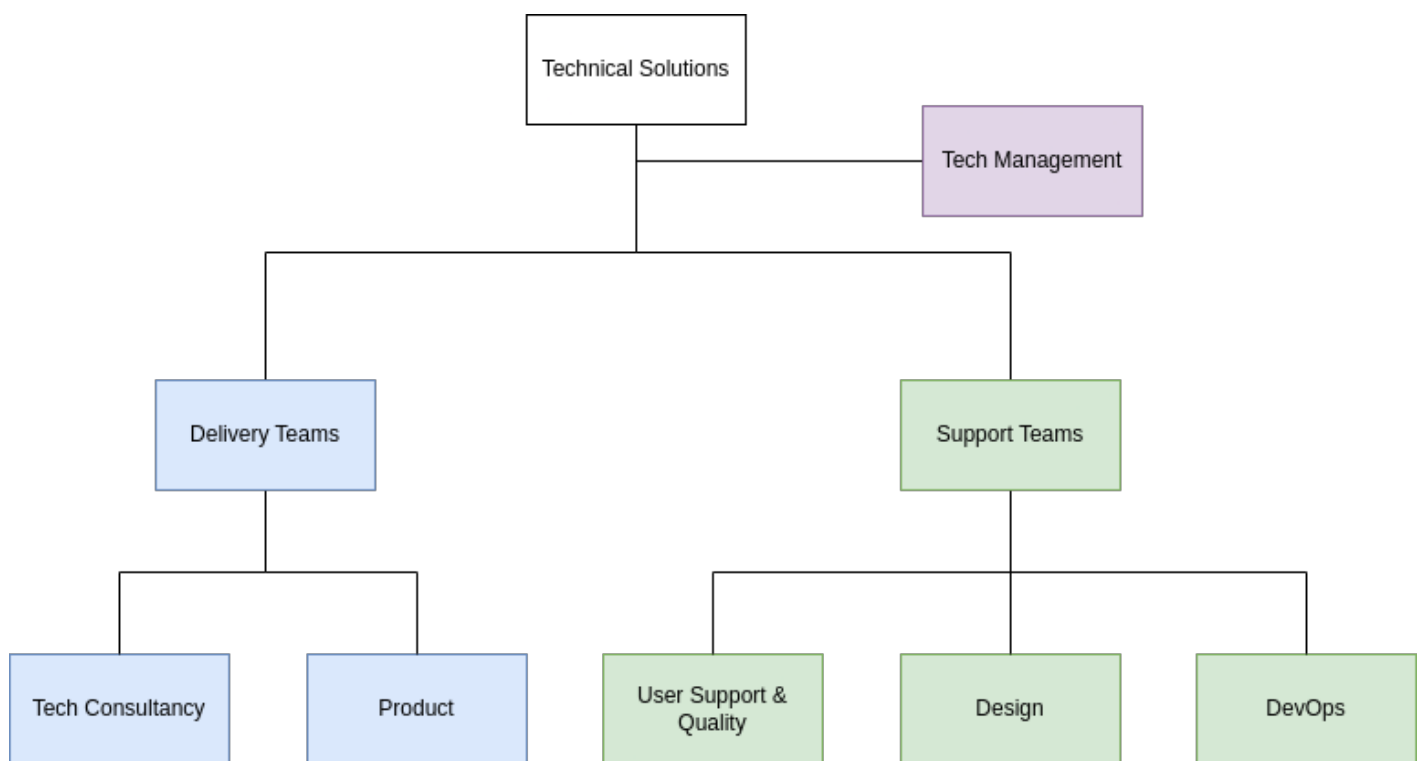


# Operating Model

## Team Structure

The Technical Solutions team is unique in the sense that it federates a very wide range of skills and expertise (inherent complexity of building software). Due to our team's size, some domains of expertise are led by a single person, resulting in one-person teams. We see this as a temporary situation but find it necessary to formalize these teams as the services they provide are essential to our collective success.



The Technical Solutions team is composed of 2 types of teams:

- **Mission Teams** - They execute the core operational goals of Akvo, i.e. build software for impact.
- **Support Teams** - They provide centralized domain expertise that is required for the Mission teams to achieve their goals.
- **Hybrid Teams** - They execute the mission and provides support capacity to the organization

Each team is described in a table with the following attributes:

- **Mandate** - A summary of what the team does at/for Akvo

- Offers - The services that the team offers
- Needs - The information, tools and services needed for that team to deliver its function
- KPIs - The KPIs that will be used to measure the performance and success of the team. In some instances, we've also described a number of metrics that reflect the volume of work.
- Lead - The person accountable for the team
- Coordination - The frequency with which the coordination meeting is held.
- Task Tracking - The place where work is tracked and coordinated (Asana).

# Mission Teams

## TC Team

| Tech Consultancy Team |   |
|-----------------------|---|
| Mandate               | <ul style="list-style-type: none"> <li>• Support the BD team in developing and closing deals</li> <li>• Deliver high quality and on budget custom software solutions</li> </ul>   |
| Offers                | <div>BD</div> <ul style="list-style-type: none"> <li>• Explore partnership collaboration</li> <li>• ToR evaluation (Go, No Go)</li> <li>• Technical proposal writing (Budgets, Timelines)</li> <li>• Tech PoC for concepts provided by sector leads</li> </ul> <div>Delivery</div> <ul style="list-style-type: none"> <li>• Custom software solutions</li> <li>• Software handover activities</li> <li>• Maintenance and support</li> </ul> |

## Tech Consultancy Team

### Needs

#### Information

- BD - ToR, context
- Delivery - ToR, context, user requirements

#### Tools

- Capacity Planner
- PMT
- Task Manager
- Code hosting: Github
- CI/CD Pipeline: Semaphore, CircleCI
- Unit testing: coveralls

#### Services

- Hosting
- Design
- Testing
- User support

| Tech Consultancy Team |   |
|-----------------------|---|
| KPIs                  | <p>Execution Efficiency</p> <ul style="list-style-type: none"> <li>• Definition: Ability to execute the scope within the allocated budget</li> <li>• Source: PMT</li> <li>• Target: 100%</li> </ul> <p>Team Utilization</p> <ul style="list-style-type: none"> <li>• Definition: Ratio between allocated work days and available days to work</li> <li>• Source: Capacity Planner</li> <li>• Target: 90%</li> </ul> <p>Team Billability</p> <ul style="list-style-type: none"> <li>• Definition: Ratio between allocated work days on client projects and available days to work</li> <li>• Source: Capacity Planner</li> <li>• Target: 75%</li> </ul> <p>Unit Test Coverage</p> <ul style="list-style-type: none"> <li>• Definition: % of the code covered by unit tests</li> <li>• Source: <a href="#">Coveralls</a></li> <li>• Target: 80%</li> </ul> <p>Integration Test Coverage</p> <ul style="list-style-type: none"> <li>• Definition:</li> <li>• Source: Integration testing software</li> <li>• Target:</li> </ul> <p>User reported bugs</p> <ul style="list-style-type: none"> <li>• Definition: number of bugs reported by users after the software went into productions (by severity)</li> <li>• Source: Freshdesk</li> <li>• Target: less than 5% <a href="#">critical bugs</a></li> </ul> |
| Lead                  | <a href="#">Joy Ghosh</a>   |
| Coordination          | <ul style="list-style-type: none"> <li>• Project issue board on GH</li> <li>• 3 times a week tasks status / adhoc as required</li> <li>• Bi-weekly team status check</li> </ul>   |
| Task Tracking         | Each project has its own Asana Team or Project  |

# Product Teams

| Product Teams  |  |
|----------------|--|
| <b>Mandate</b> | <ul style="list-style-type: none"><li>• Build, maintain and provide user support of current Akvo products (FLOW, RSR).</li><li>• Develop new products based on market needs.</li></ul>   |
| <b>Offers</b>  | <ul style="list-style-type: none"><li>• Product development</li><li>• Product management</li></ul>   |
| <b>Needs</b>   | <p>Information</p> <ul style="list-style-type: none"><li>• Market data</li><li>• User feedback</li></ul> <p>Tools</p> <ul style="list-style-type: none"><li>• Capacity Planner</li><li>• PMT</li><li>• Task Manager</li><li>• Code hosting: Github</li><li>• CI/CD Pipeline: Semaphore, CircleCI</li><li>• Unit testing: coveralls</li></ul> <p>Services</p> <ul style="list-style-type: none"><li>• Hosting</li><li>• Design</li><li>• Testing</li><li>• User support</li></ul> |

| Product Teams |  |
|---------------|--|
| KPIs          | <p>Bug Reports</p> <ul style="list-style-type: none"> <li>• Definition: number of bugs reported by clients</li> <li>• Source: Freshdesk</li> <li>• Target: less than 5% <a href="#">critical bugs</a></li> </ul> <p>User Engagement</p> <ul style="list-style-type: none"> <li>• Definition: This metric measures how often users are using the product and how engaged they are with it.</li> <li>• Source: TDB</li> <li>• Target: TBD</li> </ul> <p>Revenue</p> <ul style="list-style-type: none"> <li>• Definition: This metric tracks the amount of money generated by the product</li> <li>• Source: Contracts</li> <li>• Target:</li> </ul> <p>Customer Satisfaction</p> <ul style="list-style-type: none"> <li>• Definition: This metric measures how satisfied users are with the product.</li> <li>• Source: Satisfaction questionnaires</li> <li>• Target: 4/5 in average</li> </ul> |
| Lead          | <a href="#">Guillaume Deflaux</a>  |
| Coordination  | Every 2 weeks - <a href="#">Guillaume Deflaux</a> <a href="#">Zuhdil Kurnia</a>  |
| Task Tracking | <a href="#">RSR Project in Asana</a><br><a href="#">FLOW Project in Asana</a>  |

# Support Teams

## DevOps Team

| DevOps Team |   |
|-------------|---|
| Mandate     | <ul style="list-style-type: none"> <li>• Secure internal and external systems</li> <li>• Provide best-in-class infrastructure for the services Akvo offers</li> </ul>   |
| Offers      | <p>Security for internal and external systems (Company-wide)</p> <ul style="list-style-type: none"> <li>• Implement security best practices for our internal tools (email, password management, etc...) and server deployments.</li> </ul> <p>Infrastructure (TC Platforms / Products)</p> <ul style="list-style-type: none"> <li>• Design</li> <li>• Deployment</li> <li>• Support &amp; Monitoring</li> <li>• Costing</li> </ul> <p>Knowledge Management &amp; Company Culture</p> <ul style="list-style-type: none"> <li>• Updated technical documentation (wiki) covering the above topics (SOPs, best practices, ...)</li> <li>• Provide DevOps &amp; Security trainings internally</li> <li>• Promote a DevOps &amp; Security culture</li> <li>• Domain technical watch (best practices, tools, ...)</li> </ul> |

**DevOps Team**

**Needs**

Information

- Product/project software architecture plan (before development started)
- Product/project software architecture documentation
- Product/project system requirements and quickstart documentation
- Infrastructure budget allocation plan from product, project or BD team

Tools

- Hosting provider (Google Cloud, Contabo, Siteground)
- Code Version Control (Github)
- CI/CD Tools (SemaphoreCI, CircleCI, Github Action)
- Documentation tools
- Infrastructure orchestration and configuration management tools (Terraform, Ansible)
- Secret management tools (Hashicorp Vault, Vaultwarden)
- Mailing tools (Mailjet)
- Workflow automation (N8N)

Services

- Testing



| DevOps Team   |  |
|---------------|--|
| KPIs          | <p>Average Service Availability</p> <ul style="list-style-type: none"> <li>• Definition: The client facing service are available</li> <li>• Target: 99.9% over a quarter</li> <li>• Source: Uptime checks</li> </ul> <p>Change Success Rate</p> <ul style="list-style-type: none"> <li>• Definition: Changes made by the DevOps team do not result in any downtime or other issues.</li> <li>• Target: 90% over a quarter</li> <li>• Source: uptime checks, CI/CD</li> <li>• Note: downtime caused by deployments are not taken into account</li> </ul> <p>Cost</p> <ul style="list-style-type: none"> <li>• Definition: Amount that we spend on cloud services (mostly GCP)</li> <li>• Target: Yearly targets based usage of services ( <a href="#">COGS</a>, cost per project...). Still TBD</li> </ul> <p>Team Satisfaction</p> <ul style="list-style-type: none"> <li>• Definition: The DevOps team should aim for a high level of satisfaction among internal teams who rely on DevOps support.</li> <li>• Target: Score at least 8 out of 10 on average</li> <li>• Source: Quarterly survey</li> </ul> |
| Lead          | <a href="#">Anjar Fiandriato</a>   |
| Coordination  | Every 2 weeks - <a href="#">Guillaume Deflaux</a> <a href="#">Anjar Fiandriato</a>   |
| Task Tracking | <a href="#">DevOps Project in Asana</a>  |

## Design Team

| Design Team |  |
|-------------|--|
| Mandate     | <ul style="list-style-type: none"> <li>• Support TC and product teams in delivering designed-for-purpose applications</li> </ul> |

| Design Team |  |
|-------------|--|
| Offers      | <p>Requirements Gathering</p> <ul style="list-style-type: none"> <li>• Conduct user research</li> <li>• Collaborate with product managers, developers, and subject matter experts to define and prioritise user stories and product requirements</li> </ul> <p>Wireframing &amp; UI Design</p> <ul style="list-style-type: none"> <li>• Create wireframes, prototypes, and high-fidelity mockups that effectively communicate design concepts and interactions</li> <li>• Create and maintain design style guides and design systems that support consistent and efficient design</li> <li>• Provide corresponding HTML/CSS templates</li> </ul> <p>User Feedback</p> <ul style="list-style-type: none"> <li>• Continuously iterate on designs based on user feedback, stakeholder input, and usability testing</li> </ul> <p>Knowledge Management &amp; Company Culture</p> <ul style="list-style-type: none"> <li>• Updated technical documentation (wiki) covering the above topics (best practices, tools, ...)</li> <li>• Domain technical watch (best practices, tools, design trends, ...)</li> </ul> |
| Needs       | <ul style="list-style-type: none"> <li>• User Research Tools</li> <li>• Design and Prototyping Tools</li> <li>• Collaboration Tools</li> <li>• Design Systems and Style Guides</li> <li>• Feedback and Iteration Tools</li> <li>• Training and Professional Development</li> </ul>   |

| Design Team          |   |
|----------------------|---|
| <b>KPIs</b>          | <p><b>Process Indicators</b></p> <p>Projects use Design Process Checklist</p> <ul style="list-style-type: none"> <li>• Target: 80%</li> <li>• Source: Design Process Checklists</li> </ul> <p><b>Output Indicators</b></p> <p>% Completion of Design Process Checklist</p> <ul style="list-style-type: none"> <li>• Target: 100%</li> <li>• Source: Design Process Checklists</li> </ul> <p>% Successful Task Completion (prototypes)</p> <ul style="list-style-type: none"> <li>• Target: 80%</li> <li>• Source: Maze</li> </ul> <p>User Perceived Experience (prototypes)</p> <ul style="list-style-type: none"> <li>• Target: 4/5</li> <li>• Source: Maze</li> </ul> |
| <b>Lead</b>          | <a href="#">Ouma Odhiambo</a>   |
| <b>Coordination</b>  | Every 2 weeks - <a href="#">Guillaume Deflaux</a> <a href="#">Ouma Odhiambo</a>   |
| <b>Task Tracking</b> | <a href="#">Design Project in Asana</a>   |

## User Support & Quality Team

| User Support & Quality Team |   |
|-----------------------------|---|
| <b>Mandate</b>              | <ul style="list-style-type: none"> <li>• Be the first point of contact of our end-users and help them make the most of our platforms and products.</li> <li>• Support the TC and products teams in delivering well tested software applications.</li> </ul> |

## User Support & Quality Team

### Offers

All the services are provided to Products and TC Platforms alike.

#### L1 Support

- First point of contact with users
- Triage issues and escalate if necessary
- Resolve issues that are related to the usage of the software (anything that is not a bug or a server issue)

#### User Trainings

- Create training curriculums
- Deliver trainings to end-users (remote/onsite)

#### Functional Testing

- Write test plans
- Execute test plans (automated or not)
- Document issues and create test reports

#### User Documentation

- Create and update user documentation inline with software release cycles.

#### Knowledge Management & Company Culture

- Updated technical documentation (wiki) covering the above topics (best practices, tools, ...)
- Domain technical watch (best practices, tools, ...)

| User Support & Quality Team |   |
|-----------------------------|---|
| Needs                       | <div>Information<ul style="list-style-type: none"><li>• Platform/Product onboarding from the development teams</li><li>• Functional requirements documents</li><li>• User stories and personas</li><li>• Release schedules</li><li>• Test data</li><li>• Test environment</li></ul></div> <div>Tools<ul style="list-style-type: none"><li>• Helpdesk (Freshdesk)</li><li>• Documentation/Wiki (Freshdesk, Bookstack)</li><li>• Automated Testing (Selenium, Appium)</li><li>• Test Management (TestRail, TestLodge, Zephyr, Zebrunner)</li><li>• Bug Tracking(Github, Asana)</li><li>• Load Testing (Gatling, Locust, LoadRunner)</li><li>• User Feedback (Piwik, Hotjar, ProductBoard)</li></ul></div> |

## User Support & Quality Team

### KPIs

#### L1 Support

- KPI
  - Definition: Number and % of tickets that breached the SLAs
  - Source: Freshdesk
  - Target: 0(%)
  - Definition: Level of satisfaction of users after the handling of their tickets
  - Source: Freshdesk
  - Target: 4/5 or higher
    - SLA breaches
    - Average User satisfaction Level
- Work Volume
  - Number of tickets received (Freshdesk)
  - Number / % of escalated tickets (L2+) (Freshdesk)
  - Average first response time (Freshdesk)
  - Average resolution time (Freshdesk)

#### User Trainings

- KPI
  - Definition: Declared level of satisfaction of trainees after a training on one of our platforms or products
  - Source: Post training questionnaire
  - Target: 4/5 or higher
    - Average trainee satisfaction Level
- Work Volume
  - Number of trainings delivered
  - Number of created training curriculums
  - Number of updated training curriculums

#### Functional Testing

- KPI
  - TBD
- Work Volume
  - Number of test plans written
  - Number of test plans executed
  - Number of test reports written

#### User Documentation

- KPI
  - Definition: The % of documentation sites that have content that cover 100% of the user facing features of platforms and products
  - Source: Documentation sites + platform / product release notes
  - Target: 100%

| User Support & Quality Team |  |
|-----------------------------|--|
| Lead                        | <a href="#">Jonah Kisioh</a>   |
| Coordination                | Every 2 weeks - <a href="#">Guillaume Deflaux</a> <a href="#">Jonah Kisioh</a> |
| Task Tracking               | <a href="#">Support &amp; Quality Project in Asana</a>                         |

# Hybrid Teams

## Technical Solutions Management

| Technical Solutions Management |  |
|--------------------------------|--|
| Mandate                        | <ul style="list-style-type: none"> <li>Align objectives of the Tech Solutions Team with the objectives of the rest of the company</li> <li>Improve the efficiency of the entire Tech Solutions Team</li> </ul>   |
| Offers                         | <p>Strategic and technical orientations to sub teams, including tie-breaking based on suggestions. Internal initiatives to focus on:</p> <ul style="list-style-type: none"> <li>Resourcing</li> <li>Team / HR</li> <li>Tech Stack</li> <li>Methodology</li> <li>Tooling</li> <li>Quality Standards</li> <li>OKRs</li> </ul>  |
| Needs                          | <p>Information</p> <ul style="list-style-type: none"> <li>Company strategy and objectives</li> <li>Feedback from sub teams</li> </ul>  |
| KPIs                           | <p>Objective alignment</p> <ul style="list-style-type: none"> <li>Definition: The fact that the Technical Solutions sub team objectives are aligned with larger company objectives.</li> </ul> <p>Team Efficiency</p> <ul style="list-style-type: none"> <li>Definition: The fact that the Technical Solutions sub team objectives create efficiencies that affect the entire team.</li> </ul> |
| Lead                           | <a href="#">Guillaume Deflaux</a>  |

| Technical Solutions Management |   |
|--------------------------------|---|
| Coordination                   | Monthly - <a href="#">Guillaume Deflaux</a> <a href="#">Joy Ghosh</a> <a href="#">Deden Bangkit</a> |
| Task Tracking                  | <a href="#">Internal Project in Asana</a>   |

# Coordination Mechanisms

Team coordination plays a big part in creating the right environment for our team to deliver great work and to create a positive dynamic. The team coordination approach described below aims to foster team building while boosting our collective efficiency, i.e. provide enough context for everyone to properly execute their work while doing so in a friendly, respectful and engaging manner.

This approach is purposely built for our current team. We should expect it to change should our team size and structure evolve.

## 1-to-1s Guillaume / Team Leads

In most instances these meetings are used both for people management and team coordination purposes.

|           |  |
|-----------|--|
| Frequency | Every week   |
| Duration  | 30 min   |
| Purpose   | <ul style="list-style-type: none"> <li>• Ensure that there is a space to discuss your life at Akvo.</li> <li>• Coordinate the definition and the execution of team roadmaps</li> <li>• Ensure coherence of team specific initiatives within the larger Tech Solutions Team</li> </ul>                            |
| Structure | <p>Manager-Direct 1-to-1</p> <ul style="list-style-type: none"> <li>• Workplate &amp; Projects</li> <li>• Growth</li> <li>• Performance</li> </ul> <p>Team Specific Discussion</p> <ul style="list-style-type: none"> <li>• Services</li> <li>• Initiatives</li> <li>• Roadmap</li> <li>• Performance</li> </ul> |



# Tech Solutions All Hands

|                  |  |
|------------------|--|
| <b>Frequency</b> | Every 2 weeks  |
| <b>Duration</b>  | 1h   |
| <b>Purpose</b>   | <ul style="list-style-type: none"><li>• Make sure that we can have a bit of “face time” all together in order to break the silos created by our day-to-day</li><li>• Create a space for direct communications with the entire team (email remains the official channel for team wide announcements)</li><li>• Create an experience sharing space to foster ideation and innovation within the Tech Team</li></ul>  |
| <b>Structure</b> | <p>Think Tank Thursdays (30 min)</p> <ul style="list-style-type: none"><li>• A rotating presentation by someone from the team.</li><li>• Any topic that is (vaguely) related to our work</li><li>• Any format allowed as long as there’s at least 10 min for questions. The more interactive the better.</li></ul> <p>All Hands (30 min)</p> <ul style="list-style-type: none"><li>• Team wide announcements</li><li>• Project / Product updates</li><li>• Team Specific Updates</li><li>• Updates from MC</li></ul> |

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