

Infrastruktur TI - Cloud Computing

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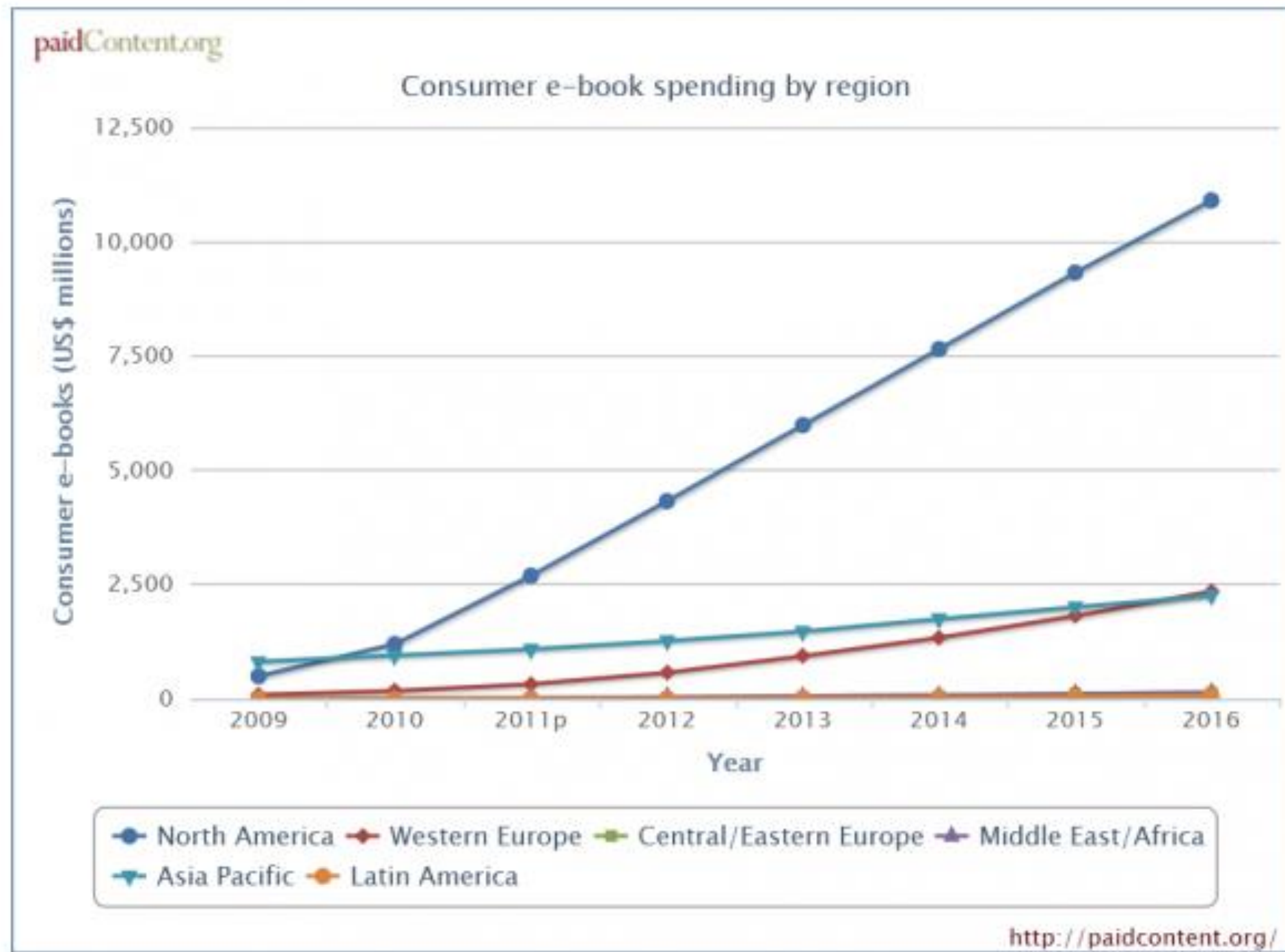
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Background & Opportunity



Survey conducted by Scoop in 2017:

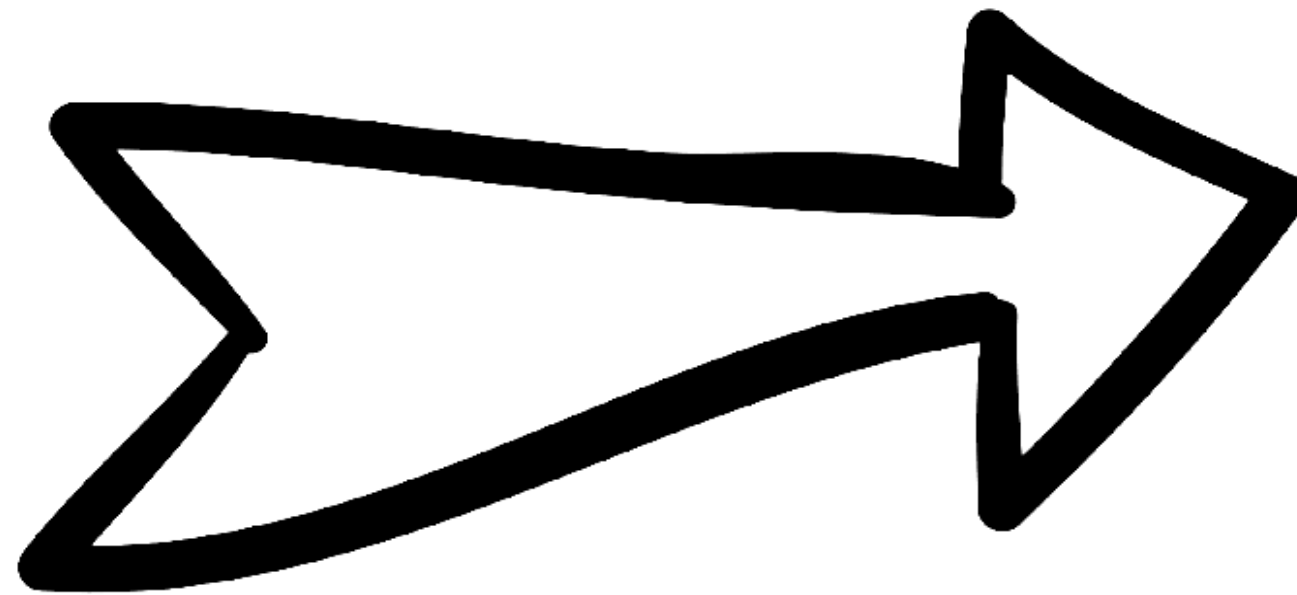
“The number of e-book users in Indonesia has increased by around 15% per year”

Background & Opportunity

LiteHub is one of publishing company that had a vision to
“Improve Indonesia Citizen’s knowledge and intellectual”.



Publishing
Company

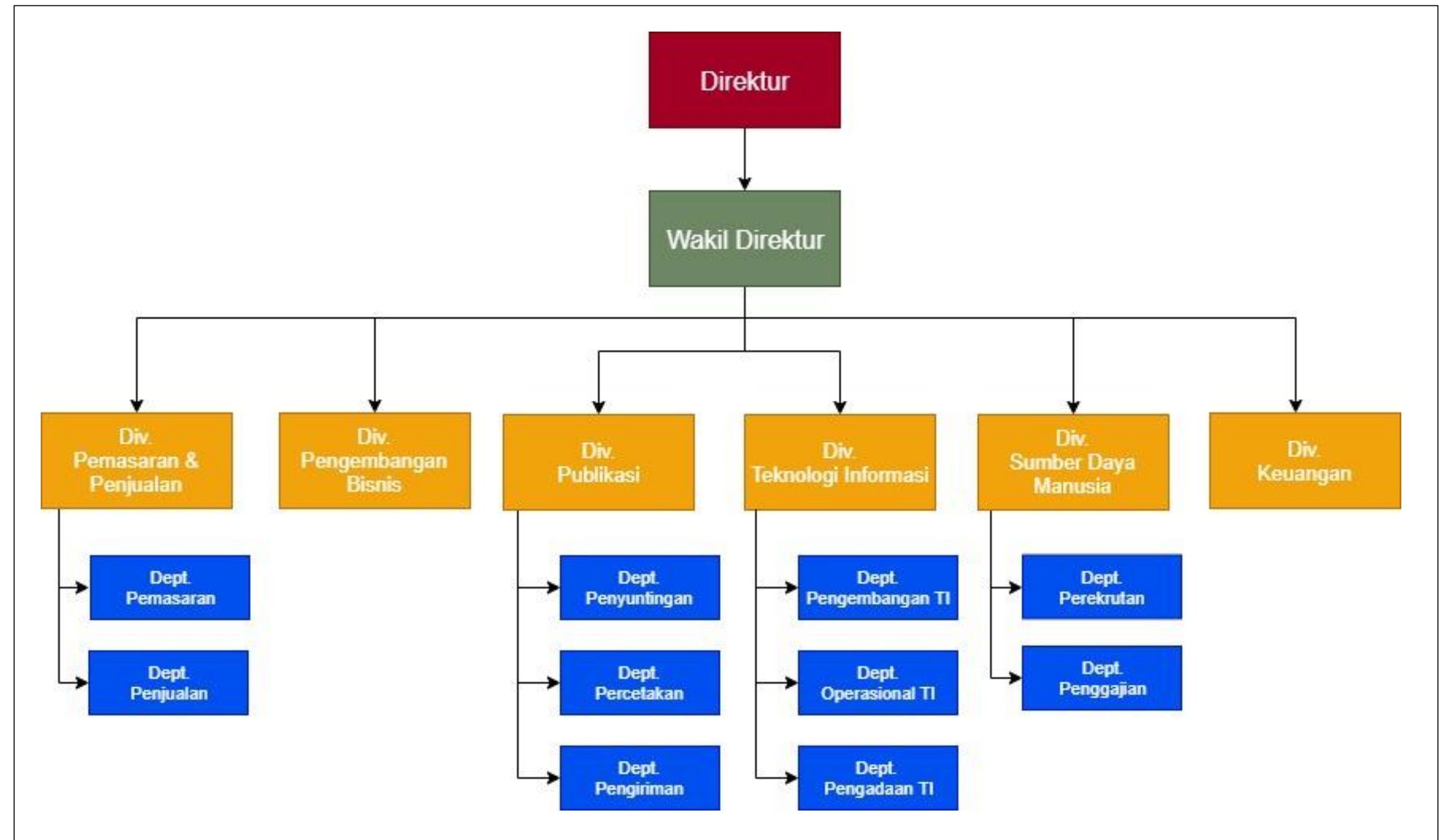


“Business opportunities are like buses, there's
always another one coming.”



Expand business
through IT?

Organizational Structure



Our Solution: EbookHub.id

The best place
to sell your
e-books!
It's online!



Kategori Shop

Cari

Masuk

Hi, kami Ebookhub!

Platform untuk menerbitkan e-book, membaca e-book, dan membeli e-book yang tepat untukmu!

Ebookhub ingin membantu minat baca di Indonesia, ayo mulai membaca dan menerbitkan sekarang!

Mulai Baca

Mulai Terbitkan



Bagaimana menerbitkan buku di Eboookhub?



Unggah

Unggah draft e-book mu dan kami akan segera melakukan pengecekan dan kelayakan terbit.



Proses Edit

Proses pengeditan ± 1 bulan, apabila draft e-book mu layak, maka akan dihubungi oleh tim kami dan melanjutkan ke proses negosiasi harga jual buku.



Terbit

Unggah draft e-book mu dan kami akan segera melakukan pengecekan dan kelayakan terbit.

Change on Business Process

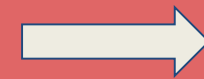
As-Is



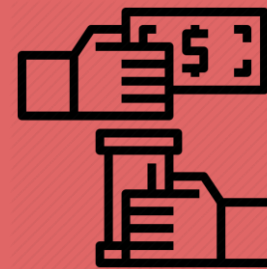
Review and
edit draft



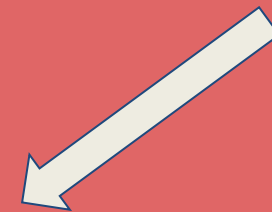
Printing



Shipping to
Retailer



Transaction



To-Be

As-Is
+
EbookHub.id

Business & IT Aspects



Business Need

- Increase company brand awareness
- Increase company revenue
- Increase business partners satisfaction by providing a marketplace for writers and readers



Business Value

- Increase customer up to 50% per year
- Increase business partner (writer) up to 20% per year
- Increase company revenue up to 20% per year

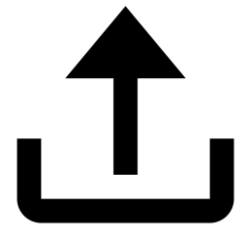


IT Requirements

- Using https & SSL Certificate to secure the payment process (via third party)
- Max of load time: 7 secs
- Must available 24/7
- Can accommodate 10,000 users per day

How It Works

Main Business Process of EbookHub.id



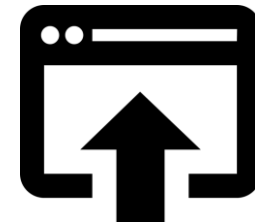
Upload

Upload your e-book



Be Patient...

Wait for the review process



Publishing

Your e-book will be published (?)



Wait for buyer

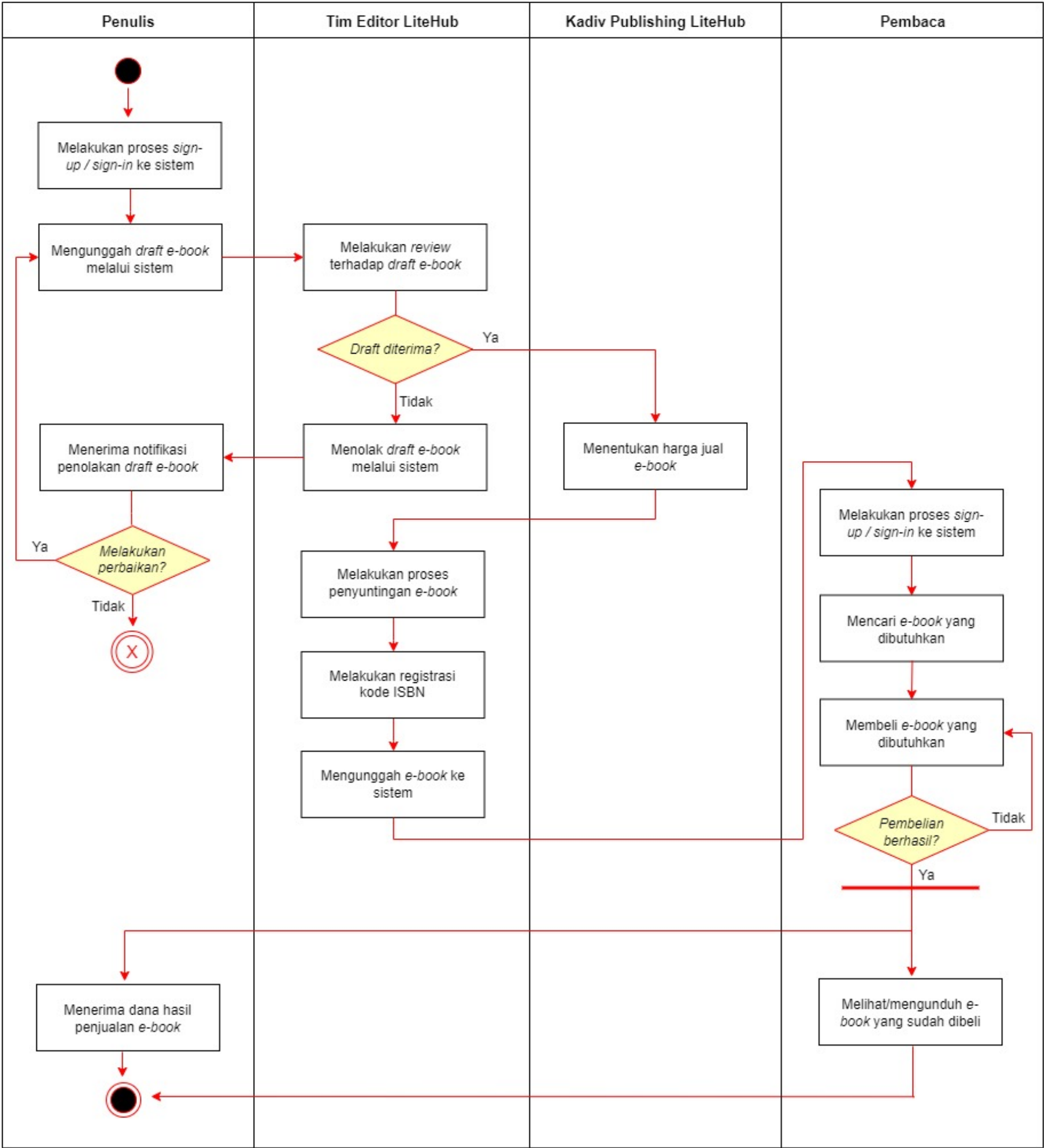
Someone buy your e-book



Gotcha!

Earn money for every e-book purchased!

Business Process:
Detailed View



Regulation

UU No. 3 Tahun 2017: Sistem Perbukuan

Pasal 5, ayat (1): Bentuk Buku terdiri atas buku cetak dan **buku elektronik**.

Pasal 5, ayat (2): Buku elektronik sebagaimana dimaksud pada ayat (1) merupakan karya tulis yang berupa teks, gambar, audio, video, atau gabungan dari keseluruhannya **yang dipublikasikan dalam bentuk elektronik**.

Pasal 27, ayat (1): Pengembang Buku Elektronik berhak:

- mendapatkan akses dan pembinaan dalam berusaha;
- membentuk himpunan organisasi usaha dan/atau organisasi profesi; dan
- **mendapatkan imbalan jasa atas pekerjaan pengembangan buku elektronik**.

Pasal 28: Pengembang Buku Elektronik berkewajiban:

- memiliki izin usaha;
- menjaga kerahasiaan dan melindungi Naskah Buku yang didigitalkan; dan
- menerapkan manajemen hak digital.

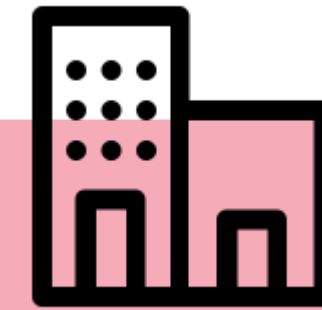
List of Features

Who will use it?

Writer
Company
Buyer



Upload E-book
See application status
See published e-book
See transactions report

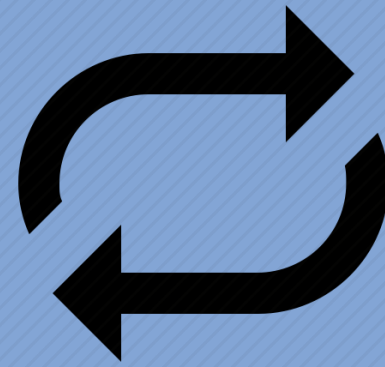
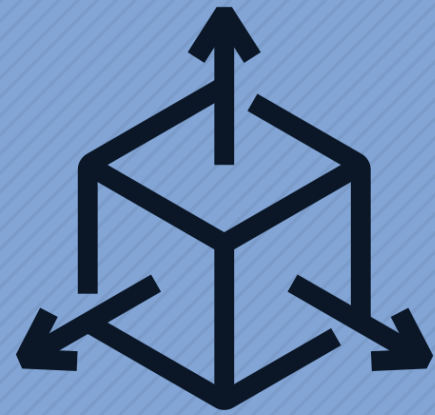


Review application
Publish e-book
See transactions report



Search e-book
Buy e-book
Download e-book

Cloud Computing? Why?



Reduce Cost

Buy server?
More staff needed?
Oh No!

Scalability

Provide On
Demand
Performance
Scaling

Continuous
Update

Automatic
integration and
deployment

Freedom of
Action

Choose based on
personalization and
preference

Limited Resources at
LiteHub

Current Condition:
Limited staff and
limited knowledge

IT Division

Current Condition?

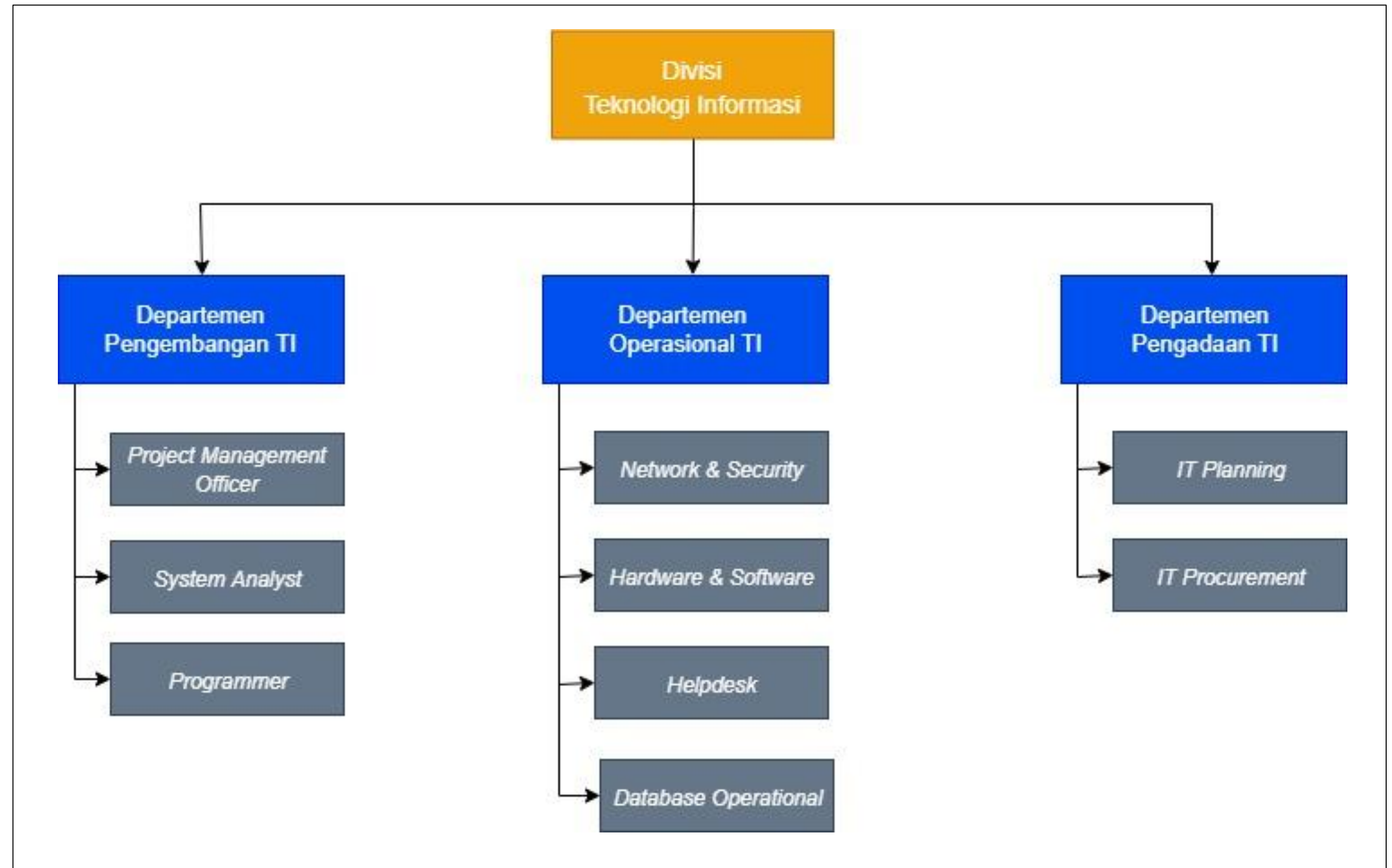
IT Development: 3 people

IT Operations: 4 people

IT Planning & Procurement: 2 people



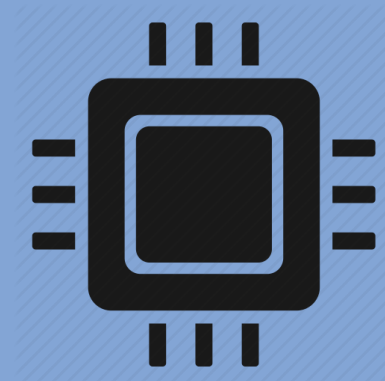
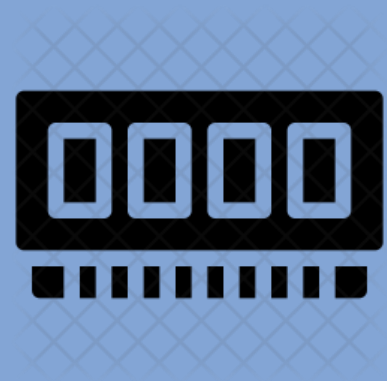
**Limited staff and
limited knowledge!**



IT Division: Responsibilities & Support

Department	Responsibilities
IT Development	<p>Responsible for the process of planning and developing IS / IT required by the company and ensures that the resulting IS / IT is in accordance with the company's requirements.</p> <ul style="list-style-type: none">• Project Management Officer -> overseeing and maintaining standards in the development process in business applications.• System Analyst -> analyzing, designing and implementing information systems.• Programmer -> develop business applications based on the documents that have been collected by the System Analyst.
IT Operations	<p>Responsible for day-to-day IT operations.</p> <ul style="list-style-type: none">• Network & Security -> implementing controls to maintain the security of business and network applications.• Hardware & Software -> designing, managing and overseeing the operations of supporting systems such as hardware and software.• Database Operations -> monitoring database usage, managing database security and access rights, configuring hardware / software to connect to the database, analyzing data usage and growth, and determining optimizing the layout of data storage.• Helpdesk -> facilitating communication between users and other IT departments, such as responding to crises and prioritizing problem solving.
IT Planning & Procurement	<p>Develop strategic planning in purchasing and developing business applications by conducting market research, vendor selection, price negotiations, and solving billing problems</p>

IT Support & Specification



Memory

512 MB RAM for application & 512 MB RAM for database (+ horizontal scaling)

Processor

Dual core for application and 4 threads for database

Storage

4 Million character (approx. 5 MB space on Cloud MySQL)

Security

Certified SSL (+https) and SHA-256 password hash encryption

Customer Service

1x24 hour customer service respond

SaaS vs PaaS vs IaaS?



SaaS

All aspects will be maintained by vendor.

(Less control of application, hard to do enhancement)



PaaS

Only focus on code, application, and data.

Can focus to enhance the feature & code



IaaS

Need to focus on (almost) all aspects:

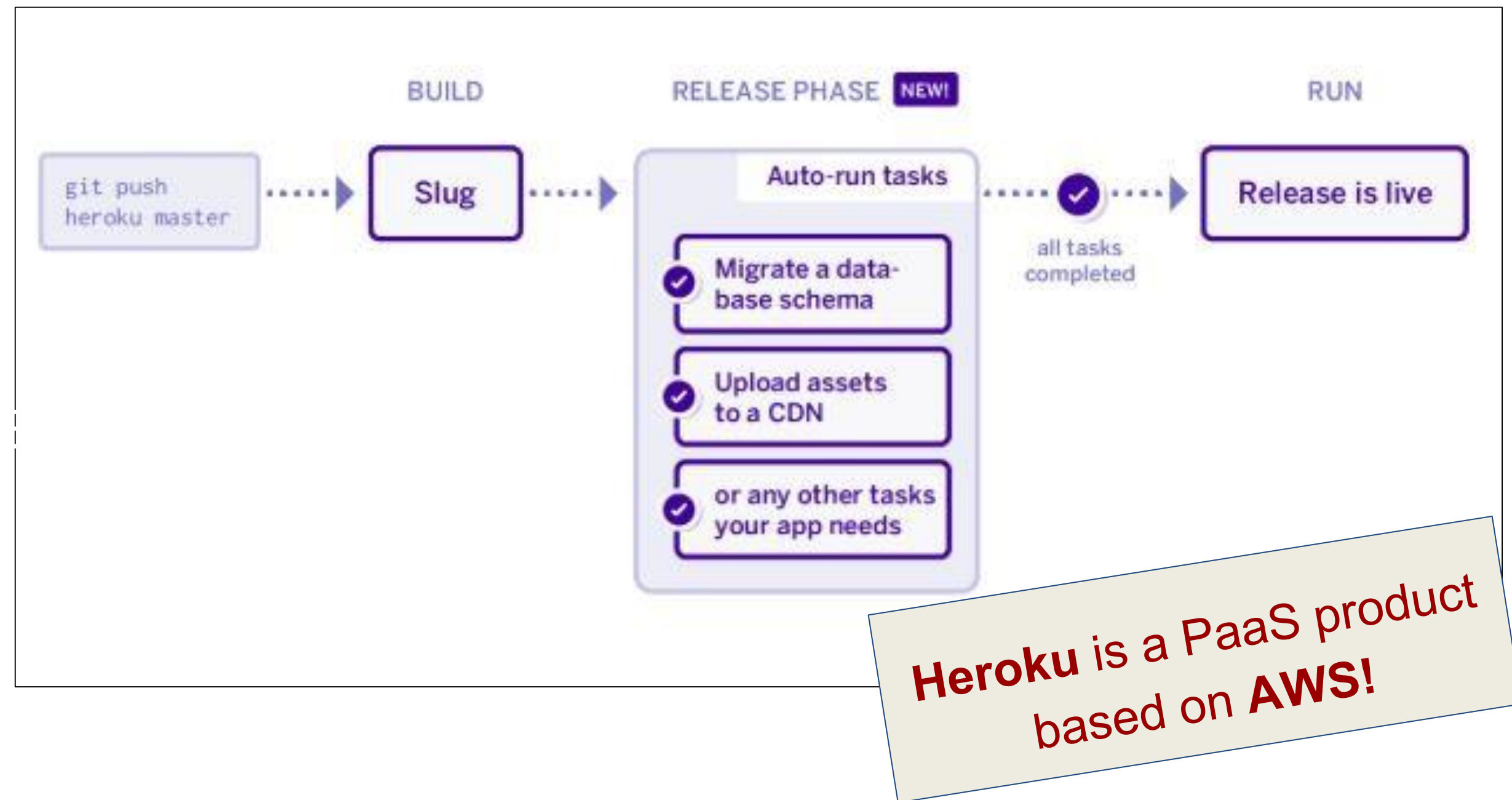
**Application, Data
Middleware, Operating System**

Remember, current condition:
Limited resources & knowledge!

Let's Take a Look: Heroku

Heroku is a PAAS, which provides a ready runtime environment and servers which eventually benefit development and DevOps teams for seamless integration to different development tools.

When a user pushes the code to Heroku application, a virtual machine called slug is created and the instance launched from this virtual machine is called dyno. The Heroku App is totally built on dynos which are lightweight Linux containers.



Why Heroku?

“We needed a platform that would allow for rapid development in our language of choice, simplified operations, and provided infinite scalability. Heroku delivered in spades.”

-- GOPAL PATEL CTO, GetFeedback



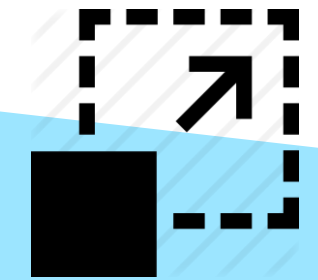
Customize application easily with add-ons from Heroku's marketplace.

Example: Big data analysis, caching, security, email, testing, and network services that help extend the functionality of your application.



Work Fearlessly!

If a new version of our application breaks, we can quickly revert back to a previous version.



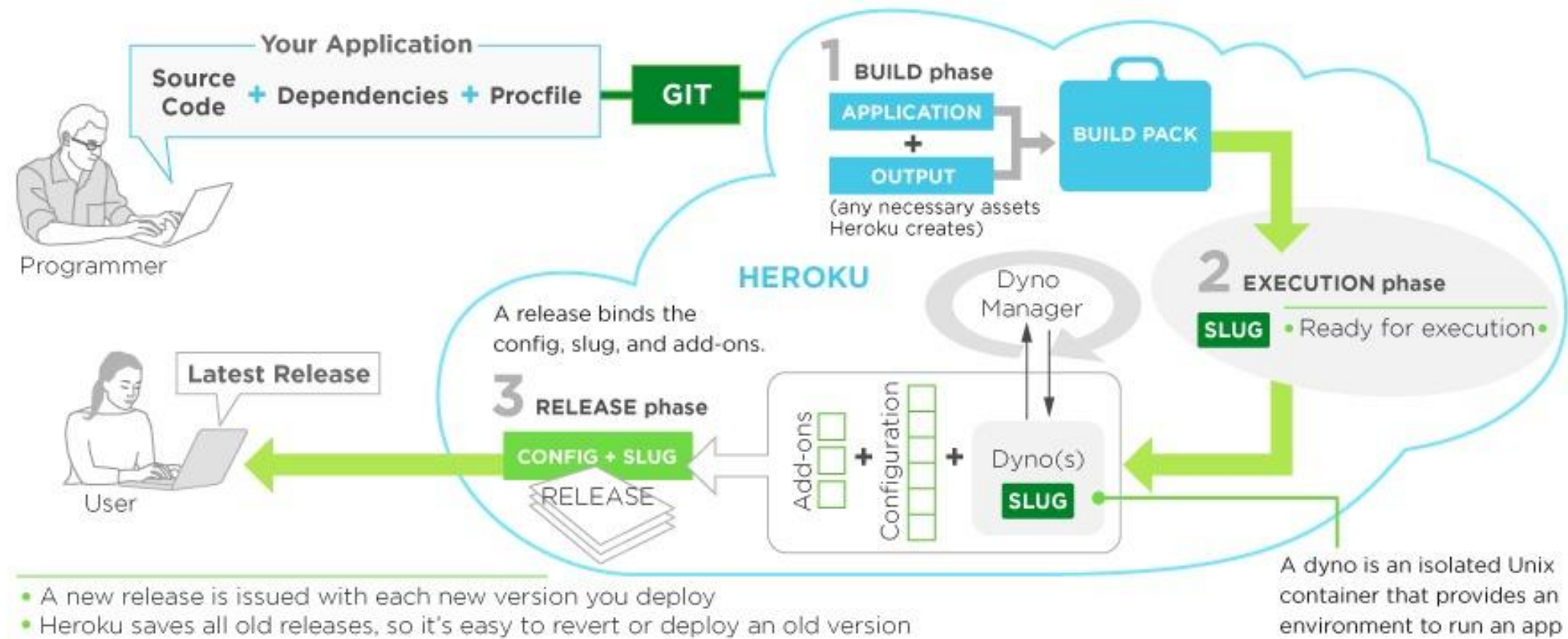
Heroku scales in an instant, both vertically and horizontally.

Integration with GitHub.

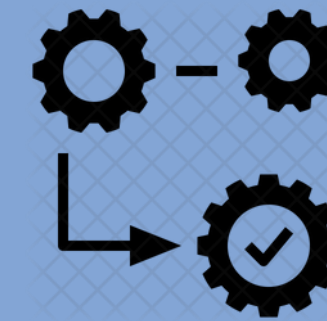
Deployment & Migration Process

DEPLOYING APPLICATIONS WITH HEROKU

Upwork™



Deployment Process: More Detailed



Preparing Application

Code, code, code!
Make sure the language support by Heroku.

Push Code to Git

Just type: "git push heroku master."
Magic!

Build Phase

Heroku will first create any assets necessary for your application

Execution Phase

Configuration with slug and dynos

The Release

The release binds the slug, config, and add-ons together and gets executed



Thanks! Any Questions?

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