ICT companies structure and roles

The Team

A reliable killer for startups is problems and inconsistencies within the team (23 percent).

A vast majority of startups doesn’t understand that **a clear org chart drives a company to success,** that is why they die a chaotic death.

Establishing the right structure is extremely important for **increased productivity, proper communication, and smooth workflow.**

The Ideal Structure for an IT Department in a Growing Business - CIOsource (ciosrc.com)

Conway's Law

Conway's Law is the belief that — subconsciously or not — **businesses will create organizational systems that closely mirror how they communicate internally.**

Melvin Conway is a computer scientist who is most famous for creating Conway's Law, which is encapsulated in the following quote: *Organizations, who design systems, are constrained to produce designs which are copies of the communication structures of these organizations.*

https://www.wrike.com/blog/conways-law/

The Ideal Structure to Facilitate Business Growth

Businesses of every industry typically have **six basic, internal, functional operations:**

1. **Production** (the creation or procurement of products and/or services)
2. **Operations** (the supporting activities that efficiently maintain an enterprise's processes)
3. **Finance** (management and data-recording of the financial resources)
4. **Administration** (implementation and evaluation of the business's plans/operations)
5. **Marketing/sales** (effectively generating qualified leads and converting them into returning customers)
6. **Business coordination** (integrating and coordinating the other critical business operations to ensure smooth business processes).

IT Department Structure: Tips and Best Practices (twinstate.com)

CEO and CTO - The founders?

A startup team structure must be clearly outlined; each of the departments and experts has roles and responsibilities.

Basically, there are **two main roles atop** of the software development team hierarchy: Chief Executive Officer (CEO), and Chief Technology Officer (CTO).

- **The CEO** is responsible for **marketing and sales,** legal issues, human resources, management, **and supervising the CTO.**
- **The CTO** also has certain areas of responsibility, they include **managing the Tech/Dev Teams (UX team, Backend team, DevOps team, and QA team).**

CTO vs CPO

A Chief Product Officer is heavily focused on interacting with and engaging stakeholders. He or she is constantly seeking external feedback to help guide a product to create positive business outcomes. The **CPO is hyper-focused on driving change and problem-solving.**

A CTO is much more inwardly focused. This doesn't mean that someone in the role won't engage with analysts and stakeholders. But **instead of focusing on the business side of positive outcomes, the CTO spends most of its time looking at the technology itself,** building the kind of technology ecosystem the product needs to succeed.

The difference is in the details, but **both are instrumental in helping a business scale quickly.** Both will be heavily motivated to push the business forward, but they'll focus on different areas of emphasis along the way, with **CPOs spending more time on the ideas and execution of a product and a CTO emphasizing the underlying technology that makes a product work.**

Product Accelerator: CTO vs. CPO – What's the Difference? | Blog | Insight Partners [VIDEO]

UX Team

User experience is one of the key indicators of product success, so working on this aspect of the project is vital.

Users should get a perfect user experience and enjoy excellent usability, interesting design, and functionality.

Oftentimes, the UX team consists of several experts who work together to achieve the set objectives. A typical UX team includes:

- Leader (Product Owner/Product Manager or CPO)
- UX researcher
- UX designer
- Frontend developers

UX Team can initially be the Product Team

Startup: Tech Company Organizational Structure | Yojji

Backend Team

This team is the core of the entire organization as it is responsible for the application logic, efficient code, and data structure.

Most often, it consists of the following experts:

- Backend engineers
- Middle-stack developers
- Team leader

Engineers are engaged in coding, improving algorithms and application logic, but for the interaction between the back-end and the front-end sides, it is necessary to involve middle-stack developers.

MS devs handle cleaning user input, rest API endpoints, etc. Thus, developers will be able to focus on performing their job efficiently, without being distracted by third-party issues. All these issues will be handled by middle-stack developers. As in any other team, there is also a leader who organizes the workflow, assigns the tasks, and coordinates the work of all team members.

Startup: Tech Company Organizational Structure | Yojji

Marketing team

Marketing experts promote your business and create an overarching image to portray your organization in a positive light.

Typical responsibilities of a marketing team involve the following:

- It is engaged in **brand management.**
- Runs a **marketing initiative campaign**, identifies the core services or products for which sales cycles are launched.
- **Creates content that promotes** your service or product.
- Optimizes your organization's **website,** creates content, and updates it regularly.
- Monitors and manages **social networks**.
- Organizes and manages **internal communication.**
- Collaborates with the media.
- Coordinates the work of third parties providing marketing support. For example, advertising and PR agencies, web providers.

LEAD GENERATION!!

Startup: Tech Company Organizational Structure | Yojji

Sales Team

In a startup, **sales managers do more than just sell.**

In fact, in addition to lead generation, deal closing, and managing relationships with customers, they also adapt the sales process according to customer pain points (this process is also known as concept sales).

1. **Without sales, your startup dies!**
2. **All Selling Can Be Automated, but Not Automatically**
3. **Sales Is Like Selling Used Cars, Not Diet Cokes**

Startup: Tech Company Organizational Structure | Yojji

QA Team

A successful product is always a high-quality product, that is why a **quality assurance team** is a must-have for any startup.

Experts test the application, find bugs, send reports to the developers, who, in turn, fix these errors and ensure more efficient and stable application operation.

QA team includes:

- QA Lead
- QA Analyst
- Testers

The most responsible role is taken by the QA lead, since this person sets the indicators of the quality standard, ensures that these standards are adhered to, determines the main strategies, manages the team, plans tasks, assigns responsibilities to specialists, and also monitors their work. The QA analyst creates test plans and executes them. Depending on the project type, timeline, budget, and customer requirements, you may need a manual QA specialist or an automation testing specialist who can perform manual testing if necessary.

in little company and startups the QA Lead can be the CPO

Startup: Tech Company Organizational Structure | Yojji

Scalability and Flexibility

One of the most important aspects of a strategic structure is understanding the need for flexibility.

Companies grow and expand, while **technology changes** and products/services – and even business goals – are dynamic. Thus, the established structure of a growing business **must include a future projected growth rate**, with a plan to optimize – and/or alter the structure of – the IT department, which may include the creation of new sub-departments/teams to solve new problems as they arise.

Thus, a scalable infrastructure, along with a scalable strategic plan and structural plan, is critical in a growing business, in order to effectively and strategically leverage an enterprise's infrastructure/department, which can ultimately increase the bottom and top lines of the business organization.

The Ideal Structure for an IT Department in a Growing Business - CIOsource (ciosrc.com)

IT department centralized versus decentralized structure

A centralized IT departmental model is one where all core IT systems and networks are managed by a central organization, such that all systems can be easily integrated and managed from a single IT central hub.

Pros: better budget control, easier governance, better standardization, better alignment across the entire technology portfolio, easier project/workflow integration, more feasible IT management.

Cons: may become bureaucratic, business departments may be unhappy fighting with other departments to get their tech initiatives prioritized.

Decentralized Structure: A decentralized IT departmental structure is one where the management of critical IT components, system controls and networks is distributed amongst multiple, different core IT centers within the overarching enterprise IT infrastructure, allowing different sub-departments and teams to utilize different resources within their own sub-systems/intranets.

Pros: individual departments/business units have more direct control over their tech projects and priorities; generally decentralized groups can get faster results (less overhead and prioritization fights).

Cons: solutions optimized at the department level often result in inefficiencies at the enterprise level (“silos” of disconnected data and business processes); too much departmental independence can lead to integration challenges and unnecessarily duplicative systems and data.

Often the best approach is to use a **centralized IT organizational model with strong departmental relationships and focused goals**, which includes using dedicated resources for specific areas (that are managed centrally). This approach provides the control and efficiency of a centralized organizational model, while also providing departments/business units with a strong influence over the priorities for their respective areas.

[The Ideal Structure for an IT Department in a Growing Business - CIOsource (ciosrc.com)]

DevOps Is Becoming More & More Important

The development and evolution of very specific, functional departments within enterprises has often given rise to departmental silos, which sometimes operate as completely separate, distinct micro-organizations within a business that may or may not effectively communicate and/or work together.

In order for modern businesses to continue to offer value in an increasingly technology-dominated world, business departments have sought to integrate different departmental workflows in order to increase communications, productivity and operational efficiency.

One significant example is with **DevOps, which integrates software development practices with automated testing and IT production operations.**

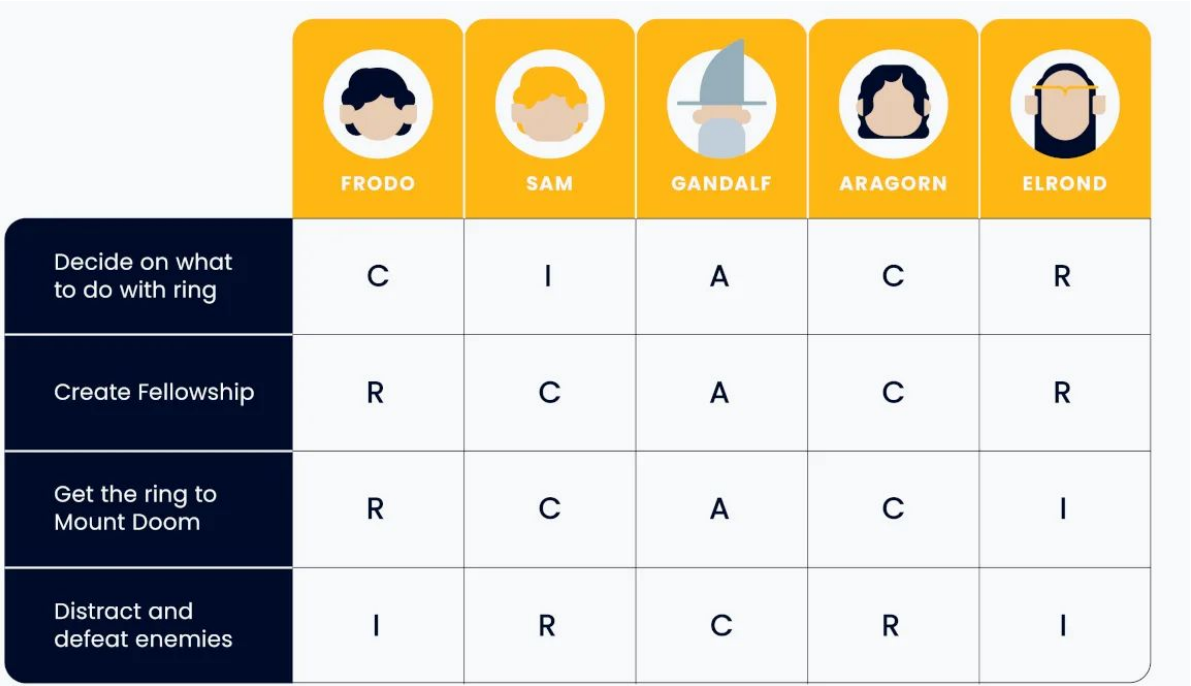
Essentially, DevOps combines workflows – and consequently departmental operations – from the software development lifecycle (SDLC) and IT operations (including testing and security) in order to deliver products in a more efficient manner, while breaking down the barriers of departmental silos within software development firms.

DevOps Manifesto for Digital Transformation | LinkedIn

The Ideal Structure for an IT Department in a Growing Business - CIOsource (ciosrc.com)

RACI Matrix

https://en.wikipedia.org/wiki/Responsibility_assignment_matrix
https://thedigitalprojectmanager.com/projects/leadership-team-management/raci-chart-made-simple/



	FRODO	SAM	GANDALF	ARAGORN	ELROND
Decide on what to do with ring	C	I	A	C	R
Create Fellowship	R	C	A	C	R
Get the ring to Mount Doom	R	C	A	C	I
Distract and defeat enemies	I	R	C	R	I

***R* = *Responsible* (also *recommender*)**

Those who do the work to complete the task.[6] There is at least one role with a participation type of *responsible*, although others can be delegated to assist in the work required (see also *RASCI* below for separately identifying those who participate in a supporting role)

***A* = *Accountable* (also *approver* or *final approving authority*)**

The one ultimately answerable for the correct and thorough completion of the deliverable or task, the one who ensures the prerequisites of the task are met and who delegates the work to those *responsible*.[6] In other words, an *accountable* must sign off (approve) work that *responsible* provides. There **must** be only one *accountable* specified for each task or deliverable.[7]

***C* = *Consulted* (sometimes *consultant* or *counsel*)**

Those whose opinions are sought, typically subject-matter experts; and with whom there is two-way communication.[6]

***I* = *Informed* (also *informee*)**

Those who are kept up-to-date on progress, often only on completion of the task or deliverable; and with whom there is just one-way communication

More information

- The ideal tech startup team structure for rapid growth (digitalocean.com)
- Conway’s Law for Business | Wrike

Assignement

- Value proposition How to Write a Great Value Proposition [7 Top Examples + Template] (hubspot.com)
- Define roles and responsibilities
- Define main activities and RACI Matrix

Pretotyping

Pretotyping.org