SKYWALK
INNOVATIONS

Assembling a Team for a Software Project

Enabler of Founders and Corporates going after Big Technology Ideas, building Africa 3.0

DIGITAL PLAYBOOK 2024

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Introduction

Navigating the realm of orchestrating a triumphant software project demands a meticulously strategic and adept approach, especially when securing the indispensable budget is paramount. This playbook is crafted to be your ally in this endeavor, commencing with insights into "Identifying the Right Team Members," ensuring that the collective skill and harmony of your team underscore the viability of your project to stakeholders. We unravel the art of "Evaluating Potential Team Members" and "Assigning Roles for Maximum Effectiveness" to construct a powerhouse team, thereby substantiating the prudence of your budget allocation.

The pivotal role of "Communication Channels and Frequency" is explored to demonstrate a robust and transparent project management framework, further solidifying the soundness of your investment. "Benchmarking and Measuring Team Performance" will not merely be a metric of success but a testament to the judicious utilization of resources, while "Proactively Detecting Challenges" illustrates a proactive stance towards risk mitigation. "Ensuring Documentation of Work," "Preparing for Demo Sessions," and "Dealing with Delays on Feedback" are elucidated to assure stakeholders of accountability and client satisfaction.

Finally, with insights into "Running Effective Planning Sessions" and "Planning for Operationalizing the Product," this playbook aims to be your compass in not only steering your project to completion but also ensuring its triumphant transition into the market, thus ensuring a judicious and lucrative deployment of the budget.

Let this guide be the cornerstone of your proposal, as you lead your team and project from conception to realization, securing not just funds but also confidence from your budget approvers.

Chapter 1

Identifying the Right Team Members(10%)

Introduction

Welcome to our comprehensive playbook, which aims to assist you in successfully launching a new project within a tight deadline while effectively managing budget allocation.

This playbook provides a systematic approach to help your project achieve its goals and succeed despite limitations. This playbook provides valuable insights and practical tools for each stage of your project, from team assembly to product implementation. It will empower you to successfully navigate your project.

Selecting the right team members is the foundation of a successful project. This step involves assessing the skills, experiences, and potential cultural fit of potential team members.

Tools

LinkedIn, GitHub, Stack Overflow, Internal HR systems, Employee directories.

Skill Matrix

Excel, Google Sheets.

Skills and Expertise

Identify the necessary skills required for the project using internal and external expertise, create a skill matrix.

Cultural Fit

Review the performance and contributions of potential team members on previous projects using internal records and external profiles.

Innovation

Look for team members who have a track record of creative problem-solving and thinking outside the box through internal and external evaluations.

Experience Share around Identifying Team members

Spend as much time focusing on “Non-Technical Skills” vs “Technical Skills” as there is nothing worse than having a creative genius that doesn’t understand deadlines, communication, and expectation management. The skills matrix is a highly overlooked exercise but will add immense value to the team if you understand the exact skills required to deliver on the various components of the solution.

Chapter 2

Evaluating Potential Team Members(10%)

Evaluating potential team members is essential to ensure you have the right people on board.

Tools

HackerRank, Codility, LeetCode, Internal assessment platforms, In-person interviews

Interviews

Zoom, Microsoft Teams, Google Meet

Interviews

Conduct in-depth interviews to assess both technical skills and soft skills, using both internal and external assessments.

Technical Assessments

Utilize external technical assessment platforms alongside internal ones to evaluate skills.

Behavioral Assessment

Leverage both internal and external interactions for behavioral assessment.

Experience Share around Evaluation

There is not enough evaluation you can do to ensure you are bringing the right person on board. The best way to know is to see them on the playing doing what they do best to deliver. It takes at least 20 to 40 days to see if an individual meets the expectations of the role or not. Ensure you have a plan in case you need to onboard a replacement.

Chapter 3

Assigning Roles for Team Members(10%)

Clear roles and responsibilities are crucial for a well-coordinated team.

Tools

Trello, Asana, JIRA, Internal collaboration platforms, Project management tools

Strength Alignment

SWOT Analysis

Clear Role Definitions

Clearly define roles and responsibilities using both internal and external communication tools.

Strength Alignment

Assign tasks based on team members' strengths and expertise to maximize productivity.

Cross-Functional Collaboration

Foster collaboration using established internal and external channels.

Experience Share around Identifying Team members

From our experience working with 50 plus technology teams we have observed certain key roles and responsibilities that are a good base for every product/project team. Our ideal size range between 5 to 7 people, with 4 roles full time and 3 roles ad hoc depending on the project/product being built.

Team Lead (Full Time)

Most senior technical person in the team. They should have a good set of projects under their belt to demonstrate they understand how to design, build and deliver various solutions with different team configurations.

Responsibilities include planning and communicating technical requirements between the team and stakeholders. rally, this person is good with planning and articulating technical requirements to various stakeholders. Some roles they often share are Architect, Scrum master and could jump in as Senior Software Engineer. It’s the team leads role to guide and provide the best support to other software engineers.

Software Developer/Engineer (Full Time)

Most teams we have found can make do with an intermediate engineer to support the team lead. Some product/project teams have 2, a mix of intermediate and junior engineers, or both intermediate engineers depending on their experience with the chosen technology.

Responsibilities include building software features based on project/product planning. Based on our experience they are often super eager individuals to take on everything or junior masking as intermediates.

QA Engineer (Full Time)

This is often an overlooked role, as many teams believe this responsibility can be shared amongst various team members. In the beginning every is always on board, until the pressure ramps up and everyone only focuses on what they are being measured on which is often not QA. QA has also been one of those roles we have seen developers use as a scape goat as to why tasks are not completed.

If the worked has not been signed off by QA against the business requirement with all the agreed edge cases tested, can we really mark the work as done?

Responsibilities include ensuring the software meets the requirements set out in the planning phase. If no acceptance criteria are set out in the beginning, the task is guaranteed to be carried over a sprint or 2 as no one can agree on what the definition of done means.

UX Lead (Ad hoc)

User experience is another one of those overlooked roles. Once a team has gone too far down the road and adopted a template, they bought online to get some speed, they realise the current flow has over complicated what the customer was looking for.

In the beginning of the journey, they will be important and usually spending a lot of time with the team, but less involved as the development team get further down the line.

The responsibilities of a UX expert are to ensure the solution is correctly mapped and designed to unlock value for the customer. Occasionally, they have some UI experience as well but for the most part they are more of an analyst with product knowledge.

UX Lead (Ad hoc)

User interface designer is critical in the early stages of the solution design stage. A good UI designer will put together low-fidelity prototypes, design systems, and high-fidelity prototypes. Each component can be tested according to the requirements of the solution. Most importantly, they will contribute towards the knowledge base and IP of the team.

Some additional ADHOC roles that are often shared or time/domain specific within a project is Devops engineer, Data Engineer, and ML engineer. We have seen many teams get away with having these roles covered by the existing technical team or contractors that come in for a short duration.

Chapter 4

Communication Channels And Frequency (5%)

Effective communication ensures everyone is on the same page.

Tools

Slack, Microsoft Teams, Discord, Internal communication platforms, Company email

Document Sharing

Google Drive, Dropbox, OneDrive

Video Conferencing

Zoom, Microsoft Teams, Google Meet

Tool Selection

Assign tasks based on team members' strengths and expertise to maximize productivity.

Communication Guidelines

Set expectations for response times, preferred channels for different types of communication, and appropriate time zones.

Experience Share Around Communication Tools

The best tools ensure seamless communication within the team and allows integration of additional tools that need to provide updates like pipeline failures, environment alerts, task updates etc. Ensure the tool could integrate as seamlessly as possible but does not cost a fortune in terms of setup and budget.

Chapter 5

Benchmarking and Measuring Team Performance (10%)

Measuring performance helps keep the project on track.

KPIs and Metrics

Google Analytics, JIRA Dashboard, Trello Analytics, Internal project management tools, Performance dashboards

Regular Reviews

Weekly Status Meetings (via video conferencing tools)

KPIs and Metrics

Define key performance indicators (KPIs) related to project milestones, quality, and productivity using both internal and external tools.

Regular Reviews

Conduct regular check-ins using both internal and external communication tools to review progress, address challenges, and provide feedback.

Experience Share Around Measuring Performance

The worst thing you can do for team morale is blast individual performance in front of the entire team, expecting fear-mongering as a tactic to improve output.

The data gathered in this phase should be used as a guide to understand how well the team is doing in terms of planning work, prioritizing work, scoping work, etc. If tasks are carried over sprints more than once, it is an indicator that either the team is stretched too far, planning and scoping is done poorly, wrong people assigned to a task or lastly the person is having challenges in meeting expectations.

Chapter 6

Proactively Detecting Challenges (5%)

Proactively identifying challenges is crucial for maintaining a healthy team environment.

Tools

Retrium, FunRetro, Internal feedback mechanisms, Team collaboration platforms

Open Communication

Slack, Microsoft Teams

Team Retrospectives

Hold regular retrospectives using both internal and external platforms to discuss challenges, celebrate successes, and identify opportunities for improvement.

Open Communication

Encourage open communication and provide mechanisms for team members to voice concerns using both internal and external tools.

Experience Share Around Detecting Challenges

Without trust within a team, there will be no effective and honest communication around challenges. Trust takes many forms in a team but is essential to having a high-performance team that is open to communicating flaws and accepting feedback as to how they can be corrected.

A very quick litmus test is to see how much honest feedback is given in the first retrospective vs the fourth or fifth one. If the feedback is less and the team's productivity has dropped, it is usually a sign that team members no longer feel their input is valued or will be taken seriously.

Chapter 7

Ensuring Documentation of Work(5%)

Documentation preserves knowledge and ensures consistency.

Documentation Standards

Confluence, Notion, Google Docs, Internal knowledge sharing platforms, Document management systems

Version Control

Git, GitHub, Bitbucket, Internal version control systems or repositories

Documentation Standards

Set clear documentation guidelines for code, designs, decisions, and processes using both internal and external tools.

Version Control

Use version control systems to track changes and maintain a reliable record of work using both internal and external repositories.

Experience Share Around Documentation

The team that starts a project is hardly ever the team that sees it all the way through. One of the biggest mistake project/product managers make is not giving the team time to document what they are doing technically and the decisions they made.

From day 1 we should always be thinking about continuity, if someone leaves the team and they played a critical role in a certain integration, it will set the team back weeks if there is not good documentation.

This counts as well for UX, UI, Testing and Analysis work done. Find a good collaboration tool that works with the team dynamic and schedule in the time for everyone to document things.

Chapter 8

Preparing for Demo Sessions(10%)

Demos engage stakeholders and showcase progress.

Tools

PowerPoint, Keynote, Google Slides, Internal presentation tools, Video conferencing platforms.

Stakeholder Alignment

Email, Slack, Microsoft Teams

Demo Agenda

Define a structured agenda for demo sessions that highlights key features and accomplishments using both internal and external presentation tools.

Stakeholder Alignment

Communicate the purpose and expectations of demo sessions to stakeholders in advance using both internal and external communication channels.

Experience Share Around Demo Sessions

If you can do a dry run, it helps the team and lets them shake the nerves. It might also save you some embarrassment if something is not 100% done.

It is honestly better to postpone a demo than to show a half-working product for the sake of showing something because the person being demoed to for the most part remembers what broke over what worked.

Chapter 9

Dealing with Delays On Feedback (5%)

Feedback delays are common but manageable. Employ internal communication tools, project management tools, and external tools

Tools

Email, Slack, Trello, Internal communication platforms, Project management tools

Follow-Up

Google Calendar, Microsoft Outlook (for scheduling reminders)

Anticipate Delays

Set expectations with stakeholders about the potential for feedback delays and explain the impact on the project timeline using both internal and external communication channels.

Follow-Up

Gently remind stakeholders about pending feedback and help if needed using both internal and external tools.

Experience share on Dealing with Delays on Feedback

Accept that they are inevitable and will happen in various stages of the project. We have never been on a project where everything ran so smoothly.

The best you can do is decide how the team deals with delays. The most important delays are usually around client feedback on work done, clarification on work to be done and feedback from other team members.

Chapter 10

Running Effective Planning Sessions (10%)

Effective planning is essential for meeting project goals.

Tools

Miro, Lucidchart, Internal collaboration and planning tools, Whiteboards (if in-person)

Sprint Planning

Trello, JIRA, Asana, Internal collaboration and planning tools

Sprint Planning

Conduct sprint planning sessions to outline goals, tasks, and priorities for each sprint using both internal and external collaboration and planning tools.

Timeboxing

Set clear time limits for discussions to ensure efficient planning sessions, aligning with both internal and external norms.

Experience Share Around Planning

If you can afford to, do it off site or in an environment where no one will be bothered about “urgent” things. Try a few things to keep the team focused and present, starting with a 2-minute meditation or having everyone share the last exciting side project they are working on.

Chapter 11

Planning for Operationalizing The Product (10%)

Transitioning from development to production requires careful planning.

Operational Plan

Microsoft Excel, Google Sheets, Internal project management tools, Documentation platforms.

Deployment

Azure/AWS Devops, Jenkins, Travis CI, GitLab CI/CD, Internal deployment and CI/CD pipelines

Monitoring

New Relic, Datadog, Prometheus, Existing internal monitoring and alerting systems.

Documentation

Confluence, Notion, Align with internal documentation platforms and practices

Operational Plan

Develop a plan for transitioning the product from development to production, including deployment, monitoring, and support using both internal and external tools.

Training and Documentation

Prepare training materials and documentation for end-users and support teams using both internal and external documentation platforms.

Experience Share Around Documentation

If you allowed the team to document well enough during the development stages, it helps a lot once you need to go live and support users.

This should be discussed in the initial design stages as well as to who will be supporting this and in what environment will it be running, as we have seen sometimes the dev and pr.

Remember to adapt the playbook to the unique mix of internal and external tools that align with your organization's processes and be prepared to adjust as the project evolves and new tools emerge.

About Skywalk Innovations

Skywalk Innovations is a technology specialist focused on modernisation within financial, legal, and business professional services businesses. With a team of competent software engineers, business analysts, and ui/ux specialists, we address business issues, uncover new potential revenue models, and reduce inefficiencies in business processes. Several software products and services are not designed with an African perspective or context, hence failing to adequately serve the African market. Skywalk Innovations utilizes its existing talent pool, experienced team, and cooperation partners to assist businesses in introducing value within their own value chain, hence fostering continued engagement with existing customers and team.

Our reach extends to a number of industries that are ripe for innovation, as well as businesses who wish to develop broader strategic business objectives on a technological basis. Skywalk Innovations is more than just a provider of custom software solutions; our mission is to assist enterprises in generating value and pursuing future opportunities.

Some of our clients

ALTRON

vodacom

GOPEAK

Standard Bank

PANGEO

mri REAL ESTATE SOFTWARE

FIT VAULT

Sanlam

NATIONAL EMPOWERM FUND
Black Economic Partic

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