

mercari

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# Engineering at Mercari Group

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Chapter.1

# Mission and Values

# Circulate all forms of value to unleash the potential in all people

“What can I do to help society thrive with the finite resources we have?”

The Mercari marketplace app was born in 2013 out of this thought by our founder Shintaro Yamada as he traveled the world. We believe that by circulating all forms of value, not just physical things and money, we can create opportunities for anyone to realize their dreams and contribute to society and the people around them. Mercari aims to use technology to connect people all over the world and create a world where anyone can unleash their potential.

## | Company Mission

**mercari**

**Create value in a global marketplace where anyone can buy & sell**

**souzoh**

**Accelerate the possibility for anyone to realize their potential**

**merpay**

**Building trust for a seamless society**

**mercoin**

**Circulate your value, anywhere and everywhere**

**Go Bold**

**All for One**

**Be a Pro**

Chapter.2

# Products

## What Is Mercari?

The Mercari app is a C2C marketplace where individuals can easily sell used items. We want to provide both buyers and sellers with a service where they can enjoy safe and secure transactions. Mercari offers a unique customer experience, with a transaction environment that uses an escrow system, where Mercari temporarily holds payments, and simple and affordable shipping options.

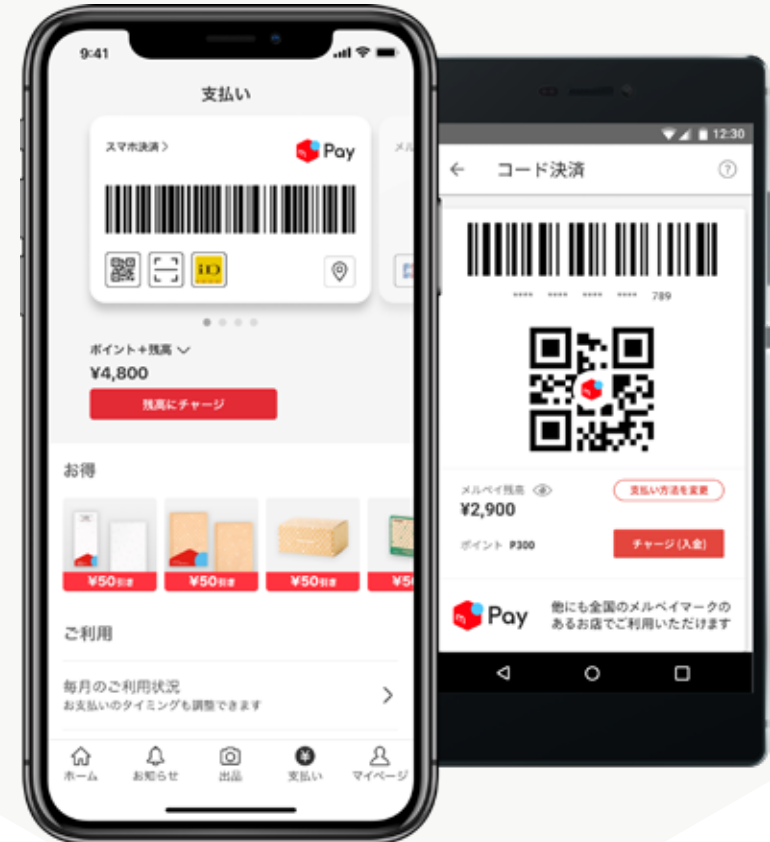
Many sellers enjoy having the items they no longer need purchased and used by buyers who need them, and buyers enjoy the feeling of hunting for treasure as they search through unique and diverse items for lucky finds. In addition to buying and selling, users actively communicate through the buyer/seller chat and the “Like” feature.



- Service launch: July 2013
- Operating systems: Android, iOS
  - \*Can also be accessed through web browsers
- Usage fee: Free
  - \*Sales fee for sold items: 10% of the sales price
- Regions/languages supported:
  - Base specs for Japan/Japanese
- Total number of listings to date: More than 3 billion
  - \*As of November 2022

Merpay is a mobile payment service operated by Merpay, Inc., that can be used within the Mercari marketplace app.

This service enables users to utilize their Mercari sales balance<sup>1</sup>, funds added to their Merpay balance from a bank account or ATM, or the BNPL (buy now, pay later) Merpay Smart Payments service to pay for purchases at physical stores and online with their smartphone. Merpay supports both iD contactless payments<sup>2</sup> and code payments and can be used at JCB merchants across Japan with Mercard, a credit card with a point-back rate that increases based on use of Mercari and Merpay.



1. In order to use Mercari sales balance, users must configure certain settings or use their sales balance to purchase Mercari points.

2. "iD" is a registered trademark of NTT DOCOMO, INC.

## What Is Merpay?

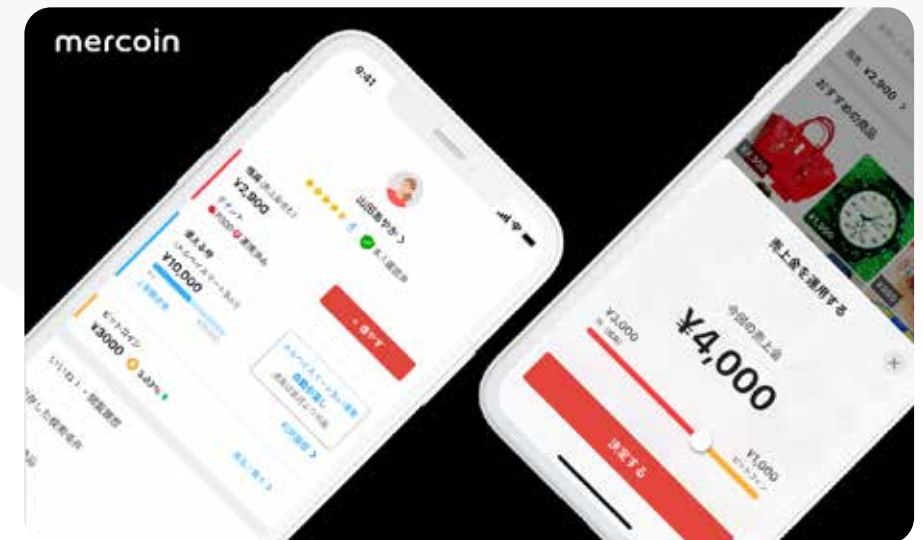
## What Is Mercoin?

With Mercoin, which was established on April 28, 2021, we will work on planning and developing services related to cryptoassets and blockchain technologies.

By taking on the cryptoasset business, we will make it even easier for users to utilize financial services within Mercari, such as by allowing users to receive payment for Mercari sales in bitcoin and providing a single wallet function that incorporates not only Merpay's payment and remittance services, but credit, cryptoassets, and asset management features as well.

Mercari has also started work on blockchain technologies, which present new opportunities for individuals to exchange value.

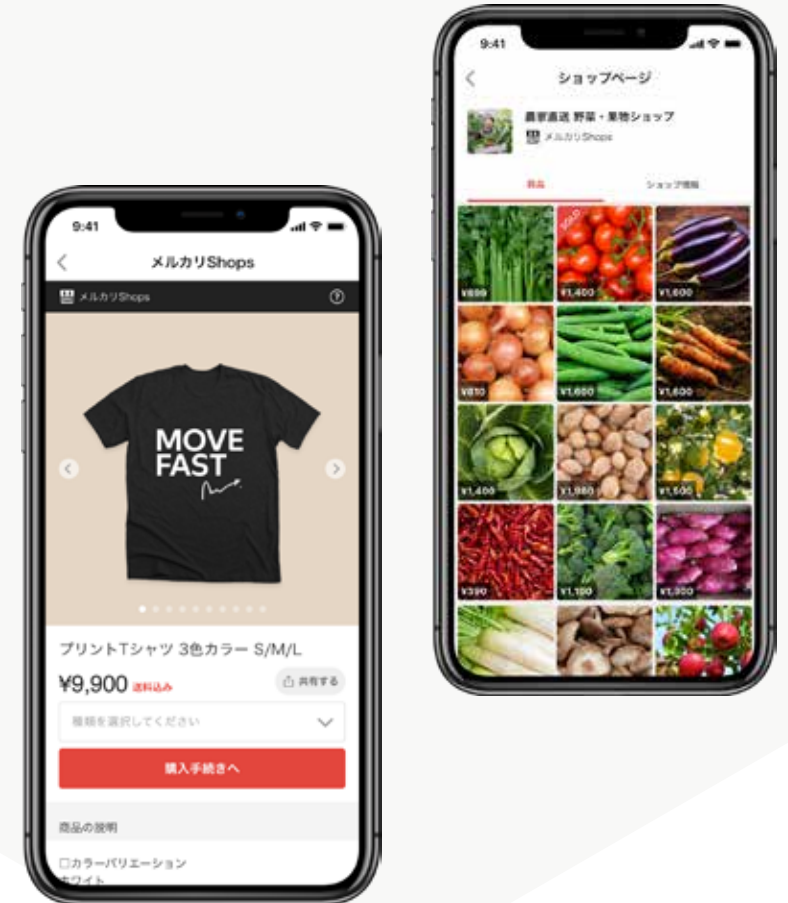
The company wants to redefine what it means to buy and sell, enabling anyone and everyone to easily exchange value in all its forms—not only as belongings and money, but services and digital content like non-fungible tokens (NFTs).



## What Is Souzoh? (Mercari Shops)

Souzoh, Inc. is a Mercari Group company charged with planning, developing, and managing new business. Established on January 28, 2021, the company is currently focused on Mercari Shops, an e-commerce platform.

With a concept of “sell with ease,” the Mercari Shops e-commerce platform allows users to establish their own online shop using just their smartphone and allows shop operators to sell items directly to consumers. Using the same simple operation as when listing an item on Mercari, Mercari Shops allows anyone to have their very own shop on the Mercari app and enjoy access to over 20 million monthly active users without the need to build their own customer base.



Chapter.3

# Message

## **Ken Wakasa**

Mercari CTO (Marketplace)

In order to realize the mission of “Create value in a global marketplace where anyone can buy & sell”, Mercari’s engineering organization has continuously taken on issues that have become more diverse and complex over time. Of course, among them are also problems that were unforeseeable, but we consider each of them valuable challenges. If you wish for disruptive growth, and want to take on the world with us, we are waiting for your application.



## **Takashi Nozawa**

Merpay CTO

To achieve our mission of “Building trust for a seamless society,” Merpay provides both payment and deferred payment services. As a fintech company, we hold our engineers to a very high standard and cultivate an environment that allows them to take on new and exciting challenges. This allows Merpay to simultaneously provide high-quality financial services and continue to innovate and improve on user experiences by leveraging data from the Mercari app. Merpay is looking to hire engineers who want to be a part of building the infrastructure that will produce the services and systems supporting our future society.



## Shigeaki Wakizaka

Mercoin CTO

Here at Mercoin, we're planning and developing services related to cryptoassets and blockchain technologies under our mission of "circulate your value, anywhere and everywhere."

We believe that by striving to build our cryptoassets business, we will be able to increase the number of options available for people to exchange and store all forms of value including not just items and money, but also digital assets. This will also result in the expansion of Mercari, Merpay, and our other existing businesses. The cryptoasset industry is one of dramatic changes in a state of transition between freedom and regulation. In the face of the issues that can and do occur, engineers are required to take on challenging activities using their domain knowledge and technology. We're opening our door to the world and waiting to welcome more engineers who enjoy the challenges of this exhilarating era of tech.



## **Keigo Watanabe**

Souzoh

Head of Engineering

At Souzoh, our mission is to “accelerate the possibility for anyone to realize their potential.” Souzoh’s software engineers are not just developers. They are tasked with the important role of building new pillars of our business that are the first of their kind—businesses that can stand alongside Mercari Shops and propel the business to success.

To that end, we are striving to create a culture of “Move Fast,” where engineers are able to fully understand the essence of what our business is aiming to achieve, make decisions on their own, and take on new challenges.

Leading a new business to success is no easy task, but we look forward to hearing from candidates who are up for the challenge.



Mercari's security and privacy teams support the Group's rapid growth while striving to continuously reinforce security measures across the company, measures to prevent fraud on our services, and appropriate data and privacy protection measures in order to ensure our marketplace is safe and secure.

## Naohisa Ichihara

Mercari CISO

As it says in our mission statement, "create value in a global marketplace where anyone can buy & sell," Mercari has sought to expand overseas since our establishment. This is why we are also driven to create the ultimate team, aiming to provide security and privacy recognized as world class. We face an array of issues, many of which are extremely difficult to contend with; you could say that we are taking on the challenge of areas for which there are no established precedents or knowledge bases to reference. We are looking for people who share our drive and can stand up to these challenges in order to achieve our mission.



## **Keisuke Sogawa**

Merpay CISO  
Mercoin CINO

Of course it is very important to get as many people as possible to use Mercari and Merpay, but we also should do our part to resolve issues faced by modern society. Obviously all engineers need to love technology if they want to keep improving themselves, but I think the people who will be a better fit for Mercari and Merpay are those who go beyond that and think about how they would use that technology and what kind of society they want to achieve with it.

As we develop Mercari and Merpay together, I believe we will resolve problems for not only our users but also society at large.



Chapter.4

# Engineering Culture

## | Everyone is a Software Engineer

In Mercari, we refer to all engineers who are involved in software development as **Software Engineers**.

As a company, we believe all software engineers should be able to use the most appropriate technology available, so **we don't limit people to particular roles or technology**.

**This does not mean that we don't believe in specialization,** but we think that **someone's work should not be limited by their job title.**

# | Mercari Engineering Principles

The Mercari Group created the Mercari Engineering Principles to explain the basic ideas behind the organization. Mercari has infused three values; Go Bold, All for One, and Be a Pro; into the organization, and they have been a strong foundation of culture.

## **Go Bold**

Seek Continuous  
Improvement

Go bold,  
Fail Fast & Learn Early

Take Action &  
Responsibility

## **All for One**

Focus on the  
Customer

Strive For  
Alignment

Foster trust &  
Inclusion

## **Be a Pro**

Deliver with  
High Quality

Share to Empower

Be Strategic  
& Efficient

## | Engineering Ladder

We have created the **Engineering Ladder** to understand and respect the unique skills, characteristics, and diversity of one another, while also creating a strong culture and aligning on the ideal direction of the organization. The Engineering Ladder **clarifies the behaviors expected during each stage of an engineer's path for growth.**

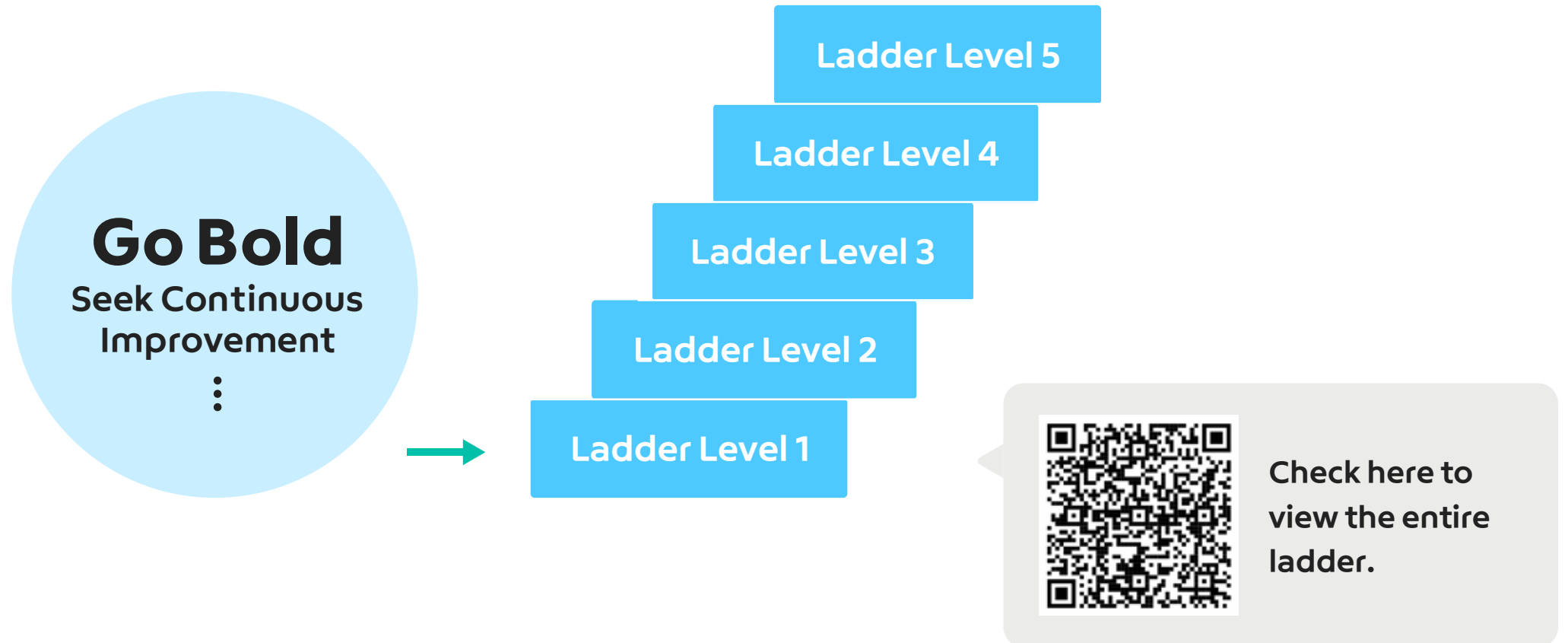
It is also used in performance reviews, goal setting, and career planning.

This does not mean that we expect every engineer to fulfill each and every skill and behavior defined in the ladder.

We believe that diversity in engineers' strengths and weaknesses helps build a better product.

# | Engineering Ladder

No one is expected to conduct behavior that fulfills all of the nine Principles at once. Engineers complement each other via their various skill sets. Diversity in strengths and weaknesses is welcomed in our organization.





## | Hack Fest and Be a Pro Camp/Day

We hold Hack Fest twice a year in Mercari. It is a technology hackathon for engineers, where members drop their regular work during that period and develop whatever they want to. In Merpay, we hold Be a Pro Camp/Day in irregular intervals to guarantee that we keep growing, that we are durable against changes, and that we have enough leeway to make investments for the future.

Chapter.5

# Diversity and Inclusion

**Diversity &  
Inclusion**

Mercari Group is  
home to employees from...

Over **50** Countries



Approx. **50**%

...of our Software Engineers  
are from countries  
outside of Japan.



## | Diversity & Inclusion

Mercari aims to create value in a global marketplace, and we place a strong emphasis on diversity in our organization and team members. It's not an easy task for members of all different backgrounds, including languages, cultures, and values, to come together as one, but **we believe that treating these differences as strengths helps us create a strong engineering organization ready to compete on a global scale.**



Check here to  
view the entire  
Diversity & Inclusion.



## | Build@Mercari

Build@Mercari is a training and internship program provided by Mercari for people who identify as minorities in the fields of STEM and IT.



## | Mercari Restart Program

Mercari offers the Mercari Restart Program, a program that aims to support those who, due to personal reasons, had to interrupt their careers and want to return to the workforce.

We hope that providing an environment that includes and enables those who have taken breaks in their career to take on new challenges without hesitation will help us create an organization—and ultimately, a society—that empowers everyone regardless of their background or their luck in trying to enter the job market.



## Mercari's New Normal Work Style: "YOUR CHOICE"

Since September 1st, 2021, Mercari has implemented a new work style that respects diversity and how people choose to work, called "Mercari's New Normal Work Style: Your Choice."

With the start of "Your Choice," each employee will be able to select the work style that maximizes performance and value for both themselves and their organization. The policy will give employees the freedom to decide whether to work remotely or in the office, what kind of environment to work in, and other working conditions.

Now the biggest thrill of working in Mercari is that you are not bound to any location, and you can freely choose how you work.

\*Assumes compliance with instructions and requests issued by the national government, local governments, and other administrative bodies in areas where Mercari offices are located.

\*Some individuals may be required to come to the office in order to meet security criteria or due to other circumstances related to their work duties.

\*Commuting expenses will be fully covered, up to 150,000 yen per month.



## | Culture Doc

The Culture Doc is an internal document that summarizes the behaviors and mindset shared by Mercari and its members. In order to achieve Mercari Group's mission, we need the kind of workplace that can welcome a more diverse range of members and enable them to excel.

The more demand there is for diversity, the more important it becomes that our members share a common set of values, linking them and enabling each to perform to their utmost. Culture is an invisible, intangible asset to the company. We believe that having a strong culture will increase Mercari's ability to compete in a way unique to our company, foster our products' growth into services essential to both users and society at large, and help us achieve the company mission.

Chapter.6

# Team Structure

## | Mercari Camp Structure

Mercari employs a structure called "Camp" to keep its organization's productivity high. **Camp is a logical grouping of multiple scrum teams.** Each camp has its own goals, and is responsible for **settings up the vision and decision making in its designated area.**



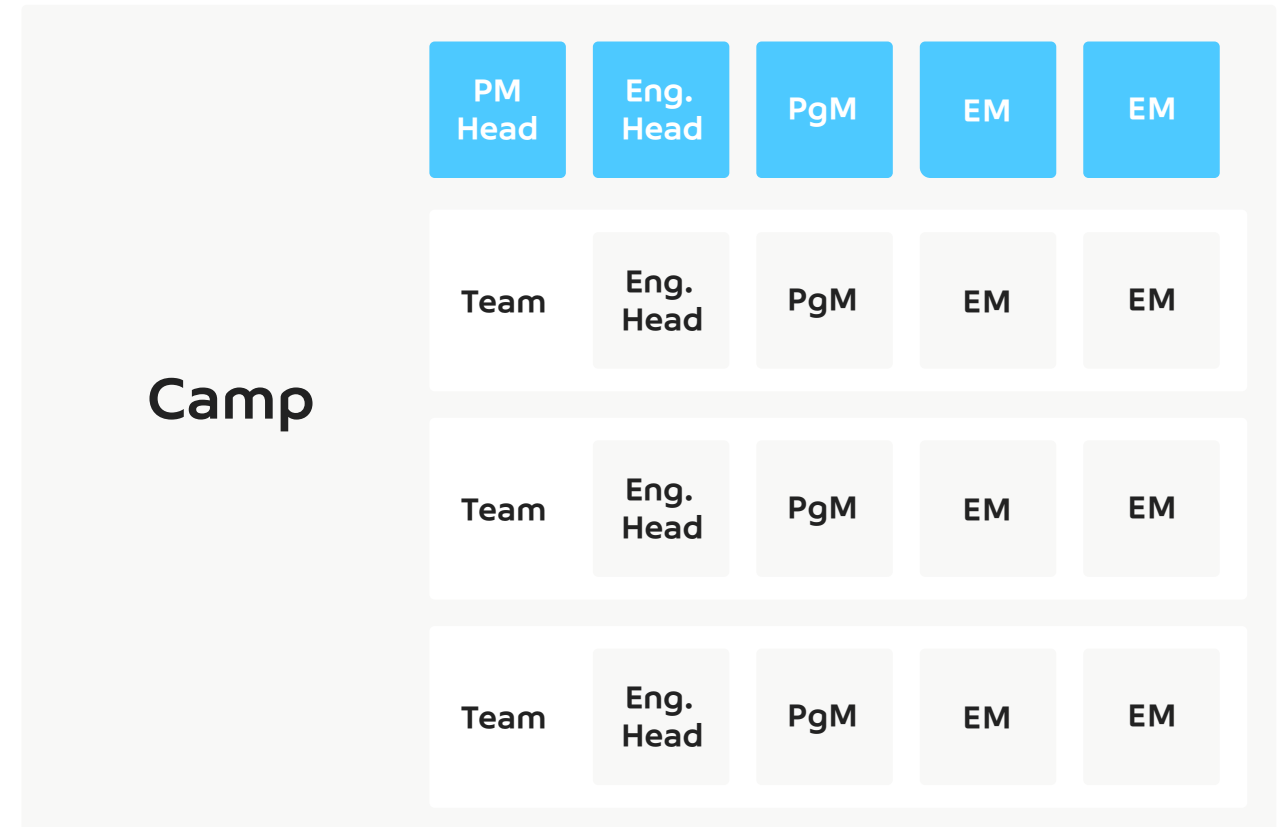
Own  
Decision  
Making

Own  
Vision

Cross  
Functional

## | Mercari Camp Structure

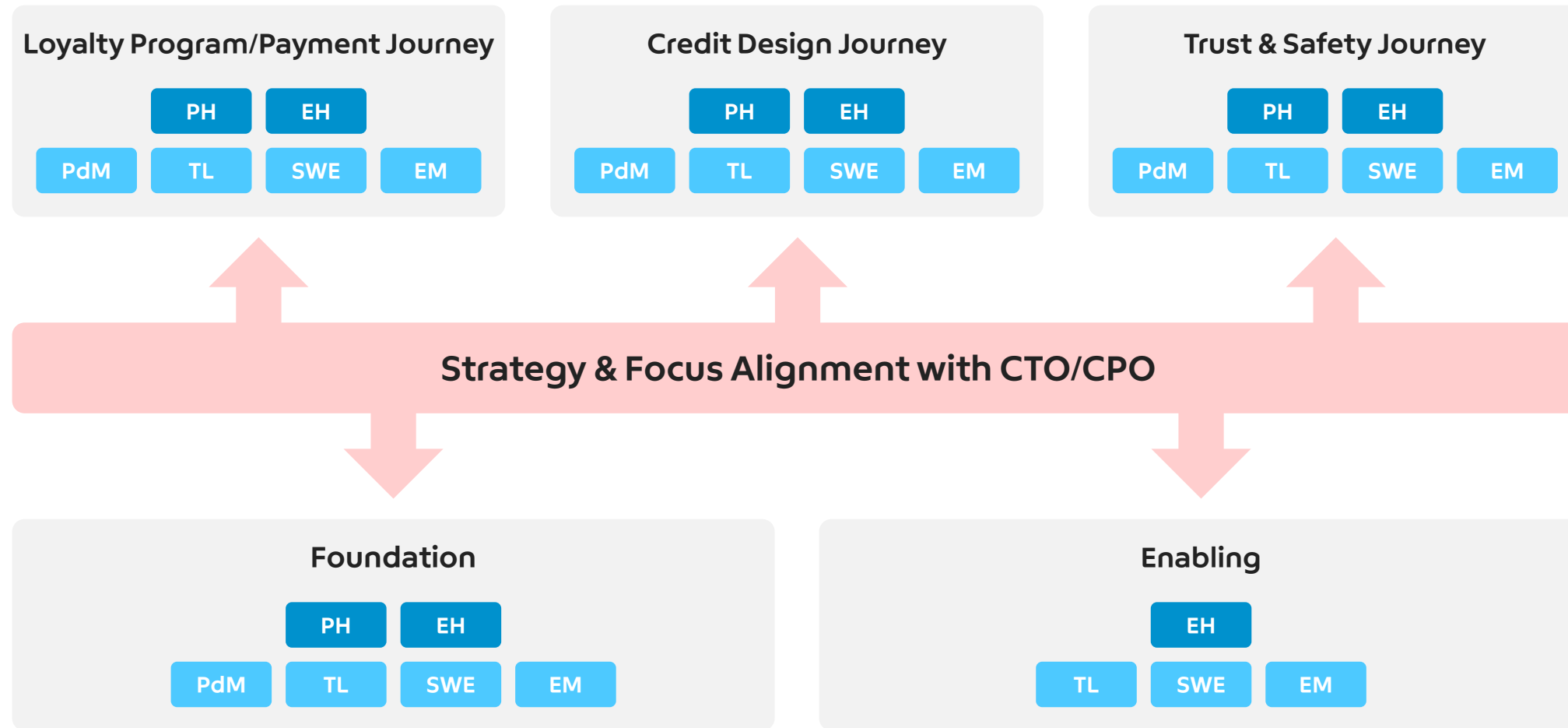
Camp consists of **cross-functional members** from various areas of expertise, so that it can solve diverse sets of issues during development. Experts such as engineers, designers, managers are gathered to form a camp.



# Merpay Program Structure

Merpay is program structured.

There is a Product Head (PH) and Engineering Head (EH) assigned to each program. They lead the implementation of the programs. The PH is responsible for the business strategy, while the EH is responsible for the sustainable systems which support the business strategy.



PH: Product Head  
 EH: Engineering Head  
 PdM: Product Manager  
 TL: Tech Lead  
 SWE: Software Engineer  
 EM: Engineering Manager

Chapter.7

# Technology Stack

## | Technology Stack

Introducing the tech stacks that are used by each team and for each service at Mercari.

Category	Technology Stack
Programming language / Library etc.	Web Frontend: HTML, CSS, JavaScript, TypeScript, React, Gatsby, Next.js, GraphQL, Apollo Client, Redux, Cypress, Rendertron, Lit, Playwright, Vue.js, Nuxt, Jest
	Android: Kotlin, Gradle Kotlin DSL, Jetpack Compose, Hilt, RxJava, Kotlin Coroutines, Protocol Buffers, JUnit, Espresso, Java
	iOS: Swift, SwiftUI, UIKit, Swift Concurrency, Combine, Protocol Buffers, Bazel, Xcode
	Backend: Go, PHP, gRPC, Python, Java, Scala, GraphQL, TypeScript, Node.js, NestJS
	DataPlatform: Python, Java, Scala

## | Technology Stack

Introducing the tech stacks that are used by each team and for each service at Mercari.

Category	Technology Stack
Infrastructure	Google Cloud Platform, Amazon Web Services
Middleware	Google Identity Platform, NGINX, Cloud Pub/Sub, Memorystore for Redis, Apache Spark, Apache Flink, Cloud Functions, AWS Lambda, Debezium, Unleash, Polyaxon, Neo4j, Kafka, Cloud Tasks, Hashicorp Vault, Envoy, Istio
Database	Cloud Spanner, MySQL, Cloud SQL (MySQL, Postgres), Datastore, BigTable, Firestore [Storage] Google Cloud Storage, Amazon S3
Monitoring	Datadog, Mackerel, PagerDuty, Kibana, Cloud Monitoring, Sentry, Crashlytics
Data analytics	BigQuery, Looker, Superset, Data Studio, Cloud Logging, Splunk Cloud
Environment setup	Docker, Terraform, Spinnaker, Cloud Build, Ansible, Bazel, CUE

## | Technology Stack

Introducing the tech stacks that are used by each team and for each service at Mercari.

Category	Technology Stack
Container Orchestration	Kubernetes, Cloud Run
CI	CircleCI, GitHub Actions, Cloud Build
Machine learning Library	Kubeflow, scikit-learn, TensorFlow, PyTorch, LightGBM, Optuna, Vertex AI, PyTorch Lightning, ONNX, Feature Store (FEAST), Neo4j, networkx, Python
Search Engine	Elasticsearch, Apache Solr, Elastic Search Cloud
Workflow Engine	Apache Airflow, DigDag, Argo Workflows, Dataflow, Cloud Workflows
Code Management	GitHub, Gerrit
Test Automation tools	JavaScript, Go, gRPC, GitHub, CircleCI, Cypress, Postman

Chapter.8

# Mercari's Tech Fields

# Backend Engineering

📍 Mercari

Mercari's backend technologies are currently undergoing a major transformation. Mercari has continued to experience rapid growth since the launch of the service, and it has grown to become the largest C2C marketplace application in Japan.

As the service grew and our challenges diversified, the Mercari API codebase has continuously expanded.

As we have our eyes fixed upon further and faster expansion in the future, the entire Mercari Group is currently undertaking the mission of microservice migration.

## Work Responsibilities

---

- Designing, developing, and operating Mercari's API and web app

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- Designing, developing, and operating tools to support the customer support team and planning-related work

---

- Designing, developing, and operating various microservices making up the Mercari API

---

- Leadership of the team's development

---

# Web Engineering

📍 Mercari

Mercari Web does not share its frontend with the native app. Instead it utilizes web frontend technology based on JavaScript, HTML, and CSS, built specifically for it. Because PWA and SPA/SSR have been gaining more attention recently, we in Mercari are also taking initiatives to base our product development on more modern web technologies. This domain has great power and potential to support Mercari's continuing growth.

## Work Responsibilities

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- Improving Mercari's UI/UX

---

- Designing, developing, and operating Mercari Web as well as the WebView called from the native app.

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- Designing, developing, and operating customer support tools that help provide support for user inquiries and transactions.

---

- Continuously improving of the codebase, including major re-architecture

---

# Mobile Engineering

📍 Mercari

The mobile development team in Mercari is in the process of changing the architectures for Android and iOS versions of the app on a major scale in order to realize an organization where large-scale development can be conducted with speed as well as safety. We also take on various other projects such as new feature development and UX improvement.

## Work Responsibilities

- Improving Mercari's UI/UX
- Improving quality with a focus on stability and performance
- Continuously improving of the codebase, including major re-architecture
- Handling updates for the iOS/Android apps
- Developing new services and linking them with other services

# Machine Learning

📍 Mercari

As Software Engineers of machine learning and search systems, we build features and services for Mercari through development and maintenance of infrastructure and platforms. We are trying to provide a safer, more useful, and more fun marketplace through proactive use of machine learning and search technologies.

## Work Responsibilities

- Developing libraries and frameworks to improve the availability of the machine learning and search systems
- Improving the existing machine learning and search infrastructures and using global best practices to support the AI and Search teams' operations
- Improving development processes through utilizing best practices for machine learning and search engine operations
- Developing and improving monitoring and logging systems for evaluating machine learning and search models.

## Microservices Platform

📍 Mercari/Merpay

The microservices platforms of Mercari and Merpay are based on Kubernetes. Our major role involves being a Kubernetes Cluster Admin, as well as developing tools and/or services that can improve the speed of developing microservices. As SREs, supporting the development and operation of highly-reliable microservices with full consideration for scalability is another one of the major responsibilities.

### Work Responsibilities

- Designing and developing microservices platformst
- Designing and developing common components between microservices (such as an API gateway or service mesh)
- Improving security of the platforms and microservices
- mproving observability of microservices
- Improving cloud resource management through infrastructure as code
- Improving Kubernetes Cluster management and operation
- Supporting the developers who build microservices
- Continuously improving on technological issues based on the results of surveys conducted among developers

## Site Reliability Engineering

📍 Mercari

Site Reliability Engineers (SRE) are responsible for building and operating servers and networks, for system automation and system failures, and also for development to improve the performance, reliability, and scalability of our systems.

### Work Responsibilities

- Using engineering ability to identify and solve technical system issues
- Developing and operating tools to automate operations including those for deployment and setting up servers
- Operating apps and middleware and improving operational performance
- Building and operating monitoring environments for incident detection and capacity planning
- Participating in incident handling as well as on-call rotations

Chapter.9

# Merpay's Tech Fields

## Backend Engineering

📍 Merpay

Some of the greatest experts within Mercari Group are gathered into teams organized by business domain. Our commitment to a culture of openness allows members to discuss architecture on Slack channels, send pull requests to each other on GitHub, and share knowledge on the internal Wiki. We hold “Go Friday” and other weekly study groups for engineers but open to all, encouraging engineers to help one another grow.

### Work Responsibilities

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- Handling web application and API development in Go

---

- Designing APIs/interfaces for microservices using Protocol Buffers and gRPC

---

- Measuring and improving effectiveness of business initiatives using quantitative and qualitative analysis of user behavior logs, etc.

---

- Designing architecture and selecting middleware based on application requirements

---

- Microservice performance tuning, monitoring, and alert handling

---

## Web Engineering

📍 Merpay

As a software engineer (frontend) at Merpay, you will work on web application development for Merpay's payment and financial services.

We are a payment and financial service that engages in not only B2B service development but also B2C service development. You will have the opportunity to be involved in both.

### Work Responsibilities

- Developing application forms for merchant dashboards
- Developing merchant support tools
- Developing customer support tools
- Developing B2C services such as Mercari Web

## Mobile Engineering

📍 Merpay

Multiple projects in Merpay are run multilaterally. Integration with the Mercari app requires our engineers to communicate with the Mercari teams and study the tech used by the Mercari app, calling for a high level of professional skill from our engineers. We work on implementation of unit tests and UI tests, while also working to constantly test these with CI and improve coverage.

### Work Responsibilities

---

- Designing/developing new Merpay features and improve existing features

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- Designing/developing SDK for integration with Mercari

---

- Working on development as a team, collaborating with product managers, designers, backend engineers, and QA/testing engineers

---

- Improving code quality and upgrade the development environment through automation

---

# Machine Learning

📍 Merpay

The Machine Learning team identifies business issues and constructs/implements models. As a member of the ML Platform Team, you will develop, operate, and improve the productivity and reliability of systems that use machine learning, such as credit scoring, fraud detection, and our recommendation engine. We also work on anti-fraud measures and recommendations, creating many future possibilities.

## Work Responsibilities

- Collaborating with product managers and defining business challenges
- Constructing, reviewing, precision monitoring, and refining machine learning models
- Designing and implementing machine learning systems
- Designing and developing data pipelines
- Building an environment for data processing and tuning processing performance
- Constructing the platform to achieve more efficient modeling

# Site Reliability Engineering

📍 Merpay

As a member of the Site Reliability Engineering (SRE) Team, you will develop and operate software to improve performance, reliability, and scalability of Merpay's services. One of the SRE Team's key roles is creating various technical mechanisms and bringing together engineers from across the company to build and operate our financial service Merpay on microservice architecture.

## Work Responsibilities

- Building and operating databases and networks in the cloud
- Operating apps and middleware on Kubernetes and improving operational performance
- Using engineering ability to identify and solve technical system issues
- Developing and operating various tools for automating operations
- Building and operating monitoring environments for incident detection and capacity planning

Chapter.10

# Mercoin's Tech Fields

## Backend Engineering

📍 Mercoin

Some of the greatest experts within Mercari Group are gathered into teams organized by business domain.

Our commitment to a culture of openness allows members to discuss architecture on Slack channels, send pull requests to each other on GitHub, and share knowledge on the internal Wiki. We will expand technologies and domain knowledge through broad discussions that also include stakeholders outside of engineering teams.

### Work Responsibilities

---

- Handling cryptoassets and blockchain services development in Go

---

- Designing APIs/interfaces for microservices using Protocol Buffers and gRPC

---

- Measuring and improving effectiveness of business initiatives using quantitative and qualitative analysis of user behavior logs, etc.

---

- Designing architecture and selecting middleware based on application requirements

---

- Microservice performance tuning, monitoring, and alert handling

---

## Web Engineering

📍 Mercoin

As a software engineer (frontend) at Mercoin, in addition to operating cryptoasset-related services, we will develop and operate the necessary internal administration systems as web applications.

### Work Responsibilities

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- Develop and operate cryptoasset-related work support tools

---

- Developing customer support tools

---

# Mobile Engineering

📍 Mercoin

Mercoin will develop and operate applications mainly involving features for buying and selling cryptoassets.

From a technological perspective, this will also require professional-level technical skills, for example, security that includes authentication methods. For a UI, this means incorporating the feedback from user testing into implementation as a part of the UX.

Even from a non-technological perspective, for areas integrated with the Mercari marketplace app, there is demand for proper communication with Mercari's teams.

## Work Responsibilities

- Designing/developing new Mercoin features and improve existing features
- Designing/developing SDK for integration with Mercari
- Working on development as a team, collaborating with product managers, designers, backend engineers, and QA/testing engineers
- Improving code quality and upgrade the development environment through automation

# Blockchain Engineering

📍 Mercoin

In addition to operating a cryptoasset exchange business, Mercoin provides technical support for such things as wallet management and reviewing how currency is handled. We also implement technical validation through the research of industry trends and PoC.

Furthermore, we are involved in promoting the planning, development, and operation of Web3-related services, including NFTs.

Internally, we strive to bolster our knowledge across our entire organization through training sessions that take from various perspectives of the crypto economy including non-technological perspectives such as law, taxation, accounting, finance, and economics.

## Work Responsibilities

- Blockchain-related technological support (Bitcoin, Ethereum, Flow, etc.)
- Development and operations using smart contracts
- Blockchain technical verification through PoC (wallets, nodes ops, etc.)
- Operational support for the cryptoasset exchange business
- Industry trend investigations and analysis

# Site Reliability Engineering

📍 Mercoin

As a member of the Site Reliability Engineering (SRE) Team, you will develop and operate software to improve performance, reliability, and scalability of Mercoin's services. One of the SRE Team's key roles is creating various technical mechanisms and bringing together engineers from across the company to build and operate our financial service Mercoin on microservice architecture.

## Work Responsibilities

- Building and operating databases and networks in the cloud
- Operating apps and middleware on Kubernetes and improving operational performance
- Using engineering ability to identify and solve technical system issues
- Developing and operating various tools for automating operations
- Building and operating monitoring environments for incident detection and capacity planning

Chapter.10

# Selection Process for Engineers

# | Selection Process for Engineers

The selection process for engineers consists of document screening, a coding test/technical assessment, interviews (2-3), and an offer meeting.

\*The process may differ depending on the applying company/position.

## 01

### Application

- Please submit an application through the career site.



## 02

### Document screening

- We will carry out screenings based on the documents that you submit.

## 03

### Skill test

- Please submit your technical assessment upon completion.

## 04

### Interview (2-3 times)

- We will hold interviews. One interview will take around 30-60 minutes.
- We also offer online interviews through Google Hangouts and Skype regardless of whether the candidate resides in Japan or overseas.
- Candidates can have their interviews in either English or Japanese.

## 05

### Offer

- We will reach out to successful candidates to discuss offers.

## Selection process for engineers

### Document screening

We don't specify a particular format for your resume and/or other documents. Please summarize your personal/career history concisely. (You don't need to submit both a resume and a CV.)

You may include whatever you would like in the document(s) you provide. However, to help us understand you better and ensure we're all on the same page regarding expectations, we recommend that you include what businesses and projects you've worked with, what your roles were, and what results you achieved, as well as the goals and vision you'd like to accomplish at Mercari.

Please submit your application in either English or Japanese. Note that some positions may require a specific language. In that case, we may specify which language to use when applying.



# Selection process for engineers

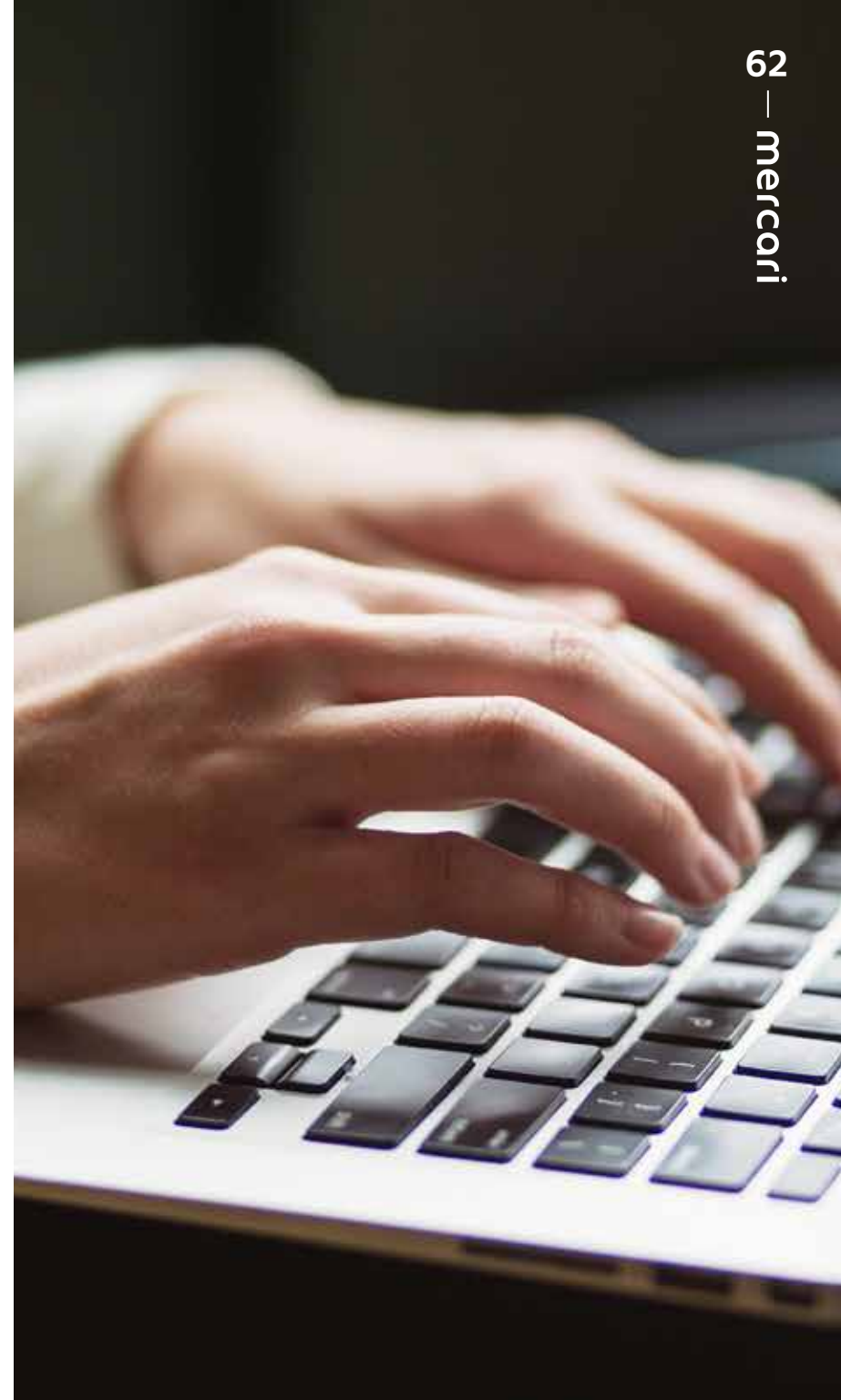
## Coding test

We conduct coding tests to assess applicants' computer science-related knowledge. Additionally, we may decide not to conduct coding tests for certain applicant depending on their abilities.

In the coding test, the applicant is asked to solve problems through code. These computer science/mathematical problems provide input values and ask the applicant to write a program which produces the expected output values. The main languages that can be used for the coding test are Go, PHP, Python, Kotlin, Swift, Java, JavaScript, C, C++, C#, Ruby, and Scala.

The test can be taken online and we'll arrange for a time that is convenient for the applicant to take the test. The test takes around an hour and the deadline is in one week's time from the initial invitation.

Please note that applicants may be assessed via a technical assessment instead of tailored coding test depending on their abilities.

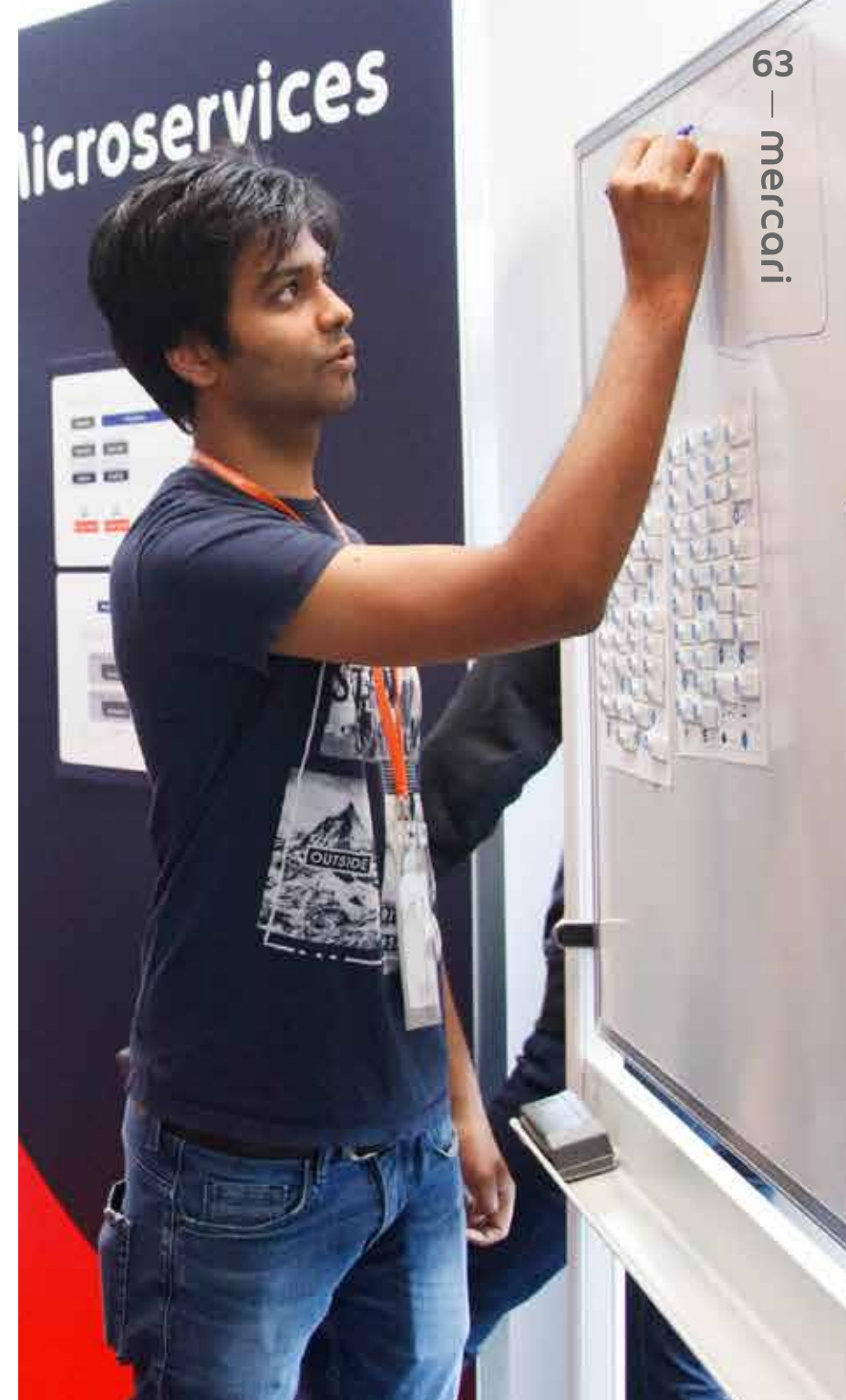


## Selection process for engineers

### Technical assessment

In the technical assessment, the applicant is asked to satisfy the provided conditions through code. The applicant's code will be reviewed by an engineer at the applicant's prospective team. The engineer will review the code in line with Mercari's assessment criteria.

Please make sure to double check that you satisfy the provided conditions, have written easily-understandable code, and that there is no unnecessary code.



## Selection process for engineers

### Interviews

Mercari interviews applicants to determine three things: enthusiasm toward Mercari's mission, embodiment of our values, and culture fit. We believe having a shared belief in Mercari's and Merpay's missions and being able to embody our values to achieve those missions are very important parts of working at Mercari. In the interviews, we will ask questions to learn about your past experience and whether Mercari is the right place to demonstrate your skills.

Telling us how you think you can utilize your past experience here at Mercari and what kind of opportunities to push yourself we can offer will help both sides get an understanding of whether the position is a good fit for you. We recommend asking about these points in your interviews.

Please note that the number of interviews may change depending on the situation. Refer to this page for more information about the interviews.



# We are Hiring!



Check here to  
view the entire  
Recruitment.

Chapter.11

# Appendix

## | Technical Information



**Mercari Engineering**



**Mercari Dev\_Twitter**



# Company Overview

The Mercari Group is made up of Mercari, Inc., and its consolidated subsidiaries.

## | Mercari, Inc.



<b>Founded</b> .....	February 1st, 2013
<b>Main Business Activities</b> .....	Planning, development, and operation of the Mercari marketplace app
<b>Representative</b> .....	Shintaro Yamada
<b>Locations</b> .....	Roppongi Hills Mori Tower, 6-10-1 Roppongi, Minato-ku, Tokyo 106-6118, Japan
<b>Offices</b> .....	Tokyo, Sendai, Fukuoka

## | Merpay, Inc.



<b>Founded</b>	November 20th, 2017
<b>Main Business Activities</b>	New financial business
<b>Representative</b>	Masato Yamamoto
<b>Locations</b>	Roppongi Hills Mori Tower, 6-10-1 Roppongi, Minato-ku, Tokyo 106-6143, Japan

## | Mercari, Inc. (US)



<b>Founded</b>	January 2014
<b>Main Business Activities</b>	Planning, development, and operation of Mercari US
<b>Representative</b>	John Lagerling
<b>Locations</b>	1. Palo Alto, CA 2. Portland, OR 3. Boston (Cambridge), MA

## | Souzoh, Inc.



<b>Founded</b>	January 28th, 2021
<b>Main Business Activities</b>	Planning, development, and management of internet services
<b>Representative</b>	Yuki Ishikawa
<b>Locations</b>	Roppongi Hills Mori Tower, 6-10-1 Roppongi, Minato-ku, Tokyo 106-6143, Japan

## | Mercoin, Inc.



<b>Founded</b>	April 28th, 2021
<b>Main Business Activities</b>	Planning and development of cryptoasset- and blockchain-related services
<b>Representative</b>	Naoki Aoyagi
<b>Locations</b>	Roppongi Hills Mori Tower, 6-10-1 Roppongi, Minato-ku, Tokyo 106-6143, Japan

## | Kashima Antlers F.C. Co., Ltd.



<b>Founded</b>	October 1st, 1991
<b>Main Business Activities</b>	Operation of a soccer club Management of Kashima Soccer Stadium
<b>Representative</b>	Fumiaki Koizumi
<b>Locations</b>	Higashiyama 2887, Kashima, Ibaraki, Japan

# | Using Technology to Change How We Exchange Value

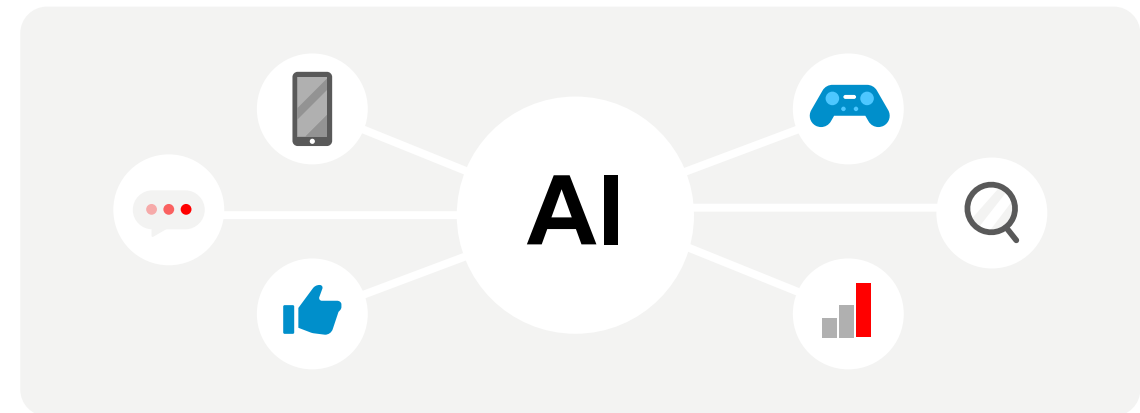
## | Differentiation through technology

Used by more than 20 million people every month, Mercari focuses on differentiating ourselves through technology. As market competition grows fiercer, we believe that using not only our ideas but also advanced technology to make everyone's life easier faster than any other company is what will make us globally competitive. Mercari is a tech company aiming for the world.



## | Focus on AI

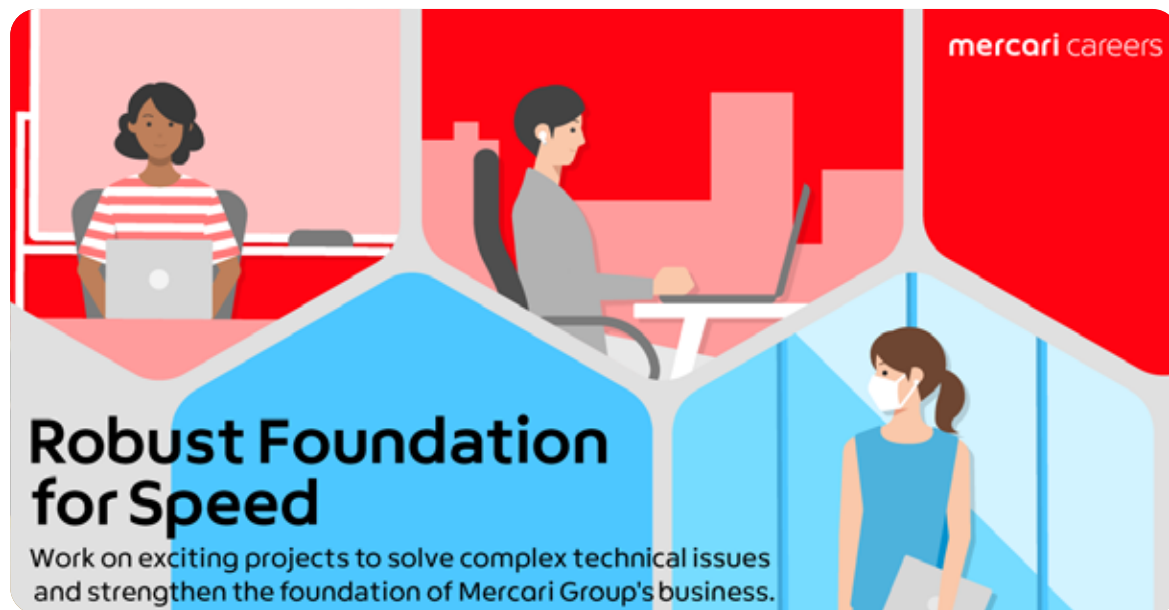
At Mercari, we have a data collection of several billion items that we've gathered over the ten years since we started our services. These are all photos and item descriptions that our users wrote when using the Mercari app, but this collection is different from that of e-commerce sites since there may be several of these pictures, item names, and details for one particular product. This data is very important for deep learning, allowing us to use pictures and text to create highly accurate machine learning models.



## | Robust Foundation for Speed

Our engineering organization has been working to migrate the Mercari marketplace app to a microservice architecture since 2017. Since then, we're shifting to the infrastructure that supports our services to a more modern platform. But it has not exactly been the easiest of tasks. Migrating our transaction system, one of Mercari's core features, has proven to be a challenge, and even now it's still running on the PHP-based monolithic application we've been using since the start.

That needs to change. We need to boost maintainability and scalability somehow, and that's how we arrived at a new approach: a modular monolith, where we create modules within the monolith. As an engineering organization, we want to be adaptable and flexible to support disruptive growth for the entire Mercari Group: not just Mercari, but Merpay, Mercoin, Souzoh (Mercari Shops), Merlogi, and whatever comes next. With this project, Robust Foundation for Speed, we aim to realize that goal by solving complex technical challenges and drastically strengthening the foundation shared across our businesses.



Check here for more details about  
“Robust Foundation for Speed”

## | Mercari's Security and Privacy

The Security & Privacy team at Mercari is responsible for ensuring the security and privacy needs of the Mercari Group as a whole and is made up of various sub-teams covering different domains.

From overall security strategy, privacy strategy, incident response, security policy and education and awareness programs, to secure design review, infrastructure security, security automation, penetration testing, vulnerability management and more; the security team at Mercari covers a broad range of functions to ensure our users can enjoy a safe and secure experience and that the company's information assets are protected!

As an integral part of business execution, our role is to build a scalable security strategy and conduct early and frequent validation checks. We do all of this while collaborating with engineers, project managers, top management, and other teams across the company to ensure security in all processes, and improve corporate operations and products as a result.



For more information about Security & Privacy team, please check Hiring Website from here.

Note: The selection process for Security Engineer is different from Software Engineer. For specific details on a certain position, please read the job description.

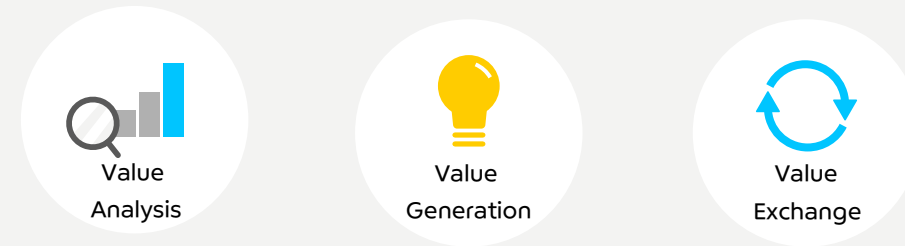
## | R&D Organization Mercari R4D

Mercari R4D was established in December 2017 as a research and development organization to set the concepts of “Research” and the four D’s (“Design,” “Development,” “Deployment,” and “Disruption”) as guidelines for our actions. Currently, in addition to doing research on quantum information technology, blockchain, etc., R4D also carries out activities with the Tech Governance Team, which is involved in policy planning and standardization. Please refer to R4D's website for the latest information: <https://r4d.mercari.com/en/>



In September 2019, the R4D Advisory Board was established with the purpose of consulting external experts to get a third-person perspective and strengthening our decision-making process. Members of the Advisory Board include Prof. Jun Murai of Keio University, Prof. Yoshihiro Kawahara of The University of Tokyo, and Woo-Keun Yoon of the National Institute of Advanced Industrial Science and Technology (AIST).

### Value Exchange Engineering



We have committed 1 billion JPY (over five years) to our Value Exchange Engineering collaborative research program with The University of Tokyo RIISE. With this collaboration between academia and industry, we aim to create a world where people all over the world can exchange value fairly and seamlessly.

# merci box

**Mercari has various systems to ensure members are able to work comfortably and creatively.**

Our benefits system, which is loved and called "merci box" by our employees, was introduced in February 2016 in order to provide an environment where members can Go Bold to the fullest and give 100% both inside and outside of the office. We also provide a monetary gift to employees who return from maternity/paternity leave, financial support for fertility treatment and egg freezing, financial support for private pre-schools and childcare for children less than 1 year of age, and financial support for children who are ill, as well as life insurance for all employees.



**Maternity/paternity leave  
Caregiving support**



**Paid childcare  
and caregiving leaves**



**Financial support  
for fertility treatments**



**Financial support  
for childcare costs**



**Financial support  
for private preschools**



**Support  
in times of need**