor fails:**

when the environment changes and when employees crave a greater sense of purpose and human agency.

- **What this metaphor means for leadership:**

under this paradigm, leaders think and workers do; it's the duty of a leader to lay out exact requirements for every role and swap people out when there is an under-performance.

- **What this metaphor says about organizational change:**

People who hold this view think that change is a matter of shutting down, replacing a cog, and easily resuming production; obviously this overlooks how people actually think and feel about change.

Ideation 1:

Currently the organization works as a Machine where employees are seen as helping hands but organization should behave as a Brain and a Cultural System.

Organization as Brain

People who see organizations as brains are concerned with the collective intelligence and organized wisdom of the organization. They see employees as sensors and management layers as sense-making functions in the pursuit of developing a learning organization.

- **When this metaphor works:**

When the environment is rife with unknowns but relatively stable so that learnings are relevant over time

- **When this metaphor fails:**

When change is so unprecedented that knowledge of the past is no longer helpful for predicting and responding to the future

- **What this metaphor means for leadership:**

Under this paradigm, leaders are expected to install and instill the capacity for double-loop learning, helping teams not only develop feedback loops that help them gauge their effectiveness but also feedback loops that help them question how they define effectiveness itself.

- **What this metaphor says about organizational change:**

This metaphor assumes that past knowledge is always predictive of future behavior, meaning that changes can be rationalized and planned for with the benefit of enough hindsight and pattern recognition.

Organization as Cultural System

People who see organizations as cultural systems are concerned with the shared beliefs, norms, and rituals of an organization. They are often thinking of the organization as a mini-society and are interested in the holistic experience of being an employee of the organization.

- **When this metaphor works:**

When competition for talent is fierce and employees desire for shared identity in their work.

- **When this metaphor fails:**

When cultures become cult-like, i.e. when entering and exiting the culture causes trauma; when external changes are ignored in favor of group cohesion; when a push for a homogenous culture drives out sub-cultures and drives away talent who are not deemed “culture fits”.

- **What this metaphor means for leadership:**

Under this paradigm, leaders are expected to be the embodiment of their cultures.

- **What this metaphor says about organizational change:**

Cultural systems are inherently systems which favor tradition and reject change; these organizations then struggle to assimilate changes which threaten their core values and beliefs.

Context for Solution

Musicians talk about being “in the groove,” sportsmen about being “in the zone.” Can employees in the workplace experience similar performance peaks and, if so, what can top management do to encourage the mental state that brings them about? We’ve long been interested in work environments that inspire exceptional levels of energy, increase self-confidence, and boost individual productivity. When we ask leaders about the ingredient they think is most often missing for them and for their colleagues—and by implication is most difficult to provide—they almost invariably signal the same thing: a strong sense of meaning. By “meaning,” we and they imply a feeling that what’s happening really matters, that what’s being done has not been done before or that it will make a difference to others.

Indeed, two contributions to McKinsey Quarterly¹ over the past years have highlighted this theme. In one, the authors demonstrate how misguided leaders often kill meaning in avoidable ways. The author of the other suggests that “meaning maker” is a critical role for corporate strategists.

Solution

Level 1 Empowerment based on Meaning Quotient

Level 2 Give teams more autonomy, and allow them to self-organize

Level 3 Integrating digital solution in Physical Space

Solution: Level 1

Empowerment based on Meaning Quotient

Strategy: Tell Five Stories at Once

Story telling is one of the most powerful medium to motivate employees to perform better. But we typically see organizational leaders tell two types of stories to inspire their teams.

The first, the turnaround story, runs along the lines of “We’re performing below industry standard and must change dramatically to survive—incremental change is not sufficient to attract investors to our underperforming company.”

The second, the good-to-great story, goes something like this: “We are capable of far more, given our assets, market position, skills, and loyal staff, and can become the undisputed leader in our industry for the foreseeable future.”

The problem with both approaches is that the story centers on the company, and that will inspire some but by no means all employees.

But instead of that there are four other sources that give individuals a sense of meaning, including their ability to have an impact on:

- The society**

Making a better society, building the community, or stewarding resources.

- The customer**

Making life easier and providing a superior service or product.

- The working team**

A sense of belonging, a caring environment, or working together efficiently and effectively.

- Themselves**

Examples include personal development, a higher paycheck or bonus, and a sense of empowerment.

It appears that these five sources are a universal human phenomenon.

Most organizations fail to provide meaning quotient to employees which results in higher Attrition rates and reduction in productivity levels.

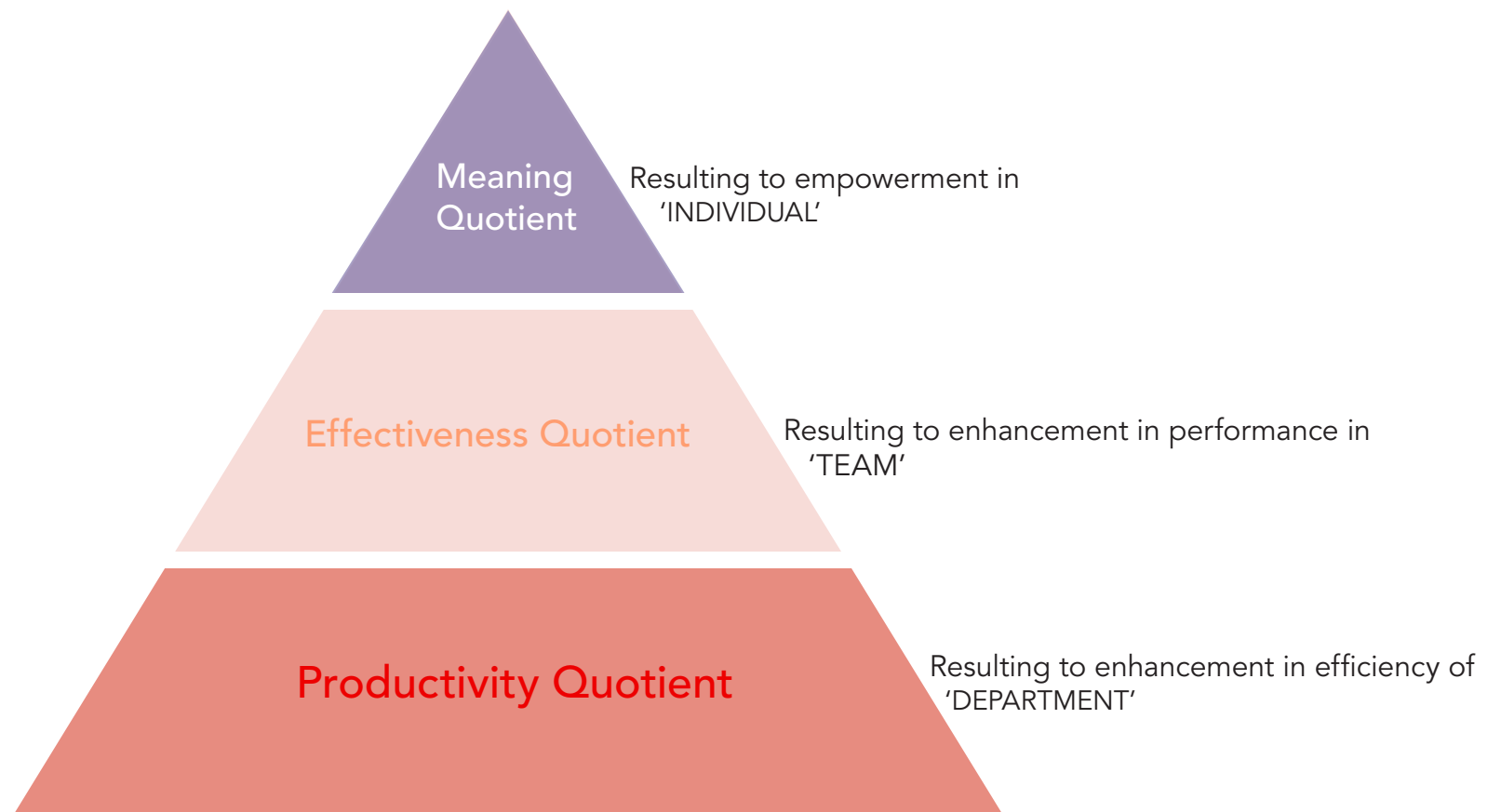
Most of the time when people don't find meaning in the kind of work they do they leave.

There's often a disconnect between the desire of practitioners to create meaning in the workplace, the good ideas emerging from cutting-edge research, and the number of specific, practical, and reliable tools that leaders know how to use. Meaning quotient results in intrinsic motivation sense of empowerment in employees.

The implication for leaders seeking to create high-MQ environments is a turnaround and leading 'good-to-great' story that will strike a motivational chord within workforce.

The same goes for a "change the world" vision like those of Disney and Google or appeals to individuals on a personal level. The way to unleash MQ-related organizational energy is to tell all five stories at once.

This will impact not only individual but entire organization.



Solution: Level 2

**Give teams more autonomy,
and allow them to self-organize**

Most companies had all launched traditional operations programs like “total quality management” and “just-in-time inventory control”.

These programs sometimes improved productivity in one company or another, but “no overall performance effect” when the companies were looked at in aggregate. In other words, there was no evidence suggesting that any of these operations initiatives would reliably and consistently improve productivity.

So what did improve productivity?

Productivity improved when performance was taken care, when companies implemented programs to empower employees (for example, by taking decision-making authority away from managers and giving it to individuals or teams), provided learning opportunities that were outside what people needed to do their jobs, increased their reliance on teamwork.

These factors “accounted for increase in value added per employee. In short, only when companies took steps to give their people more freedom did performance.

When staff members can do their jobs more effectively, they become more confident. This leads to greater job satisfaction and improved employee retention. There are a range of low-cost professional development training options to choose from, including mentorships, job shadowing and cross training.

Idea: Leverage the expertise you already have within your office.

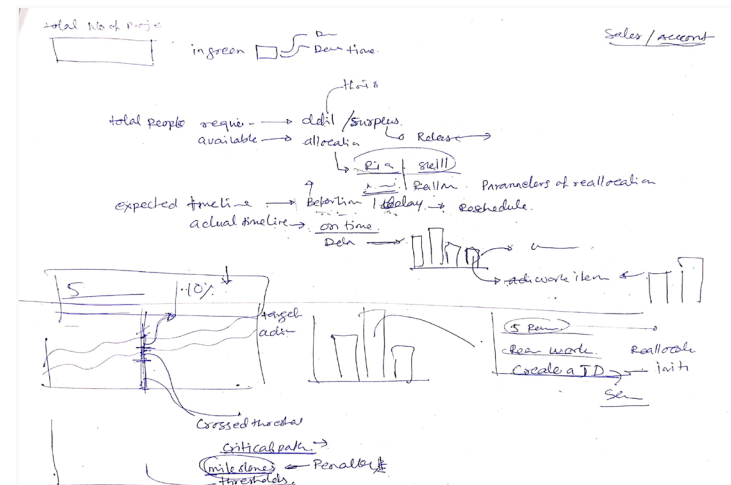
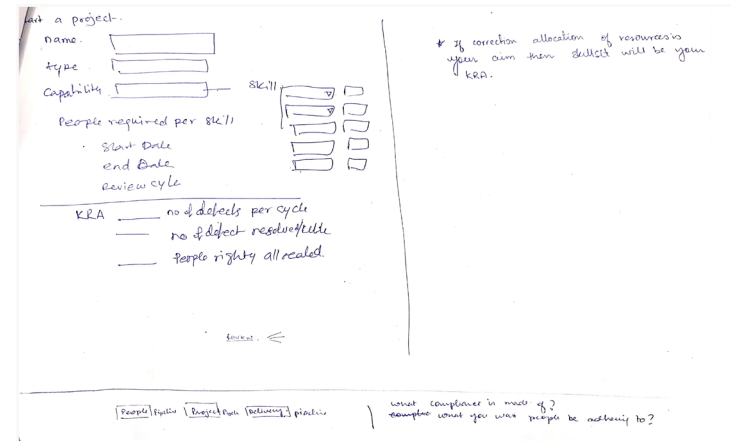
A mentor, for instance, can serve as guide and teacher and help mentees sharpen both their soft skills and technical abilities. Gaining practical knowledge, institutional insights and hands-on guidance is a highly effective way for mentees to become more valuable and versatile employees.

Paper Prototyping

Taking this concept further, paper prototypes were created to translate this concept into solution.

This will not only benefit employee but create an impact at business level as well involving stakeholders at execution level.

The solution focuses more on people who are involved in the execution of the project i.e Employees and Project Managers.



USER FLOW FOR PROJECT MANAGER

1. What would the user want to know?

The PM would like to know the status of the project and what is affecting the overall health of the project for example(delays, project running of budget, unavailability of people as per skillset etc) and the reason behind it.

2. Why would the user want to know?

The PM would want to know the root cause of the problem and underlying reasons/factors so that he/she can prevent delays, complete projects within the budget.

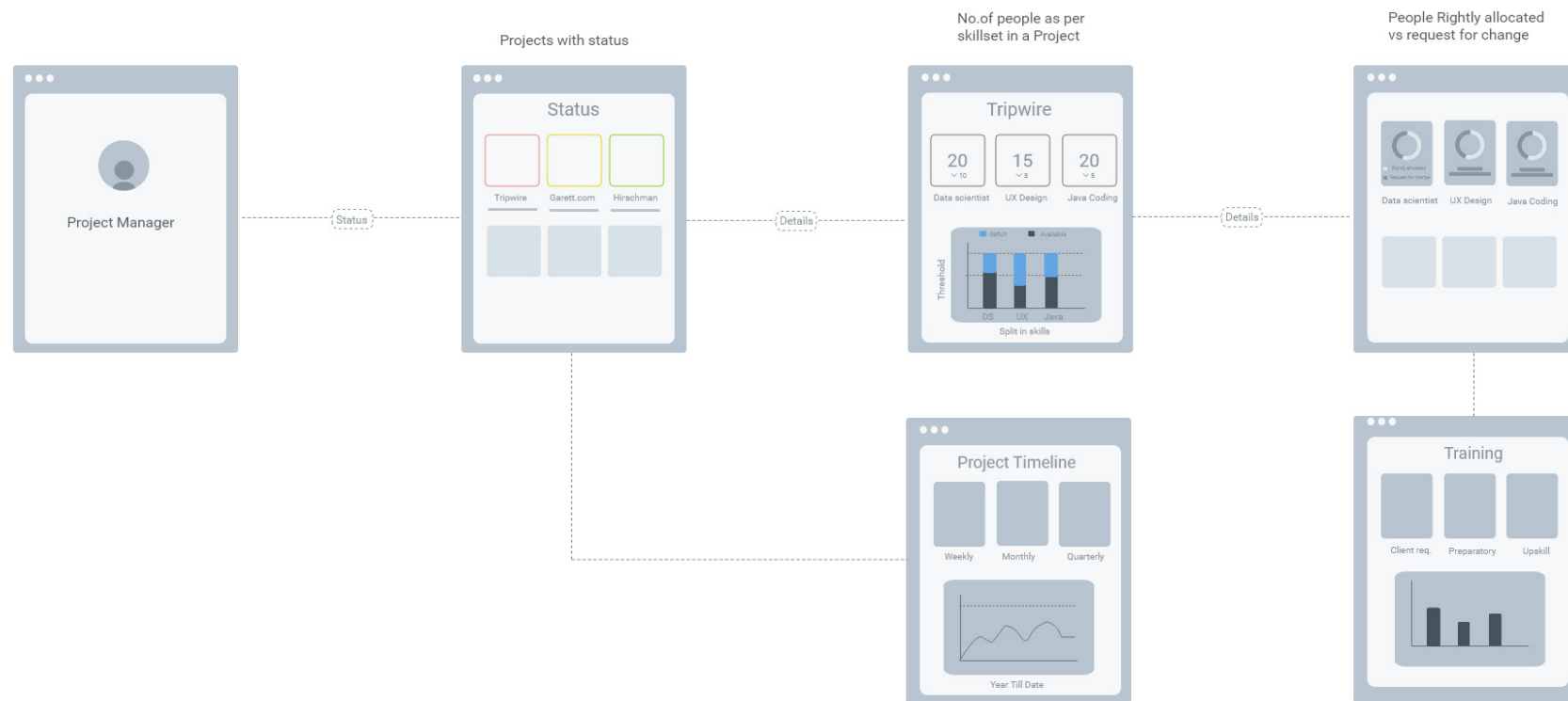
3. What benefit would the user get from it?

The PM would have multiple benefits, for example, completing the project on time would lead to client satisfaction and more business from them. PM would get people available as per skillset on time that would enhance the overall productivity and efficiency of the project.

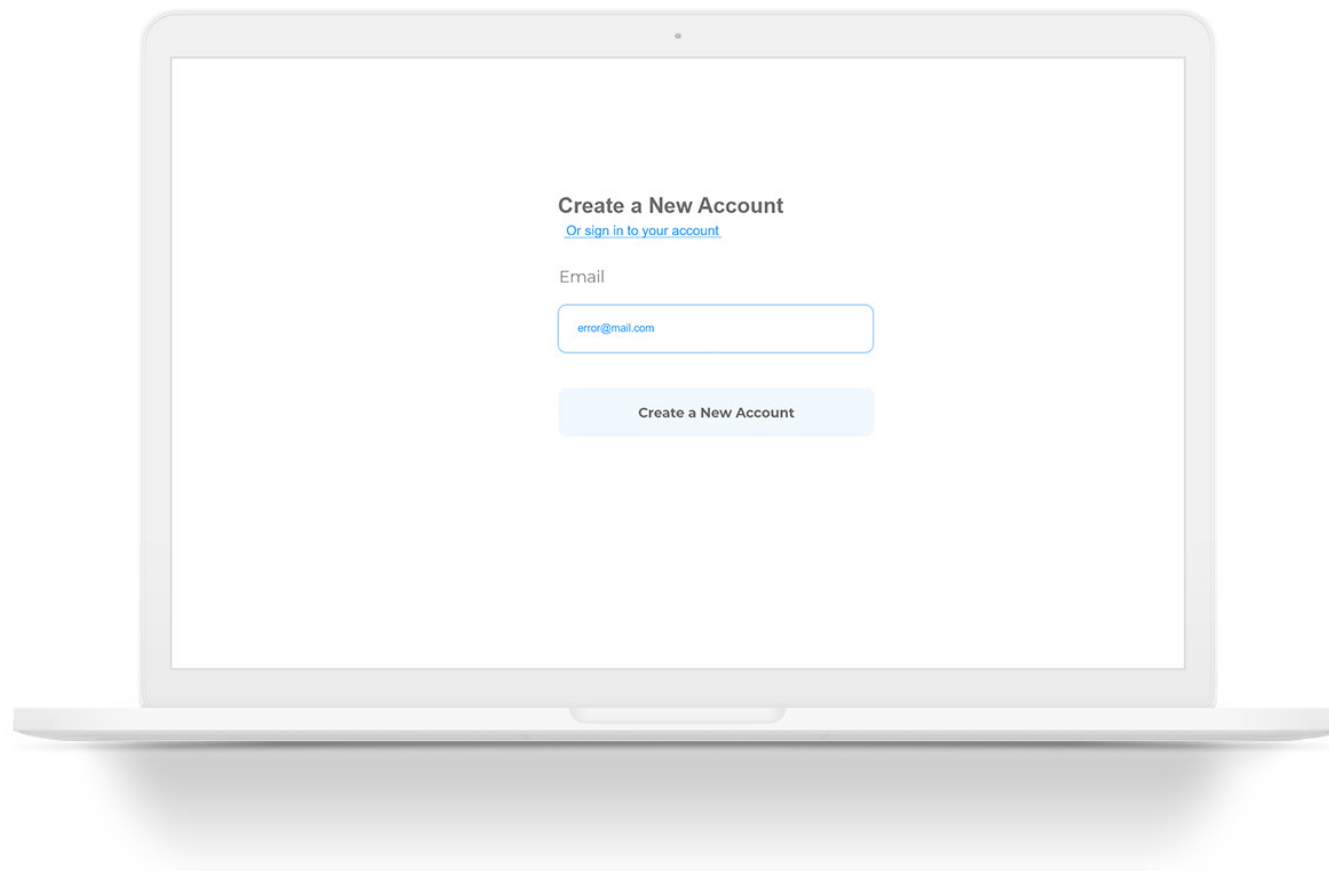
4. What action might the user want to take?

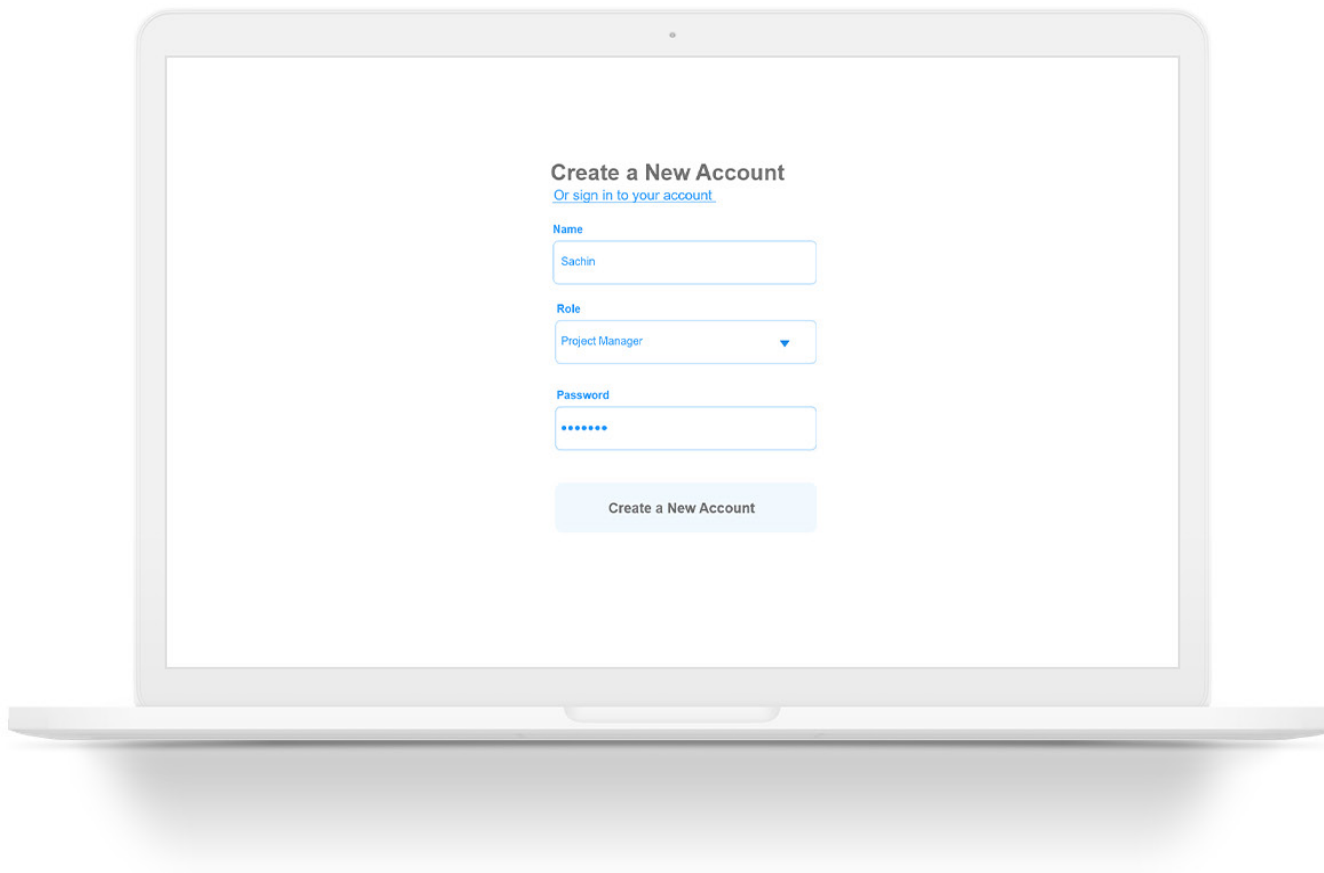
Based on the key insight PM would like to get the recommendation to launch the most relevant action as per the scenario.

USER GOAL: As a Project Manager I want to allocate employees to right kind of project as per skillset so that they perform better and work can be done faster.

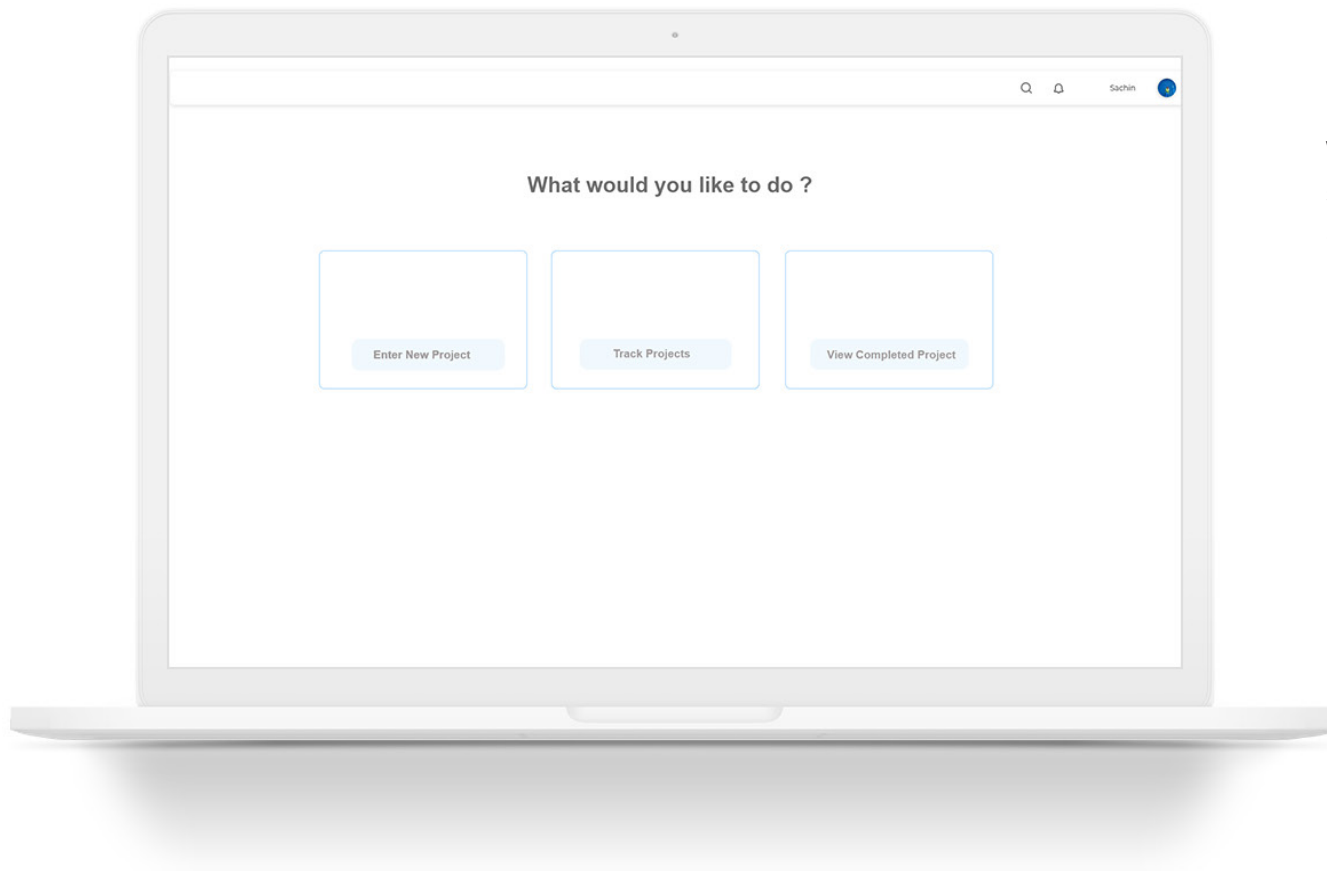


Detailed Solution



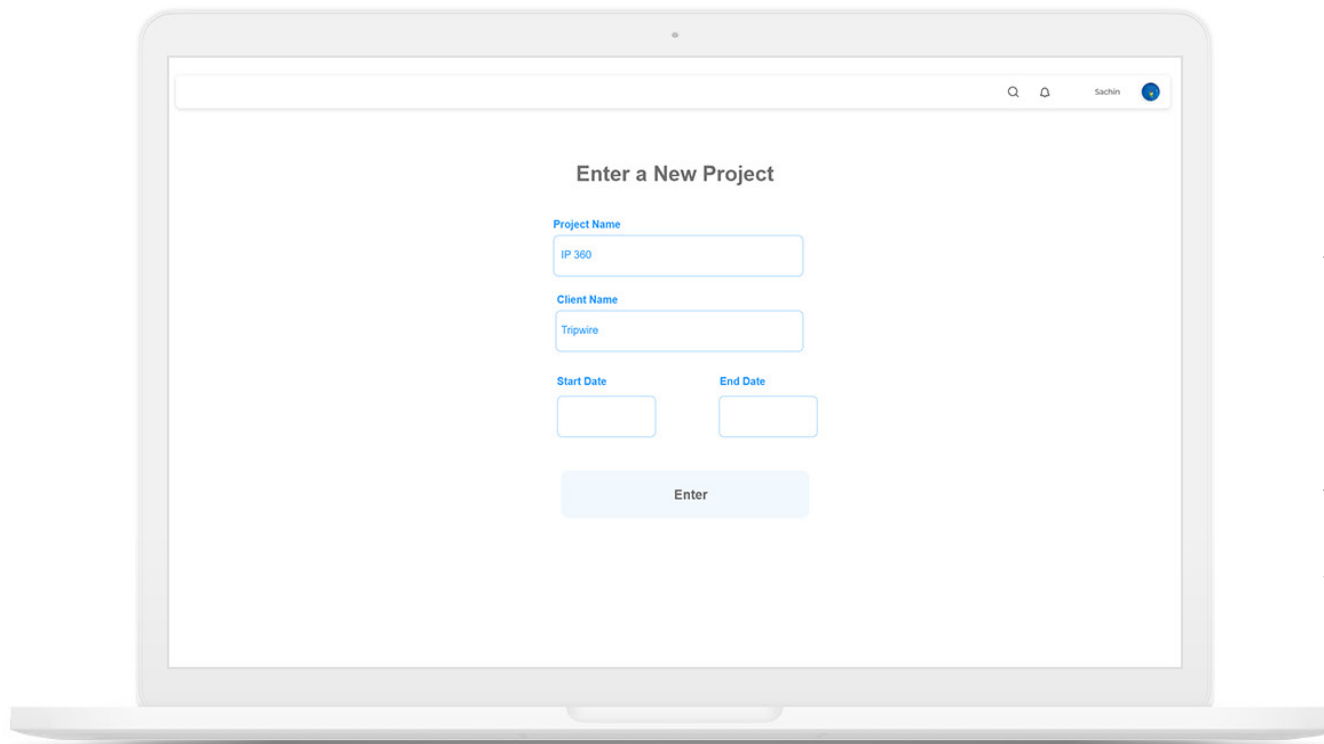


Landing page of the dashboard where people sign in to their account or create new account as per the role.



When project manager has signed in, following options appear based on the project.

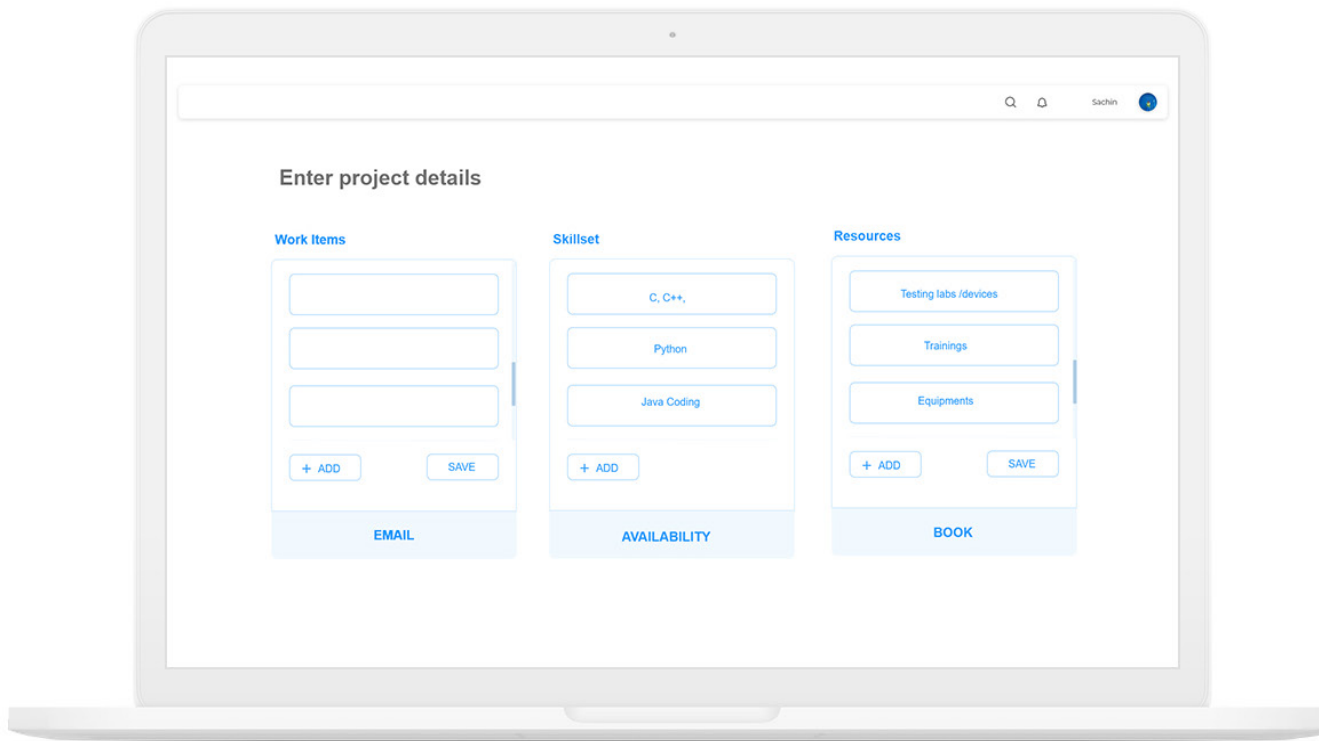
- Enter new project,
- Track the project or
- View Completed Project.



Project Manager selects 'Enter a New Project'. Initially, data has to be entered by Project Manager regarding the project which includes:

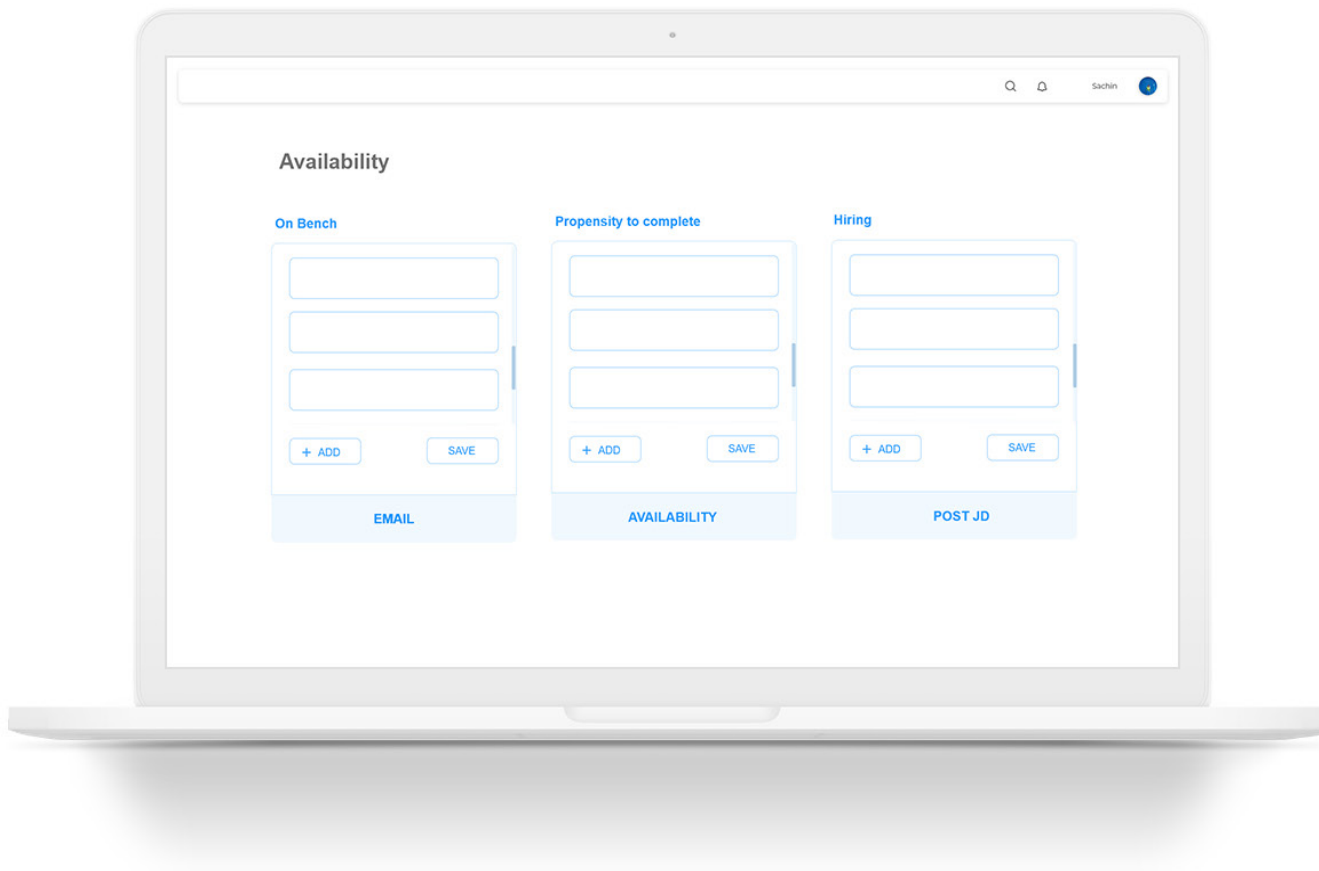
- Project Name
- Client Name
- Start Date and End Date of project

This is the basic level of information which is known while signing up for a project.



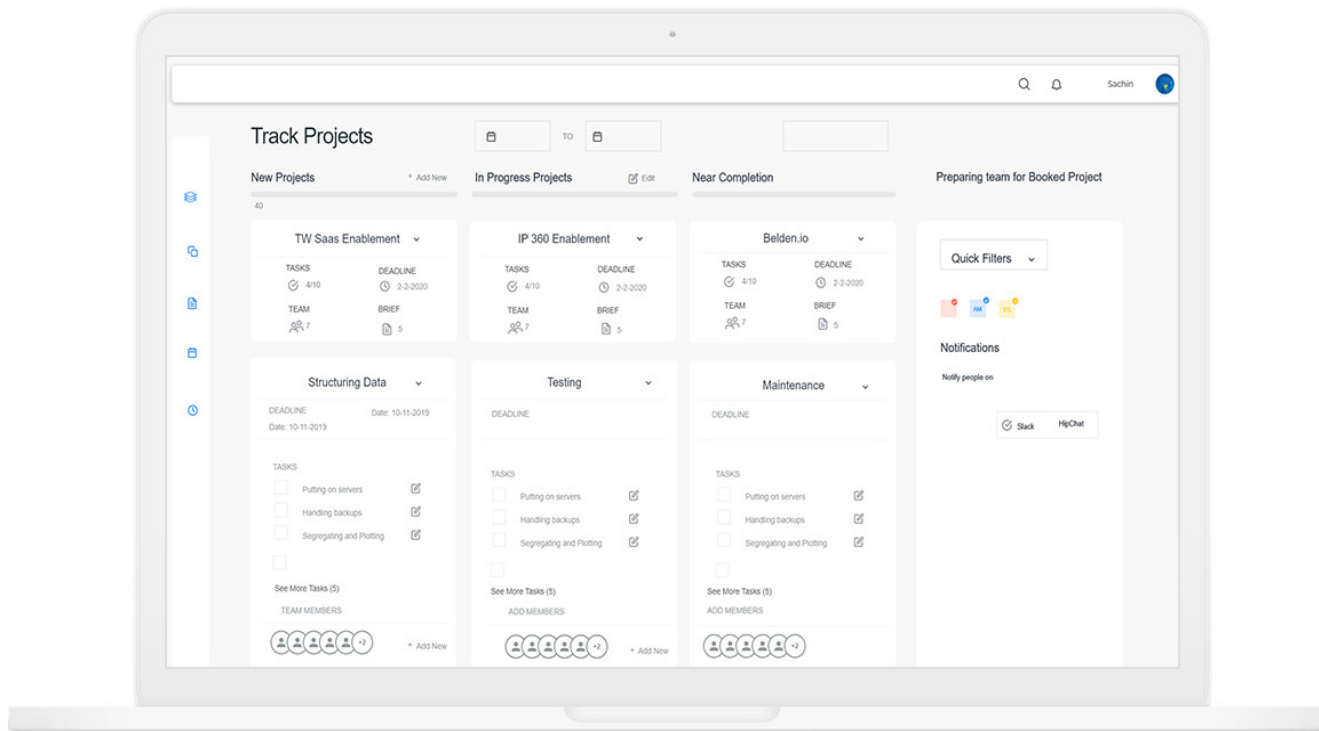
Entering project details page consist of three sections:

- Work Item: Initial details are to be added by Project Manager, which can be directly shared by the team over email.
- Skillset: It asks to save skillsets that are required in order to check availability.
- Resources: Booking of resources can be done, in case any training is required or any equipment is required for the project.



On clicking check availability, it shows people (as per skillset) in the three categories:

- On Bench: People who are currently not working on any project. They can be reached out via mail.
- Propensity to Complete: People who are about to complete the project and would be available to take new project.
- Hiring: JD for people to be hired is posted (if people are not available on bench neither on propensity to complete project)



On selecting the track project option it will show details of project which are:

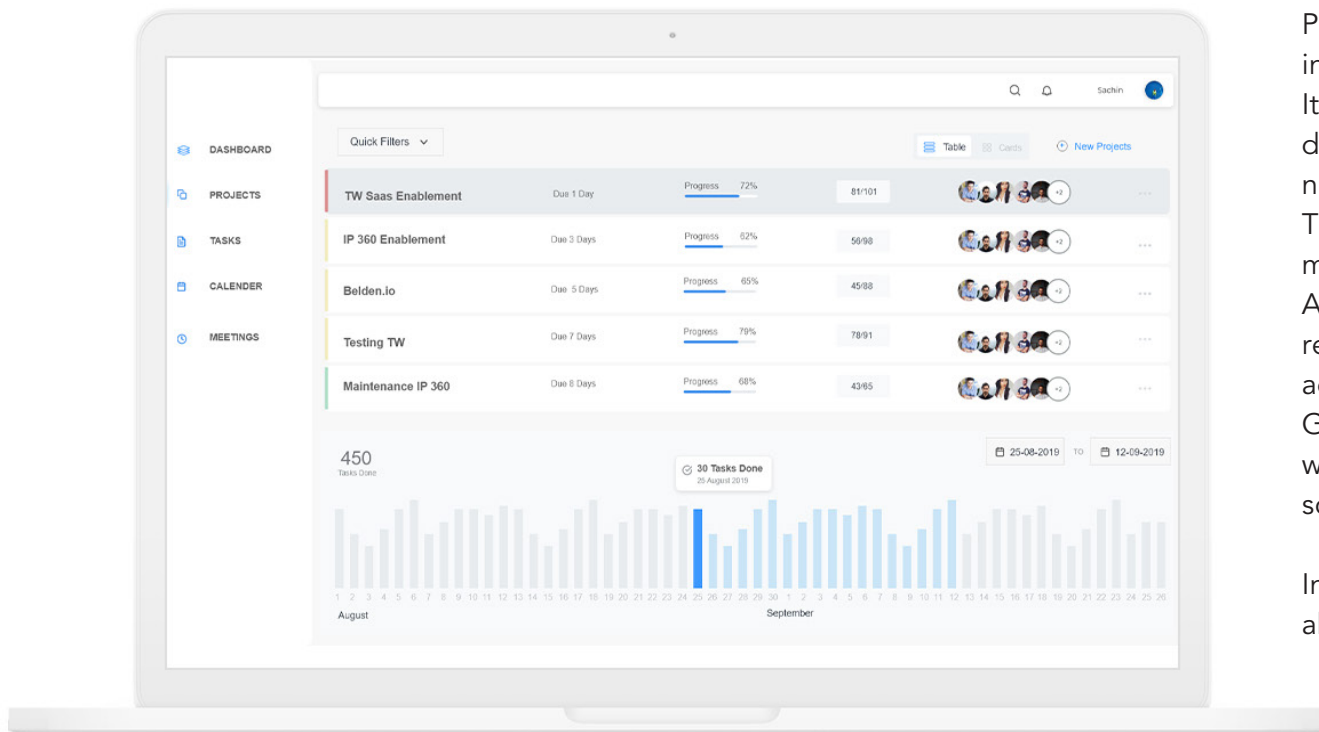
- New
- In progress
- Near Completion

Details include project type, no of tasks, deadline and brief.

The work item includes milestone and deadline along with the team members.

There are quick filter options and a notification section.

Notifications is linked with slack.



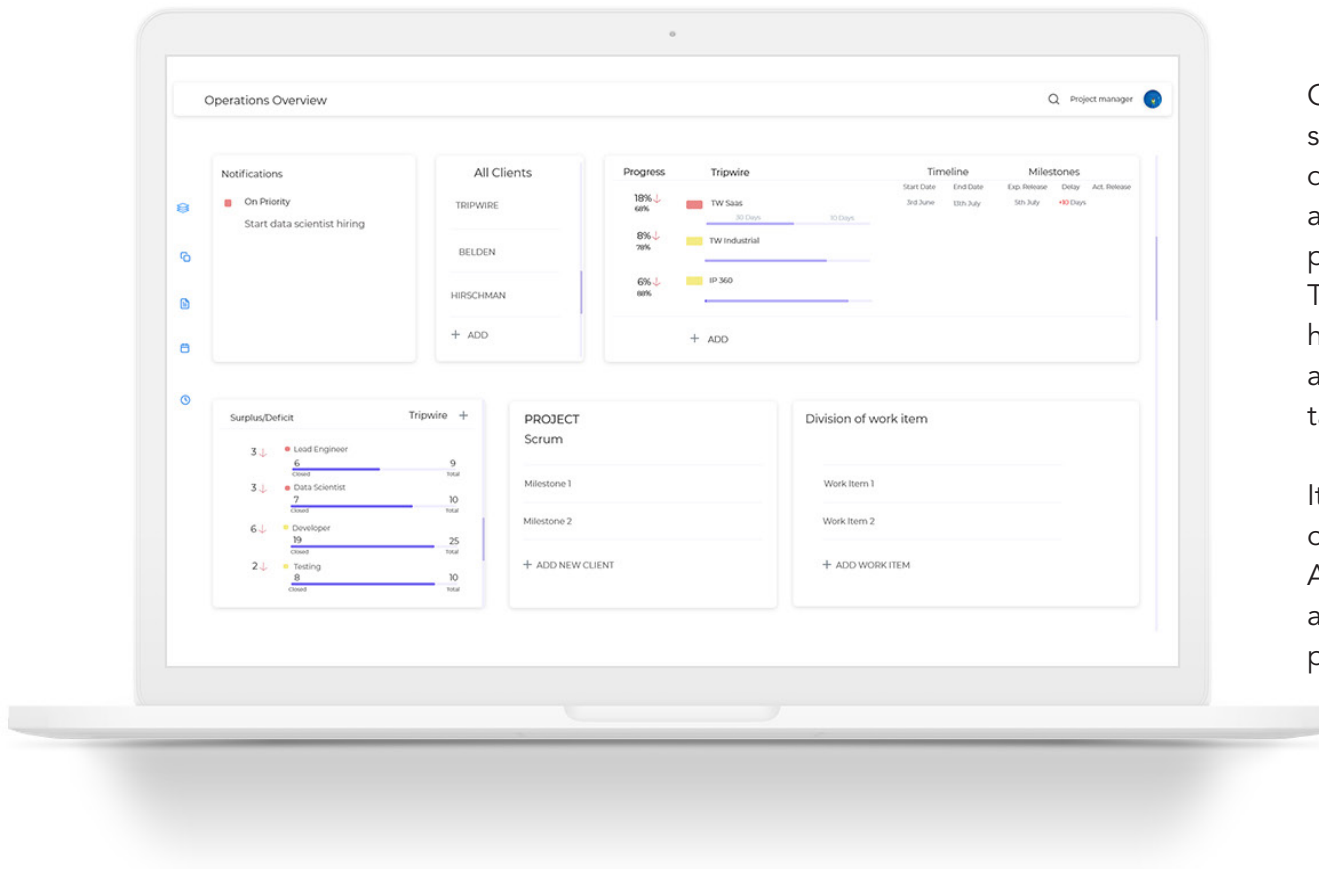
Project which is at risk is marked in red.

It shows current progress and due date of project along with the number of people working on it. This project requires immediate management action.

Amber shows project that requires attention. If issues are not addressed it is prone to risk.

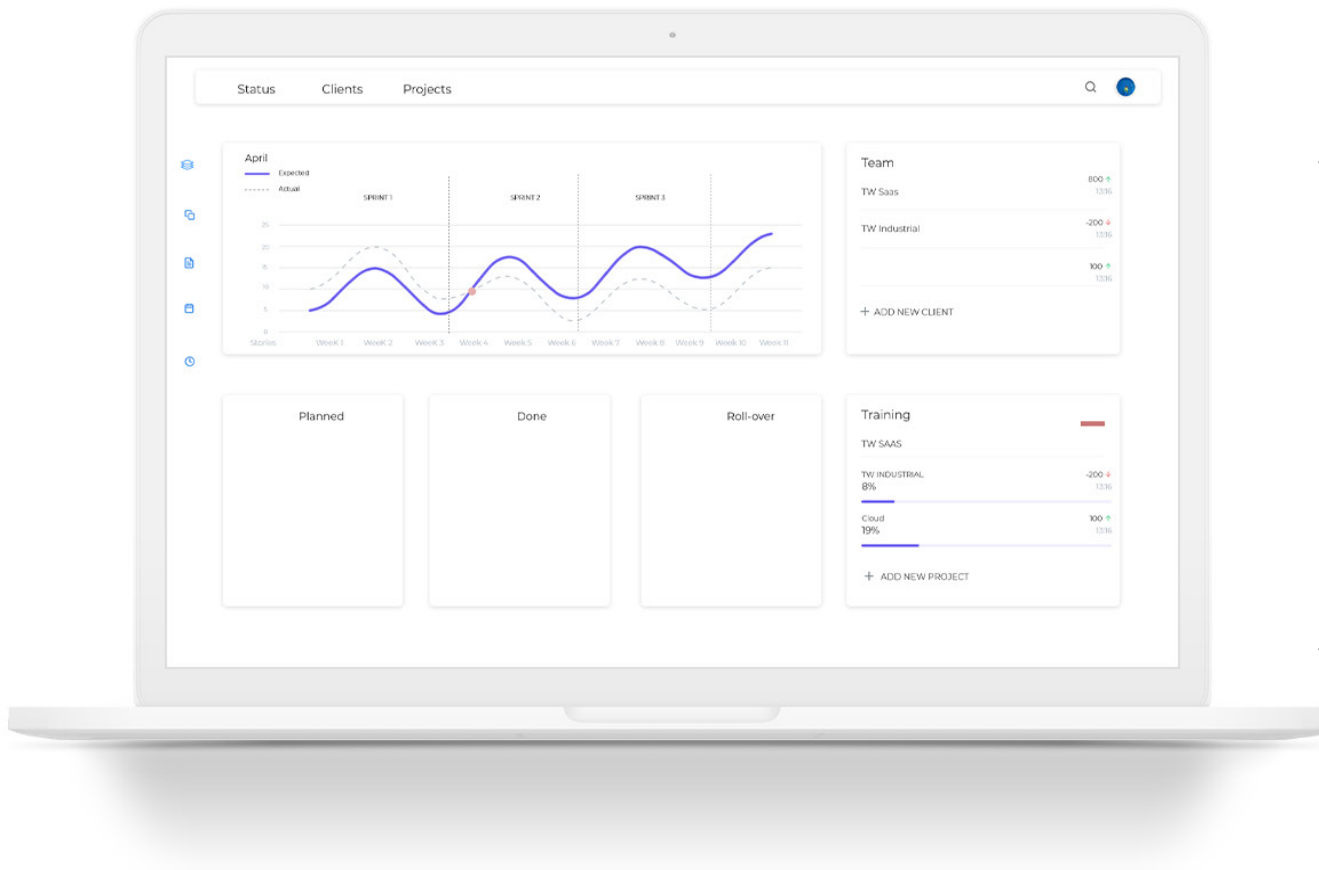
Green shows all good project which is on track, to meet scheduled dates.

In the bottom there are details about sprint for the project.



Going a level deeper, this screen shows Operations overview where detailed information can be seen and tracked about the project progress, timeline and milestone. The notification section at top left highlights tasks on priority which are probable reason for delay in task.

It also shows surplus and deficit of people for the project. Accordingly, people can be added and removed from a project.

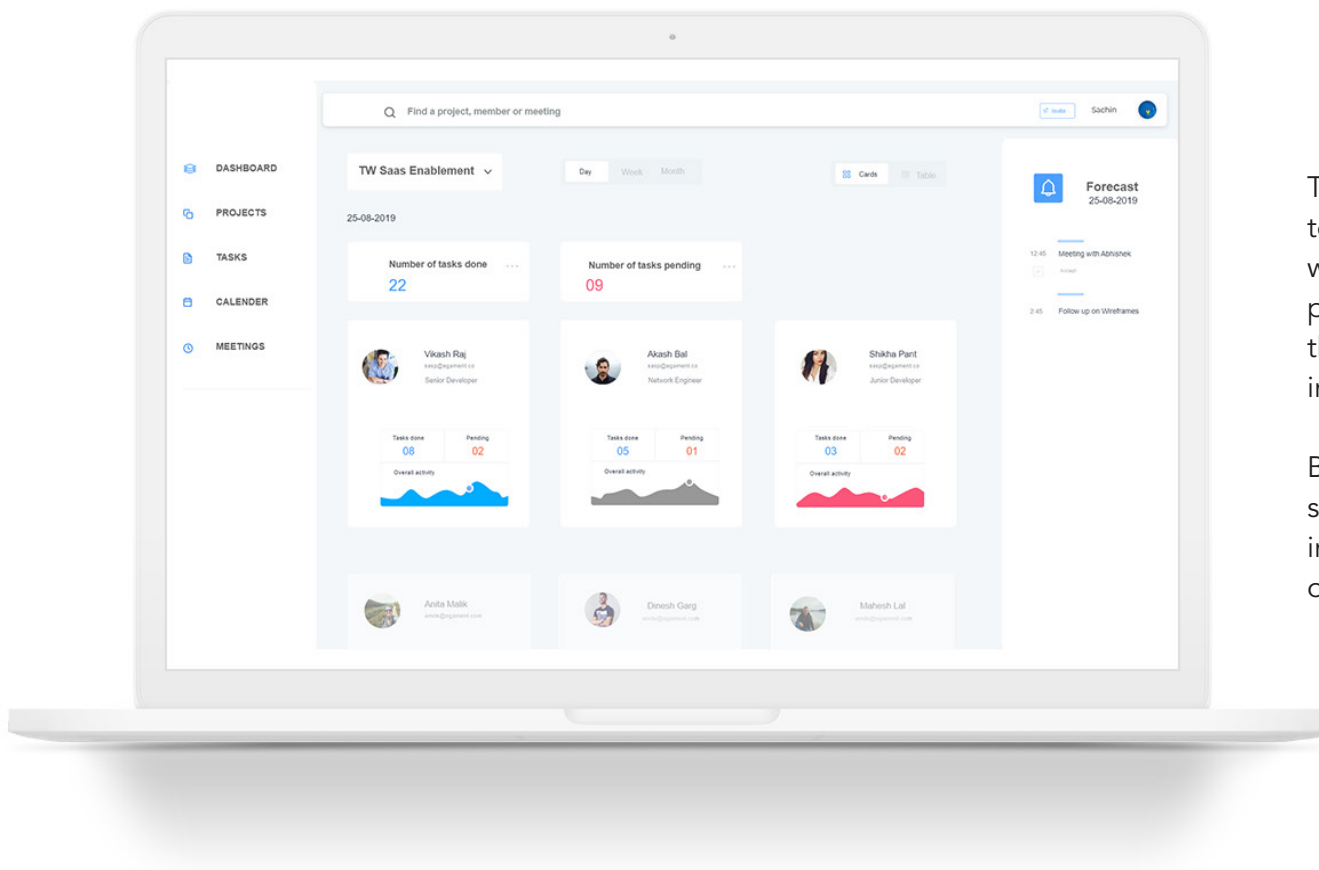


This screen shows the progress of a team in a sprint over a duration of time.

It can be tracked client wise or project wise.

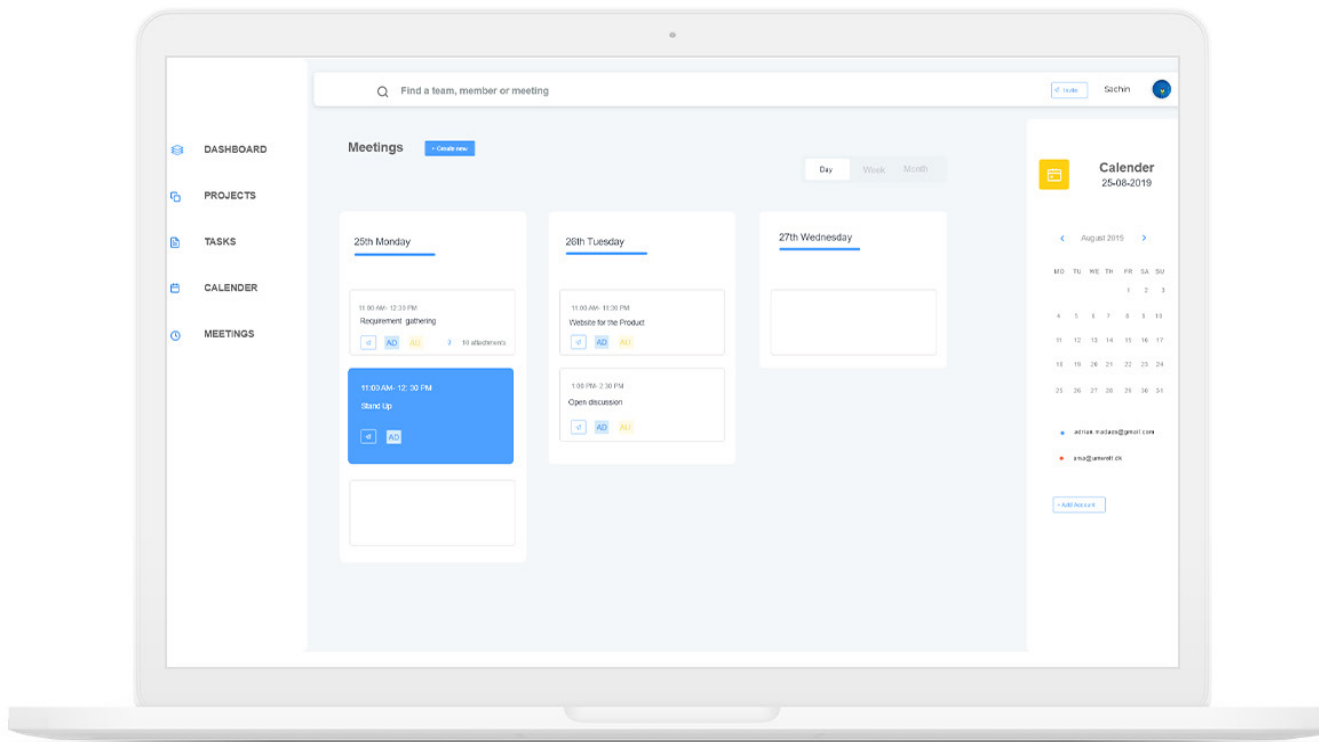
It also has section where number of sprints planned, done and roll-over can be added.

Details of training if required any can be added and progress can be tracked for the same.

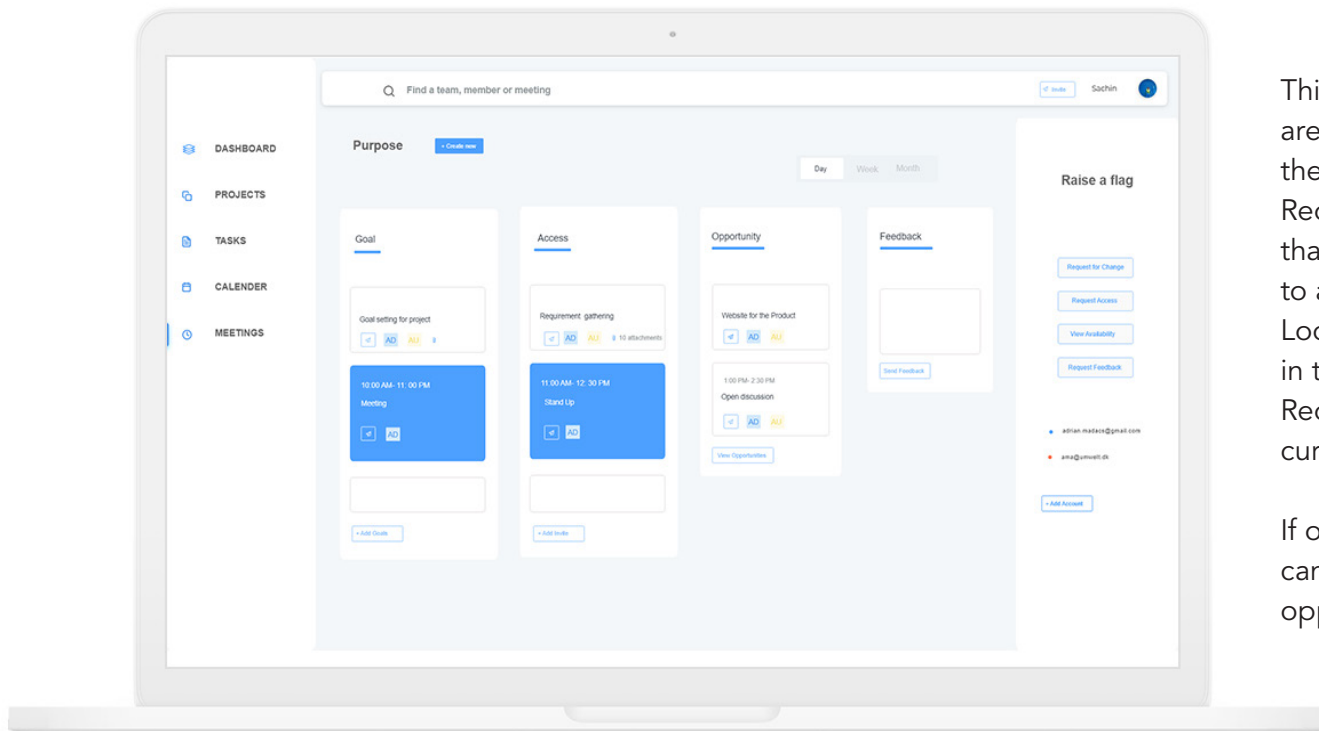


This screen shows details of each team member and amount of work done by a team and tasks pending. Also, the tasks done by the individual employee and its individual activity chart.

Based on predictive analytics, system will show tasks to be done, in future in order to finish project on time.



This screen has calendar to view meeting dates and also details regarding the meeting.



This screen is for employees who are working on the project where they can see Goal of the project. Request access for the material that they feel would be required to accomplish the goal. Look for existing opportunity in the domain they want to work. Request feedback on the last or current project.

If opportunity exists, employee can raise flag to change opportunity.

The idea here is to make employees feel empowered by letting them have autonomy over the kind of work they want to work on. Most of the time employees don't feel comfortable in sharing or speaking with their manager in public this in public but would share it in personal. This interface is just a medium to help them facilitate with this.

Even incremental steps forward—small wins—boost what inner work life: the constant flow of emotions, motivations, and perceptions that constitute a person's reactions to the events of the work day. Beyond affecting the well-being of employees, inner work life affects the bottom line. People are more creative, productive, committed, and collegial in their jobs when they have. But it's not just any sort of progress in work that matters.

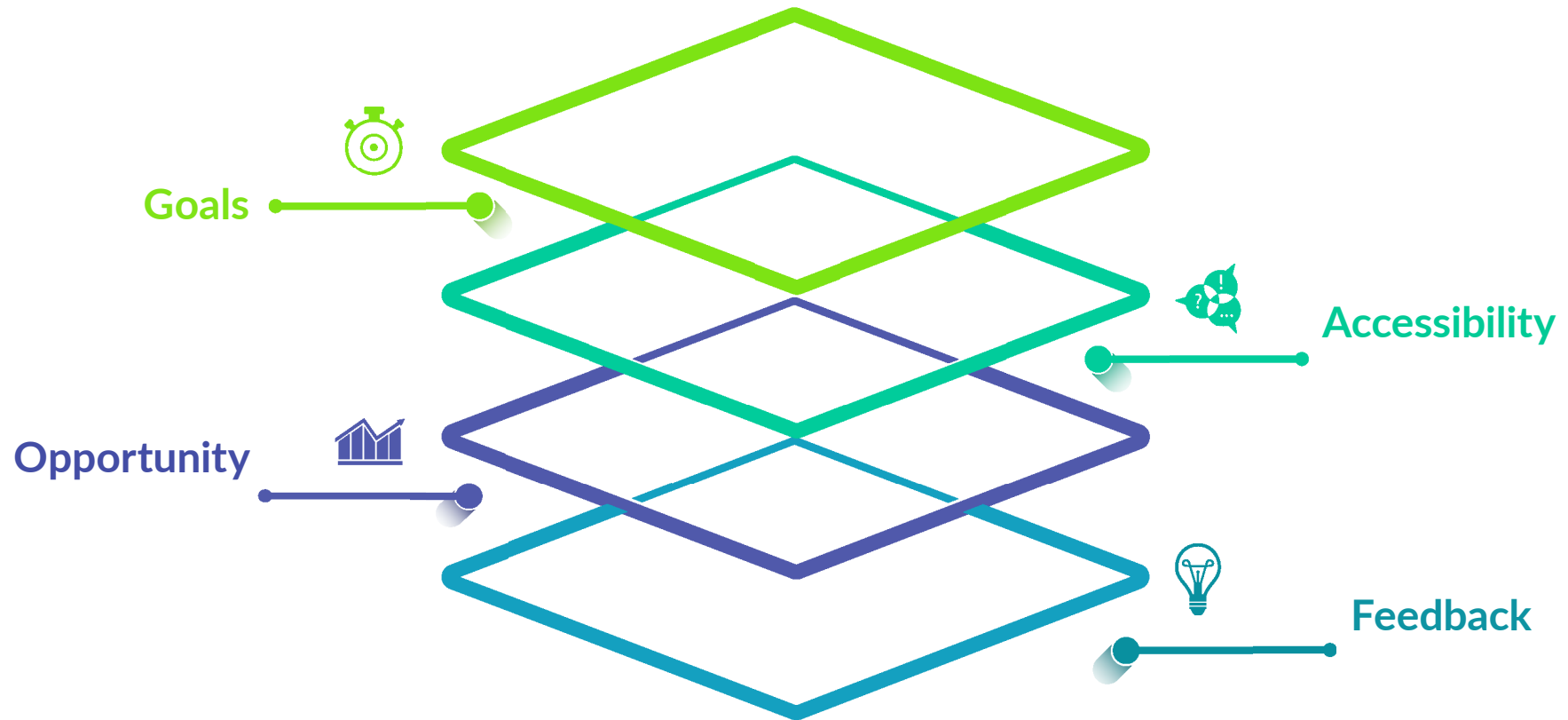
The first, and fundamental, requirement is that the work be meaningful to the people doing it.

This necessarily might not be the case for every employee but people who feel that other project which is running parallel in the company makes them feel interested to work then they can raise a flag. Though, software would not be able to help this idea to put into action so some of it would be in digital space as well.

Solution: Level 3

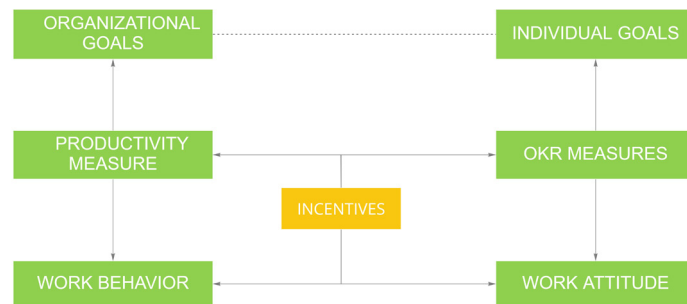
Integrating Digital solution in Physical Space

Framework



Integrating the solution in the physical space taking software as the touch point. Creating several interrelated mechanism(s) to create business benefit as well as employee feeling encouraged, equitable state of power.

Goals



In Corporates goals, are generally referred to as Organizational goals, which are generally measured by KPI's through which productivity and employee's work behavior is measured.

Based on the productivity measure and work behavior incentives are given to employees but there is other side of coin which is includes Individual Goals of employees.

Google came up with OKR's measure which can be applied here in this case which leads to employees work attitude.

While attitude involves mind's predisposition to certain ideas, values, people, systems, institutions; behaviour relates to the actual expression of feelings, action or inaction orally or/and through body language.

Accessibility

Accessibility and inclusion are important cornerstones of employee productivity, and, in turn, organizational productivity. Accessibility can manifest in multiple ways, and needs to be practised and encouraged at a pan organization level. Accessibility policies are not enough.

A simple way to motivate employees through accessibility is to enable them to see their work in the larger context of the organization and society. As most employees are able to own only a miniscule part of the larger project, often without knowing any other details, it can be easy to feel despair in the work they are undertaking and to find it meaningless. By enabling them to see the bigger picture, and by letting them see how important their (however small) part of the work is in the entire project, it can stop them from losing interest in the work. If the employees are able to understand the beneficiaries of the project and how their work will bring about change in the real world, they will be more motivated to see the project through effectively.

This can be done by promoting transparency in the organization. Meetings with clients and key stakeholders tend to be conducted with only the most relevant and senior employees, who then relay the objectives or goals to their subordinates. The subordinates then end up working in silos as mentioned earlier and feel a disconnect from the original project. When they are communicated only the section of the work they are supposed to undertake, a large part of the mission and vision of the project gets lost. By simply including employees in the meetings where key project decisions are undertaken, even if they are not involved in the decision making process, they can understand why certain decisions were taken. If they are able to contribute to these meetings, they would feel more autonomy and ownership towards the project, especially if their suggestions were acknowledged and implemented.

Opportunity

Opportunities follow through from accessibility. Employees should be given access to opportunities which may be of interest to them.

At the time of joining, companies generally require new employees to indicate their areas of interests, as well as hobbies and co curricular activities. However, this information is not taken forward in most cases to assign work to the employees.

There can be an office-wide presentation of the projects undertaken by the various teams in the organization. This way, the employees also have an understanding of the context of the larger organization and the work being undertaken. Using the understanding they gain these large scale showcases, they might be able to indicate a project of preference for the future. These opportunities can also be presented as a reward for good performance, when financial incentives may not be possible or motivating.

The ability to choose a project of their liking reaffirms the employee's sense of autonomy, which is an important primal driver in the workspace. Without autonomy, the employee may feel that the project is a cage, and may come to resent the work he/ she is expected to do. With a project of their own choosing, even if the work turns out to be less interesting or fulfilling than expected, the employee is likely to take ownership and see the project to completion in the best way, as it was his/her decision to take it forward in the first place.

In addition to the town hall meetings, which may not be possible very regularly, the internal software of the company can have a space for upcoming opportunities from different teams and functions. By advertising the opportunities, the teams may be able to recruit candidates from within the organization who have interests, or past experiences in those areas, without having to undergo the expensive process of hiring and training new employees. Similarly, employees, with multiple projects to choose from, will feel that they have access to multiple opportunities for growth and exploration. In order to make a stronger application to these projects, they would be willing to work more conscientiously in their present roles as well.

Feedback

Developing a feedback culture creates a safe environment for mutually-beneficial relationships to thrive because there is a space for honest dialogue. Parties involved have opportunities to reflect on the process without defending themselves, arguing over the matter, or even evading issues at hand. Consequently, unmet needs come out in the open, the flow of invaluable insights into the real issues and problems the workforce regularly encounters is maintained, and expectations are properly communicated. This atmosphere encourages better performance and positive attitudes, and lessens the occurrence of miscommunications. It also empowers the organisation to be proactive and effective in addressing unmet needs.

But well-thought-through feedback, packaged in an honest, in-depth conversation and one that aims for development can improve employees' performance, minimise workplace stress and increase an organisation's productivity.

Impact

The framework is likely to have a sustained impact on the overall culture of the organization upon implementation.

The intangibles of the organization can not directly be changed, but certain behaviours, performed repeatedly, can influence the attitude of the organization.

When primal drivers such as autonomy and curiosity are satisfied, employees are likely to have more intrinsic motivation. Their general attitude towards their work and the employer organization is likely to be positive. They would be more satisfied with their work and more hopeful about future opportunities. A change in attitude is manifested as changed behaviour, and they are likely to pay more attention to their work and deliver work of higher quality. Increase in satisfaction with work would also mean employees who are happier in general. Happier employees are likely to be more collaborative, creative and helpful to others.

Thus, by implementing the framework over a longer period of time, the organization is likely to see more than just a rise in productivity. These efforts would create a ripple which would transform the workplace, creating happy employees which make the organization a great place to work.

Validation

The model is intended to provide a understanding and analyzing productivity. But because of the complex interactions represented by the variables and relationships in the systems map, there is no one solution that fits all. However, the solution that has been provided, if utilized by managers will lead to significant results.

incedo

December 3, 2019

TO WHOMSOEVER IT MAY CONCERN

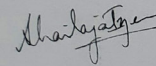
This is to certify that **Krashagi Saini** has successfully completed her Internship in **Digital and Analytics** Department for period of **June 03, 2019** to **December 3, 2019**.

Krashagi has done the project on **'Enhancing productivity in Corporate Functions'** under the guidance of **Neha Saraswat** and has submitted her Project to our satisfaction.

The Project on evaluation fulfills all the stated criteria and the student's findings are her original work.

We found her sincere, hardworking and result oriented. She worked well as part of a team during her tenure. We take this opportunity to thank her and wish her all the best for her future.

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6.1 Conclusion

6.2 Key learnings

6.3 Bibliography

6. Epilogue

Conclusion

Productivity has different connotations for different stakeholders within the organisation. For example if you see it from CEO point of view or a managers point of view or for an employees point of view it would be very different from all three of them. But the ultimate objective or goal for all three of them is to enhance productivity for greater business benefit leading to the growth of business in terms of profit margins, expansion across domains and acquiring new clients as well as making business from existing clients.

Here, research played an important role to understand motivation of each stakeholder and what is in it for them or what benefit they will get out of the research. The research led to an systemic understanding of the organisation where drivers of each stakeholder was considered aligning with the organisation's vision and mission. Thus, research helped and led to generation of insights that helped to know the touch-points related to productivity and probable directions for enhancing it in corporate functions.

The concept of productivity is still often misunderstood; discussions of the relationship of productivity to effectiveness, efficiency, quality, innovation, and financial or behavioral measures of performance take the form of debates. A common definition of productivity, at all levels of organizational analysis, is a prerequisite for the development of a comprehensive measurement system.

Attempts to aggregate individual productivity measures or to disaggregate organizational measures are thwarted by the dissimilarity in measures of output. At the individual level, output is often counted in physical units of product produced or service provided. At higher levels of analysis, different outputs from different sources are combined in some form of weighting scheme, sometimes using cost or price data that are incompatible with financial measures at the individual level, given current cost accounting methods.

On the input side of the productivity ratio, individual productivity is often measured only against labor input, and labor may be counted in a number of different, but acceptable, ways. At the organizational level, a total factor approach is often used, that is, inputs consist of labor, materials, capital, and energy.

In most organizations today, the amount of indirect or managerial work far exceeds the direct labor associated with producing products and services.

The productivity of indirect labor and, to a lesser extent, managerial efforts can be measured in terms of results achieved and resources consumed.

Often, however, the contribution of these activities to the productivity of the organization is unclear. If the organization was evaluated strictly by the value of products produced relative to inputs, it would have, for example, no training function; but such myopic views would never be accepted by the enlightened manager. Current productivity measurement systems suffer from an inability to capture and integrate the contribution of indirect functions, such as training, into the productivity equation for the organization.

When individuals are formed into work groups or teams, linkages are formed between the effort of the individual and the output of the group. The nature of the linkage is dependent on the structure of the group, characteristics of the individuals, psychological factors, sociological factors, technological variables, and system variables. The complex interactions that take place in cooperative productive behavior, however, are seldom captured in common productivity measurement systems.

If you play tennis, you have an individual scoreboard, but if you play basketball, you have a team scoreboard. What matters is helping the team win.

Key Learnings

There were a lot of things that I learned during my internship. One to one interaction with my mentor helped me grow a lot. To summarize my learning I would put them down in points as follows:

1. System's Thinking: I realized that systems thinking is thinking beyond design patterns. This is beyond the ability to frame the problem from multiple vantage points, the ability to see how data from Interaction can scale and map the bigger story, the ability to make sense of user intent, workflows and mental models in the architecture of the experience.
2. Creative Problem solving: I tend to exercise divergent thinking prolifically where I looked at the problem from every angle.
3. Critical Thinking: The ability to articulate in a given design, feature or direction.
4. Story Telling: The ability to persuade, educate, or explain by distilling complex concepts into a narrative that others will remember or understand.

5. Collaboration and Communication: It gave me experience of working in a diverse team where I ideated to extend the thinking of engineers and data scientists.

6. Research: In this context research was desired but not required. Here I utilized my skill of a researcher by conducting contextual inquiry and behavioral research.

7. Information Architecture: I learned about Information architecture while working on the User Interface and its experience which aims at organizing content so that users would easily adjust to the functionality of the product and could find everything they need without big effort.

8. Data Visualization: Data visualization was a new stream altogether that I got exposure to during my Internship. I realized how important a role it played in design to communicate dense and complex information in graphical form. It was more of a data visuals design that is used to tell a story, which can help users in decision making.



"I always use to ask my mentor that what is the right wayof doing things and she always use to tell me that there is no right or wrong way to do things. The way you do things is the only way."

Bibliography

Anon. (2015), The Future of Productivity Report. OECD. [Available at: <https://www.oecd.org/economy/the-future-of-productivity.htm>]

Back, T. (2019), "The Product Podcast: Product Management for AI by Google PM", Apple Podcasts, [Available at <https://podcasts.apple.com/in/podcast/the-product-podcast/id1219400787?i=1000434683747>]

BOCK, L. (2015). Work rules!: insights from inside Google that will transform how you live and lead.

CSIKSZENTMIHALYI, M. (1990). Flow: the psychology of optimal experience. New York, Harper & Row.

Gore, A., Ponappa, S., Nadiem, "Go Figure Podcast: Is Bottom Up Innovation really possible at Gojek", Gojek [Available at: <https://gofigure.go-jek.com/episode/is-bottom-up-innovation-really-possible-at-go-jek>]

Senova, M. (2017). This Human: How to Be the Person Designing for Other People, BIS Publishers

KALBACH, J. (2016). Mapping experiences: a guide to creating value through journeys, blueprints and diagrams.

KAPLAN, R. S., & NORTON, D. P. (2018). Balanced Scorecard.

MARR, B. (2015). Key performance indicators for dummies. <http://www.books24x7.com/marc.asp?bookid=82470>.

Morgan, Gareth, 1943-. (1997). Images of organization. Thousand Oaks, Calif. :Sage Publications,

NEWPORT, C. (2016). Deep work.

Peter Merholz and Kristin Skinner. 2016. Org Design for Design Orgs: Building and Managing In-House Design Teams (1st. ed.). O'Reilly Media, Inc.

PINK, D. H. (2013). Drive. <http://mooneevalley.oneclickdigital.eu/Products/ProductDetail.aspx?skuid=28953>.

<https://www.business.com/articles/agile-team-productivity-metrics/>
By Aakash Gupta, business.com writer | Jul 27, 2018

<https://www.peoplekeep.com/blog/bid/312123/employee-retention-the-real-cost-of-losing-an-employee>
Employee Retention - The Real Cost of Losing an Employee | 2019

<https://hbr.org/1996/05/the-ways-chief-executive-officers-lead>

<https://library.gv.com/the-gv-research-sprint-a-4-day-process-for-answering-important-startup-questions-97279b532b25> | Aug 4, 2014

https://hbrascend.org/topics/5-mental-mistakes-that-kill-your-productivity/?utm_source=WhatsApp_website

<https://www.sap.com/india/documents/2018/09/a2a4eee6-1a7d-0010-87a3-c30de2ffd8ff.html>

<https://uxdesign.cc/when-to-use-user-flows-guide-8b26ca9aa36a>
Alexander Handley Oct 23, 2018

<https://pmhut.com/summary-of-key-project-manager-actions-and-results>

[https://www.pFrame \(work\) for Growthmi.org/learning/library/project-complexity-model-competency-standard-6586](https://www.pFrame(work)forGrowthmi.org/learning/library/project-complexity-model-competency-standard-6586)

<https://productivityist.com/3-things-deliver-great-work/>

