

# Newwave Solutions Showcase

### **Contact Us**

e newwave.vn sales@newwave.vn +84 98 5310203

#### Address

Vietnam: Mitec Building, Duong Dinh Nghe Street, Yen Hoa Ward, Cau Giay District, Hanoi, Vietnam **Japan:** 1 Chome-11-8 Yushima, Bunkyo City, Tokyo 113-0034, Japan



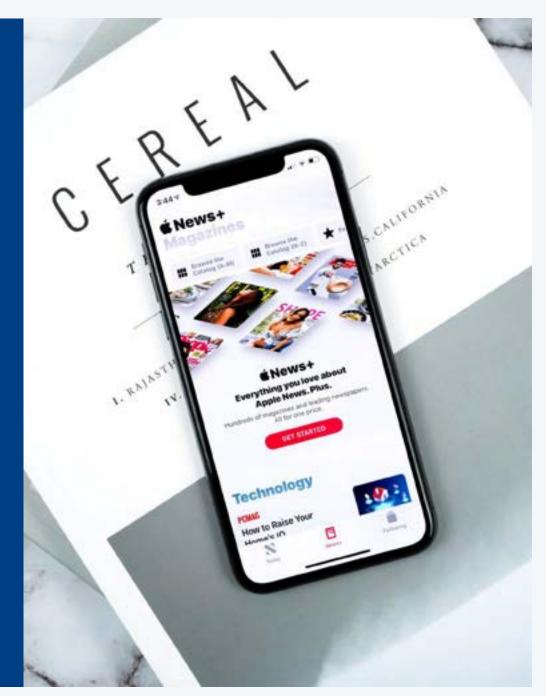
### Table Of Contents

I - Mobile App	03
I.A - Native App	03
I.B - Cross Platform	35
II - Web System & Mobile App	49
III - Web System	93
IV - Blockchain	111



## Mobile App

I.A - Native App



## The Best Monitoring App For Healthy Sleep

A sleep-tracking app that provides valuable data and detailed recommendations for improving sleep



#### Industry

Mobile App Development

Healthcare

**Technology Stacks & Dependencies** 

Ľ

#### Platform

Mobile (Android / iOS)

#### Type

Native App

#### **App Features**

- Users can see data like the duration and quality of their sleep.
- The app can give users personalized recommendations for when to go to bed and wake up.
- The app owner can collect a large amount of anonymous data about users' nightly sleeping habits so that they can analyze data and enhance algorithms to make better suggestions.

#### **Business Challenges**

• Developing an algorithm to analyze sleep quality and give recommendations is a difficult task because it requires the team to understand individual behaviors.

In order to create accurate source code, the development team must carefully read the client's scientific research and other related articles, then use statistical tools to simulate collected information and verify the correctness of the algorithm.



#### Technical Challenges

- A connection must be maintained between the app and the internal iOS/Android device sensors, which helps collect data seamlessly.
- The algorithm used in the source code must ensure good performance while dealing with large volumes of data sent from the sensors.

The development team has combined many methods such as using internal services as well as services provided by third parties. To optimize the algorithm, the development team has used profiling tools.



- Technology: Mobile/Android/iOS
- Programming Language: Swift / Kotlin
- Framework: ReactiveX / Realm.io
- Management tool: Jira
- Management Methodology: Agile
- Project type: Fixed price
- Team size: 5

#### **Results & Benefits**

- According to client's report, this sleep apps generated over 120 million U.S. dollars in revenues.
- The number of app users is projected to substantially increase in 2022.

#### Newwave Solutions' Roles

- Analyzing
- Management
- Development







· • • • • • • • • • • • • • • • • • • •	enciane 1	
記名通行 [/ 2000頃 (15個)(行) 第4年 [/ 15昭和	-4034)	
Minal ofFiteradeurus 訂成:最於nV[	1	=
丁坡 一番华彩叶 7周	•	1
002210 [		i

## 66

#### **Client Quote**

The system developed by the team ran on a smooth interface and was deemed outstanding. Their management style matched the objectives of the project. Although Newwave Solutions worked on a tight deadline, no delays in delivery were recorded.

## Powerful Collaboration Sees Application Modernisation Rapidly Realised

A platform to connect trailer renters and owners

#### Service

Mobile App Development

#### Industry Business

**Platform** Mobile (Android / iOS)

#### Туре

Native App



#### App Features

- Enables person-to-person trailer rental by putting unutilized trailers to good use.
- Renters can easily search for trailers near them, complete booking process and sign rental agreements completely on phone.
- Trailer owners can upload trailer's information via phone and sign rental agreements completely on phone.



#### **Business Challenges**

 The client felt risky and skeptical about our work at the first stage of the project, prior to implementation.

The way to convince the client is to show them proof. We decided to have a PoC (Proof of Concept) to show the viability of our proposal. Our clients were satisfied with the PoC and decided to start implementing the project.



#### **Technical Challenges**

 The open source code library which supports map display encountered errors and there had not been any way to repair it. On the other hand, we had to maintain and update new features while ensuring the stability of the current system.

→ We split our development team in half to be able to quickly solve problems, avoid negatively affecting our client's revenue. The first team continued to fix the old library, and the second team deployed a new library and test to preserve system performance.

- Technology: Android / Google Service
- Programming Language: Java/ Kotlin
- Management tool: Jira
- Management Methodology: Agile

#### Newwave Solutions' Roles

• Development

#### **Result & Benefits**

• There were 23,300 app downloads in 2020

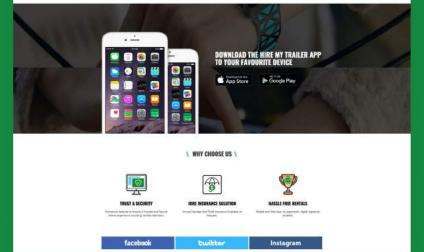






X A TRAILER FOR EVERY OCCASION X



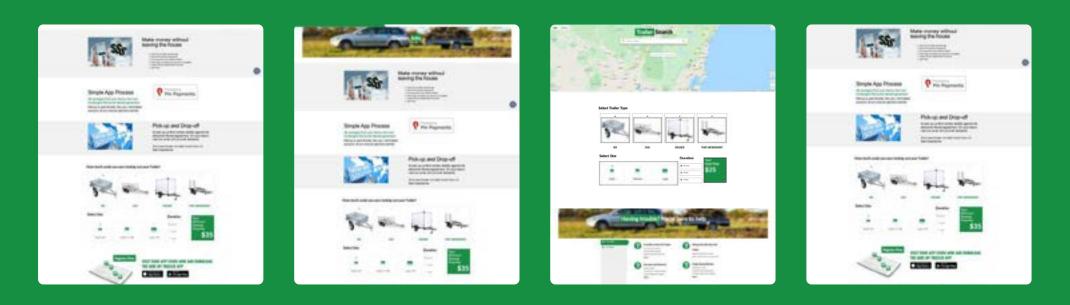


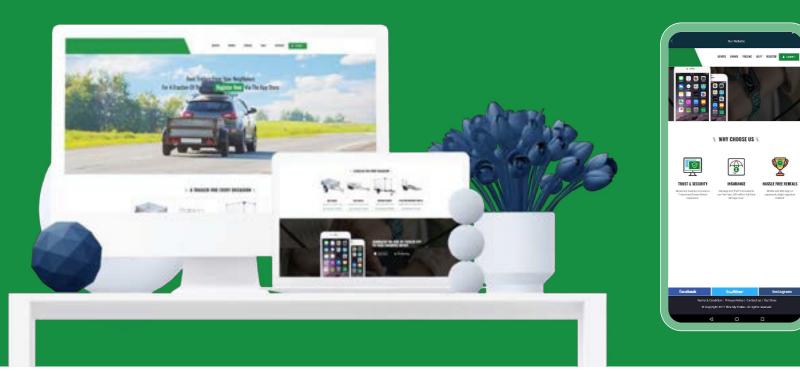
Terms & Carolitics / Proces Policy Instant Taller Hos. South Robins

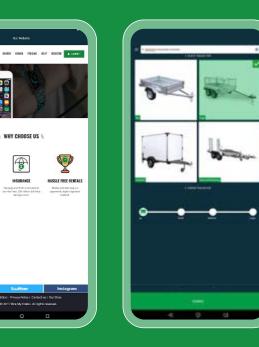
Client Quote

Pleased with the accuracy of the final product and the responsiveness of both points of contact, the client praises Newwave Solutions as an effective and trustworthy partner. Internally, the site was received very positively. Clients can expect a calm communicator and exacting partner, along with a thorough eye for detail.

Copyright 2017-3021 Hw My Trailer All rights reserved.
 Copyright 2017-3021 Hw My Trailer All rights reserved.
 Copyright 2017-3021 Hw My Trailer Inter







## Best Live Streaming Software App For Professional Streaming

A new generation livestream platform in Japan



Native App

#### **App Features**

• Users can interact and communicate with streamers through voice chat and comment functions.

KOTLIN

nøde

- Streamers can make money legally through the reward system.
- The app provides streamers with unique filters and stickers.

## **Business Challenges**

· Our clients decided to enter the business and compete directly with competitors that already had a firm position in the market with great financial and technological strength.

Our initial approach was to analyze core technologies used in the system, develop PoC products, continuously measure and evaluate performance to scale in both size and functionality to keep up with leading competitors in the market.



#### **Technical Challenges**

 Face recognition function built with machine learning models and inapp functions like live stickers, face and skin filters are challenging to mobile apps, which usually do not have a lot system resources.

After considering several solutions available in the market, we decided to use livestream technology developed by Wowza, which helps with low latency in live streaming. Moreover, good load balancer helps distribute the load for large and complex distributed server system, making it easy to serve thousands of viewers at once. In addition, our team use microservices in system infrastructure to increase flexibility and scability in the process of continuously updating new features.

- Technology: Mobile / Android / iOS / Firebase / Node JS
- Programming Language: Swift / Kotlin / Python
- Framework: NestJs / ReactiveX / Realm.io / Android Studio Profiler / Xcode Instrument
- Management tool: Jira
- Management Methodology: Agile





**Newwave Solutions' Roles** 

Analyzing

ManagementDevelopment

**Result & Benefits** 

retention rate.

Interaction functions not only

increases user engagement and the number of new users

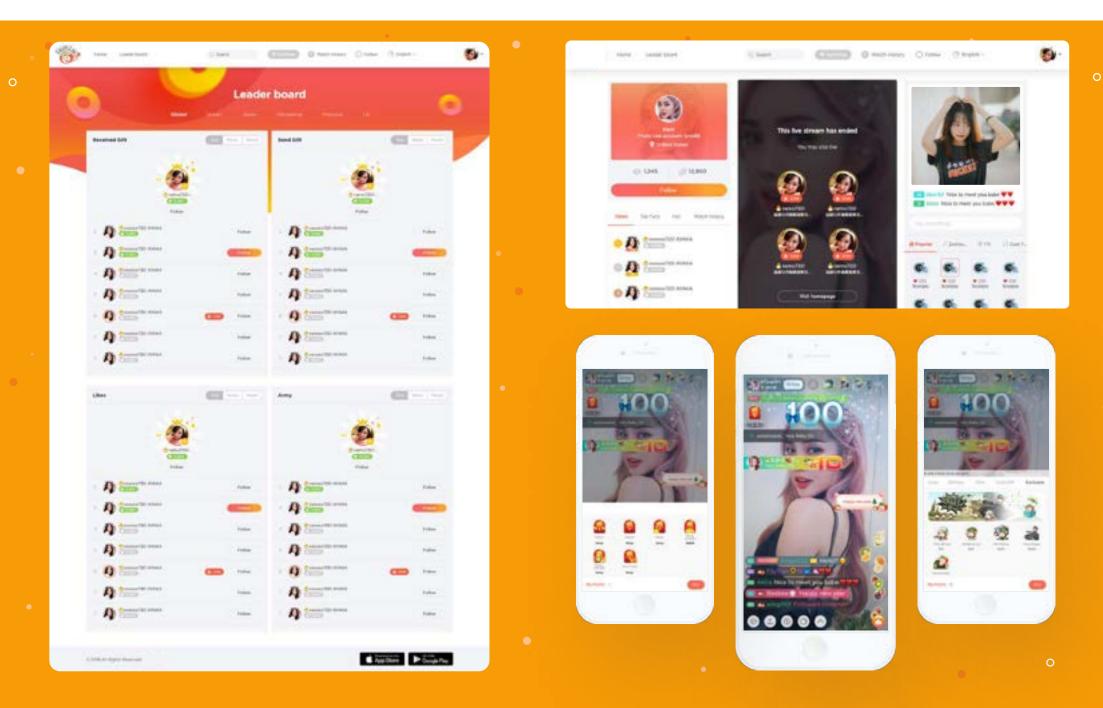
but also boosts the app's



Client Quote

Newwave Solutions is an accommodating and attentive partner. Flexible and reliable, the team is quick to adapt to the client's working style and s able to scale as needed. They go above and beyond to deliver on their promises and provide valuable recommendations.

5



19 <<<

## Earning Billions In Revenue From A Immersive Game With 3D Spatial Sound

A 3D game with in-game voice chat for multiple players



Game Development

Mobile (Android / iOS)

Entertainment

Industry

Platform

Technology Stacks & Dependencies

Type

Native App

#### **App Features**

- Creates an online virtual space for fans.
- Players can easily interact with each other through voice chat, talk events, dress-up, mini-games, etc.
- Players can support the company through gacha events.



• Our team was allocated limited time to finish the project, yet it took so much time to work on elements of the app.

We decided to arrange weekly meetings with our client so that we could clearly understand what they want and comply with their requirements, avoid having to edit many times.



#### **Technical Challenges**

 Our client required that the app must simulate the 3D positional voice that is indistinguishable from its real-world equivalent.

The development team tried a variety of techniques to come up with the best solution for satisfactory ingame real-time voice chat.

- Technology: Vivox Voice Communication Service
- Programming Language: C/C++
- Framework: UE4 / Vivox SDK



Development











Client Quote

The engineers provided successfully integrated with the internal team, resulting in a smooth workflow for both parties. Newwave Solutions is talented, experienced, and hard-working. Their team excels across a variety of technologies.

## Saving Hundreds Of Dollars A Year With Advanced Apartment Search

An app that allows users to access rental information in Japan



#### Mobile App Development

Ecommerce

Industry

#### Platform

Mobile (Android / iOS)



**Technology Stacks & Dependencies** 

Type

Native App

#### **App Features**

- Helps users save time with many search filters.
- Provides users with information about rentals.

#### **Business Challenges**

 Newwave Solutions team did not have much information about the house rental market in Japan, so it was nearly impossible for us to understand what our clients really wanted.

We spent a lot of time learning about the rental market in Japan to understand what aspects people in Japan were struggling with when trying to find property for rent. We succeeded in developing a platform with advanced search filters to help people find homes more easily.



#### **Technical Challenges**

 Our team had to figure out a method to optimize the ability to accurately search by map, station or place in Japan.

→ We tried many different ways and finally came up with a solution that can help users find rentals based on filter options.

 It was challenging to display rental information fully and clearly with a great amount of data.

→ Our design team conducted a survey to gather opinions and experiences of people in Japan to understand what they truly want in an app.



- Technology: iOS / Android / Google maps
- Programming Language: Java / Swift
- Management tool: Jira
- Management Methodology: Agile & Scrum



#### **Newwave Solutions' Roles**

• Development

#### Result & Benefits

• The time a bot takes to augment the searching process has been reduced to 57% less than searching on the Internet.









#### Client Quote

To date, Newwave Solutions has continued to be consistent in their timeliness, and they address any issues along the way. The team allows the internal staff to focus on their vision while Newwave Solutions brings the concepts to life. Clear communication and quick responses also stand out.

## T-Shirt Business App Adoption Leads To 57% Increase In Revenue

A platform where the whole supply chain happens, where anyone can create printable designs for items like T-shirts, bags, phone cases, printing and selling the items

#### Service

Software Development

#### Industry

android

Ecommerce

**Technology Stacks & Dependencies** 

2

SWIE

#### Platform

Web & Mobile (Android / iOS)

#### Type

Native App

#### **App Features**

- · Allows users to create and sell their own designs with the help of the system to print and ship out orders.
- Users can buy final products or T-shirts as materials from suppliers.
- Users can create their own shops to sell their products.



· There are many steps from creating a design to shipping the final product out to customers.

We must implement app integration for automated and synchronized process of creating a design, product printing, online ordering and offline delivery.



#### **Technical Challenges**

• We had to handle high traffic peaks.

We adopted suitable AWS services (RDS, EC2, ELB, Route53, Cloudfront, etc.) to ensure stable operation under high and stressful loads.

• There was a large amount of data related to users and orders. The system could be attacked by hackers due to its popularity.

Our team made a strategic plan to ensure the systems are constantly and securely monitored. We also supported the client to immediately solve any problems to get their business back to normal operations.



- Technology: AWS (RDS, EC2, ELB, Route53, S3, Cloudfront) / Docker / Jenkins
- Programming Language: Javascript / PHP/ Java
- Framework: ReactJS / CakePHP / Android Java / Swift
- Management tool: Redmine
- Management Methodology: Agile & Scrum

#### Newwave Solutions' Roles

- Analyzing
- Management
- Development







Newwave Solutions delivered a high-quality solution that completely satisfied internal stakeholders. Their dedication to success supported seamless collaboration across teams. They effectively communicated and quickly responded to inquiries. Their project management skills ensured a successful partnership.

**Client Quote** 



Mobile App

I.B - Cross Platform



## This App Can Help You Make **Better Medication Decisions**

An app that provides users with information on pharmaceutical drugs

#### Service

Platform

Mobile App Development

#### Industry Pharmaceutical

**Technology Stacks & Dependencies** 

Mobile (Android / iOS)

Cross Platform

Type

#### **App Features**

- Users can browse information like ingredients or side effects of more than 12.500 types of OTC drugs and 22.000 types of prescription drugs.
- Users can browse using drug names, barcodes or QR codes.



Business Challenges

inconvenient.

• At first, users can only browse

more ways of browsing, and we have

successfully developed new features

to help users be able to search by

scanning barcodes and QR codes.

information using drug names, which can sometimes be

Our team suggested adding

#### **Technical Challenges**

• Newwave Solutions team had to maintain and update new features while ensuring the stability of the current system.

We decided to document the entire source code of the current system before working on maintenance. We also wrote testing source code to ensure correctness throughout the maintenance process with new features added.



- Technology: Mobile crossplatform / Firebase Service
- Programming Language: Javascript / Typescript / Swift / Objective-C / Kotlin / Java
- Framework: React-native / Ignite
- Management tool: Jira
- Management Methodology: Agile

#### Newwave Solutions' Roles

Development

#### ノフルー 禁止物質の含有なしと表示された 医薬品から禁止物質が発見されたら?

それによりユーザーがデービンプ達用を知わ れた場合には「東京市部」の用行をおやみ みいただけます。他用が用いた時間をが用 された「川道理解明瞭」は加上を用する面的に 目的したものではないと思想する相称の一つ としてお使いいただけます。



## 







66

#### **Client Quote**

Newwave Solutions was highly cooperative throughout the development. They stuck with their pre-estimated timelines, as well. Overall, the client highly regarded their highly proactive, direct, and goal-oriented nature that remained timely and highquality.

## The Official Community Forum, The Ultimate Playground For Basketball Fans To Hang Out Together

A social networking application targeted at amateur and semiprofessional basketball players

#### Service

Software Development

Social Network

**Technology Stacks & Dependencies** 

Industry

Platform

Mobile (Android / iOS)

#### Type

Cross Platform

#### **App Features**

- Provides their users with many features exceptionally suitable for basketball teams' activities.
- Helps teams connect with each other easily as a social networking platform.



 When dealing with a social media network, the development team needs to design a system infrastructure that can respond quickly to the increasing connectivity among users.

We did various research and tried different options to find the best solution yet were still able to deliver the project on time and on budget.



#### **Technical Challenges**

- The system must be able to handle a large volume of user connections at any time (up to 1000 concurent users at the same time)
- The large volume of users also poses the problem of how to optimize data synchronization process to provide users with the best experience.

The development team decided to use GraphQL to build a server-side data storage and retrieval system as well as applications on website or mobile platforms. The GraphQL framework has been proven for its great performance and usability in other platforms such as Facebook, Instagram, etc.



- Technology: Mobile cross-platform /
   AWS Service / Firebase Service
- Programming Language: Javascript / Typescript / Swift / Objective-C / Kotlin / Java
- Framework: NestJS / React-native / GraphQL / Ignite
- Management tool: Jira
- Management Methodology: Agile
- Project type: Fixed price

#### Newwave Solutions' Roles

- Analyzing
- Management
- Development



ここでは「目時」「地域」「イベントタグ」な どの条件から、あなたに合ったパスケイペ ントを展すことができます。それをヒント にチーム動画などもみながらイベントに応 書してみてください。







ここでは、あなたに合ったイベントをご紹介 します。他族を見るとどんなテームなのかす くにわかります。伊起する前の不安やミス マッチはカンタンに解測されるはずです。 きっそくイベントに応募してみましょう!



イベント作成には「日町」「福田」「福田」 昔」などを記載して公開することで、応募 中間が最きます。 応募が来たらぜの承認して、違え入れてあ げてください!



#### **Client Quote**

The client is delighted with the platform development work the teammates from Newwave Solutions have helped complete. Their team is experienced and passionate – they put in the extra effort to deliver exactly what the client needs. Communication is excellent and their teammates take feedback well.

## The Most Helpful And Free App For Any Parking Space Search

A parking lot sharing service that makes effective use of vacant space



Software Development

Ecommerce

Industry

#### Platform

Mobile (Android / iOS)

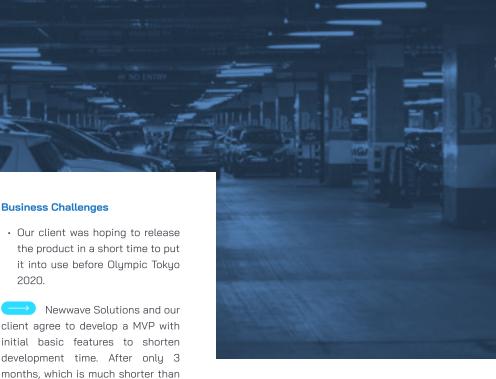


Type

Cross Platform

#### **App Features**

- Owners who have vacant parking spaces anywhere can post on the app.
- Parking space renters can search for the desired parking lot in the app, make a reservaction and online payment.



#### **Technical Challenges**

 Integrating payment gateways into the platform in Japan and supporting real-time location updates are big challenges that we had to face.

With timely support from our partners, we quickly mastered the technology and securely integrated these functions into the app.



our client's expected delivery time,

we released the product and received many positive feedbacks

from users, which proved the

success of solving problems related

to parking space finding and parking

2020.

spot rental.



- Technology: Google Maps / FCM / Stripe
- Programming Language: Dart
- Framework: Flutter
- Management tool: Jira
- Management Methodology: Agile

#### **Newwave Solutions' Roles**

- Analyzing
- Management
- Development









## 66

#### **Client Quote**

The team has impressed their partner with high-quality code and their ability to keep on pace throughout all sprints. Contributing solid code to support iOS and Android platforms, they kept all parties up to date on progress through a comprehensive communication cadence.

Newwave.vn

## Web System & Mobile App



## Homes For Real Estate Sale, MLS Listings, Brokers

An app that creates a professional and stable community for brokers, and at the same time creates an ideal environment for brokers to have a successful career

#### Service

Software Development

**Industry** Real Estate

#### Platform

Web & Mobile (Android / iOS)

#### Туре

Cross Platform



#### **App Features**

- Brokers can actively reach out to new projects and clients without having to be dependent on anyone.
- Brokers can streamline transactions, nurture clients anytime, anywhere.



#### **Business Challenges**

 There had been a great need for a mutual app for members in real estate, technology and finance, but it was not easy to create one that can meet the expectations of users.

Our team communicated on a regular basis to deeply understand what the client really wanted.





#### Technical Challenges

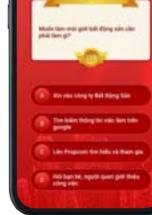
In order to build such a complex app, we had to:

- Build a learning management system to create online courses.
- Build a trading system.
- Build a social media for real estate.
- Build a continuous digital transaction system.
- Create Play-to-Earn games.
- Use complicated technology platforms such as microservice, message queue and container orchestration.

At the first stage, our team will work directly with the client at their company to be able to receive feedback directly from the stakeholders. We also learned from other similar apps in the market to understand what to improve and successfully create a unique system that offers many special features.



- Technology: AWS / Mobile crossplatform
- Programming Language: Javascript /
  Typescript / Dart / Swift / Kotlin
- Framework: Angular / Flutter / VueJS / Wordpress
- Management tool: Jira
- Management Methodology: Agile



#### Newwave Solutions' Roles

- Analyzing
- Management
- Development

#### Result & Benefits

 The program has provided the client with a firm foundation for their core systems so they can continue to build. The software IP is owned by the client and they can reduce their reliance and spend with 3rd party provided as a result.







Client Quote

The amount of time saved has markedly increased, while noise in the system has been reduced. Direct work by Newwave Solutions executives not only expedites completion and enhances the project creatively, but also demonstrates a vested interest in long-term outcomes and business needs.



## Best Practice For Return-On-Investment Improvement

An online utility that helps ensure sound account management through the sharing of information on products between sellers on Amazon.co.jp

#### Service

Software Development

Industry Ecommerce

#### Platform

Web & Mobile (Android / iOS) Flutter

**Technology Stacks & Dependencies** 

#### Type

Cross Platform

#### **App Features**

- Shares information on products.
- Displays brand and manufacturer intellectual property information for each product, helping avoid violations of rules before they happen.
- Analyzes listings and informs sellers of products that may violate any applicable rules.
- Suggests retail price for sellers.

#### Business Challenges

 Sellers on this marketplace can post listings that violate rules without acknowledgment, which might result in getting banned from this marketplace.

Newwave Solutions collected and analyzed the marketplace's rules, then developed a platform to automatically warn sellers when their listings may violate the rules.





#### **Technical Challenges**

- Our team had to effectively plan cache and speed up query execution.
- We also had to develop a method to support scanning multiple barcodes at once and improve accuracy with small and unclear barcodes.

The development team researched Amazon API Gateway works to understand deeply how to scan barcode quickly and accurately. We also researched other similar apps to find a way to improve barcode scanning and reading speed.



- Technology: State Management / Firebase ML / AWS Marketplace API / Keepa API / Big Data Management
- Programming Language: Dart / PHP / Javascript
- Framework: Flutter / Laravel / VueJS
- Management tool: Jira
- Management Methodology: Agile



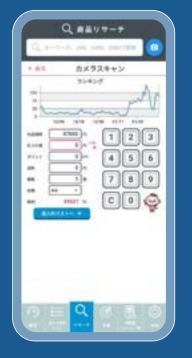
Development





#### Result & Benefits

 According to the client's report, \$212k in upsell revenue was generated in the first year of using this e-commerce app in one user's store, although they weren't even the top user.









#### **Client Quote**

The homepage and about page are well delivered by the team, meeting the expectations of the client. The team is quick and flexible to the partner's demands and changes. Also, Newwave Solutions is keen to manage bulk projects with their own tools, which established a successful ongoing collaboration.

## Major Upgrade Of A Co-Working Space Management Platform

This is the digitization platform for managing co-working spaces and facilities

Industry

**Business** 

Service
Software Development
Platform
Web & Mobile
(Android / iOS)

Flutter spring Vue.js

**Technology Stacks & Dependencies** 

Cross Platform

#### **App Features**

Type

- Includes an iPad App for guests' check-in and check-out, a mobile app for guests and a CMS platform for management.
- Guests can book and manage bookings of the team they supervise or belong to.
- Managers of the co-working spaces can easily manage bookings and facilities
- Co-working space owners can access clear reports of cash flow and the number of bookings.



#### **Business Challenges**

• The development team must figure out how to meet the diverse needs of decentralized management structures of different stakeholders using the app.

We spent time researching and learning more about what people usually expect from this type of business system.



#### **Technical Challenges**

• The system and the infrastructure must be up and running 24/7.

→ We used Microsoft services to help the system operate stably 24/7.

 When dealing with a large amount of interaction from users, the system must ensure uniformity and good data processing performance to provide a good user experience. The system includes a lot of historic data and statistical graphs, posing a problem for the development team to find a way to prevent the system from bad performance.

The development team must design the system with diagrams to ensure data and source code are developed in the most versatile way. We also applied pre-calculating, caching, distributed data computing and sub-table methods to handle big data.



- Technology: Microsoft Azure (Hosting, Blob Storage, Service Bus) / Quartz Scheduler / Hazelcast
- Programming Language: Java / Dart / TypeScript / Swift
- Framework: Spring Boot / VueJS / Flutter

#### **Newwave Solutions' Roles**

Development











#### 日本の働き方に 自由という選択を。

10年にアジメニートも同じしたい、もっと白がらし (、人気を用しるようと簡単たい、そのような、面 もが確認とする書を方をイメージして、知られい (アーホス) お金方りました。北田一ムウとうが活 白に巻(ことで、前期が広ち見めていく、そのシ ナジーが、自社会会を見なっていく、回 用すのは、和田子口道や見たたかものも思っる形だ 自にフレキンプルに、着を力すのものも思っる形式 など会うす。 用すれにはれまち。





66

Client Quote

Since Newwave Solutions came into the picture, the client has been able to scale and reiterate their products. The team administers an extremely effective workflow. Their dedication and eagerness to help their partner are highly appreciated. Overall, the progress is satisfactory so far.



#### 施設別ご請求金額

<b>今月</b>	Concession in the local division of the loca		
	2021#5月	202144/9	2021#37
用政	单级	利用時間	合計金額
π	750円/30分	1,216時間	1,824,000円
	500円/30#	240時間	240,000円
	1.000円/30分	264.5#8	529.000P3
	1.500Fl/309	OPER	0P3
72F	750月/30分	316.5868	474,750(9)
101	20720	a i partijel	3.067.750円











## Great App For Coworking Professionals

A visualization system for managing co-working spaces and facilities



Industry Business

#### Platform

Type

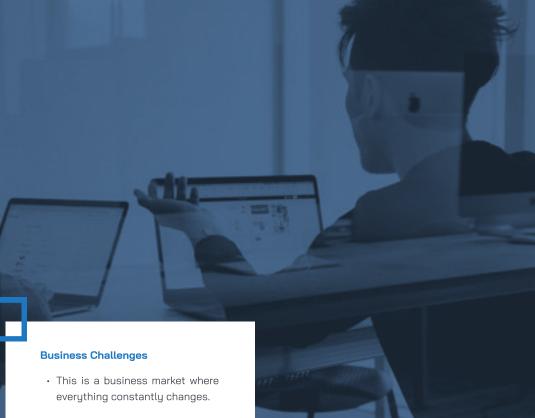
Web & Mobile (Android / iOS)

Cross Platform



#### **App Features**

- Includes a mobile app for guests and a CMS platform for management.
- Guests can book and manage bookings of the team they supervise or belong to.
- Managers of the co-working spaces can easily manage bookings and facilities with unlimited levels of decentralized management.
- Co-working space owners can access clear reports of cash flow and the number of bookings.
- The system allows real-time facilities management by integrating sensor system to facilities
- All booking data is synced with Google Calendar and Microsoft 360 Calendar services.



Our team deeply understood the trends of the market since we made time for doing research and regularly meeting with our client.





 The large amount of data sent from sensor devices consumes system resources and makes it complicated to process data.

To handle a large volume of data, enhance business processing system and sync data with Microsoft 360 Calendar and Google Calendar, the development team has decided to separate the sensor and synchronization process from the system's business process.



- Technology: Microsoft Azure (Hosting, Blob Storage, Service Bus) / Quartz Scheduler / Hazelcast
- Programming Language: Java / Dart / TypeScript / Swift
- Framework: Spring Boot / VueJS
   / Flutter

1201 1301 1401		Wites - ANN	
13:00			
1400			
💮 жвовжжи 🕥	h -	1日の動務地道沢	0
extra 0		HAT FO	0
🖗 ##Ffi 🕥	ο,	8876	0
Q RANKRER ()	2,		0

#### Newwave Solutions' Roles

Development

#### Result & Benefits

8.05

lobe

1245

• With the app, the client was able to attract owners of more than 100 co-working spaces to use its service.







Newwave Solutions successfully delivered exactly what was asked of them, adhering to the project deadlines. Their work, which is sure to have a significant positive impact on the business' brand received positive internal feedback. Their businesslike nature and consistency set them apart.









$\odot$			
	2000		
1	Q ###	RIK SINES	5
1000		-	0.0.7-1
1		adorf 1	-
C		1 m 1	
× .			
	122		m le
	10.9	STREET, ST	100
1000	August of	1000	tool out
10	240.24	0.0100	286 286-
題	383	111	2 (R.
題	36		
題			
	10		
	а 1 1 1 1 1		
	ани 101	• • • •	
	S II S		
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	ATT I	86. 34	
5555 (Mar	8121. 8197	86	
	8121. 8197	18. 18. 48. 48.	
	8121. 8197	88. 88. 48. 48.	2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4
	8171 8172 8173 8174 71	18. 18. 48. 48.	11 AURO

# An Easy-To-Use Real Estate App That Helps Agents Perform Live Virtual Showings For Remote Homebuyers

An app that allows real estate businesses to manage from A to Z





# **App Features**

Real estate businesses are able to:

- Manage projects and investors.
- Manage all product ranges (shophouses, apartments, villas, etc.).
- Manage customers and staff with online calling and chatting.
- Manage contracts, invoices and assets.
- Manage social media groups.
- Manage customers' requests.



 Multi-layered business model is an extremely complex one, involving many stakeholders.

Newwave Solutions had to do some research into the market to clearly understand the multi-layered business model.



# **Technical Challenges**

 It was not easy to create a realtime transaction system that is always available and performs at superfast speed.

←→ We used AWS services to help the system operate stably 24/7.



- Technology: AWS / Mobile Crossplatform / Microservice / RabbitMQ
- Programming Language: Javascripit / TypeScript / Dart / Swift / Kotlin
- Framework: Angular / Flutter / VueJS / NestJS
- Management tool: Jira
- Management Methodology: Agile

### **Newwave Solutions' Roles**

Development





dör ting sin, ting shie vien mit sich shinh silo, minh bech



### Result & Benefits

- The platform was successfully transformed to be optimized for mobile, with an improved user experience, and greater security for all users in 2019.
- Newwave Solutions continues to work with the client, continually improving these capabilities while adding new features and implementations to enhance the learning experience on the OpenLearn platform.



# 66

# **Client Quote**

Newwave Solutions demonstrates flexible technical support and a 24/7 response approach, leading to positive feedback for the project. A quality-driven team, they are committed to bringing out a product's best features. They are dedicated and deliver high-quality work.

# A Powerful Full-Service Real Estate Tools For Lead Generation

A supporting system for a real estate company

# Service

Software Development

# Real Estate

Industry

## Platform

Web & Mobile (Android / iOS)



# Туре

Cross Platform

# App Features

- Includes a real estate website where users can post property listings for sale and find property listings to buy.
- Includes a CMS website for management.



 Finding the right property is one of the most difficult parts of customers' home buying process.

Our team has facilitated the process by offering a variety of filter and search options to provide customer with in-depth information about the property and its surroundings.



# **Technical Challenges**

 This project was converted from a website built with Phalcom PHP, an old framework frequently used in 2012. There was no one in the development team that had ever worked with Phalcon PHP before, so it was really challenging in the first stages of the project.

We reached out to a developer who has expertise in Phalcom PHP to help us get to the bottom of the problem.



- Technology: API Google / Rocket Chat
- Programming Language: JS / PHP
- Framework: React navite / Phalcon / Laravel
- Management tool: Jira
- Management Methodology: Agile

## **Newwave Solutions' Roles**

- Analyzing
- Management
- Development

10.7.1944	1854		
Dolling Lac Kinin An Qu	Lon) Duke, Tri Hij	en and congristion	-
Dolling Lac Rev Villing		distriak Dile, Te	***
-	1.400-		
Big	Ne.i		
the states	- Ch Ch.		
Thiath ph	Ind Contain-		
010100	(9)		
Phillips	6		
Bulling of	¢.		
KTU VAK			
DE ÎN TRA			
THE OF			
EA.			
		Cae risk .	

# NHĂN DẠNG KHUÔN MẶT HOẶC VĂN TAY

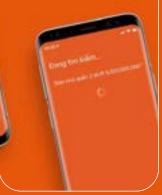
Đảng nhập nhanh bằng nhận dạng khuôn mật hoặc văn tạy chỉ bằng một lần chạm.

a tempta de réplica de Barro	
a tempta de réplica de Barro	
O Mar der Meder mit	
	D
in minutation	
selp shile sil -	
Might adulta anali *	



# TÌM KIẾM GIỌNG NÓI THÔNG MINH

Ung dụng dựa trên nên tảng phân tích Ngôn Ngữ Tự Nhiên và Big Data để đưa ra gọi ý chính xác đến 99% các yếu cầu tìm kiếm



# 66

# **Client Quote**

The application developed by Newwave Solutions is fast, intuitive, and functional, helping the client vastly improve their productivity and efficiency. The team is communicative, organized, and extremely timely. They also have solid experience and skill sets, making them a key strategic partner for the client. More Than 100,000 Users Are Using This App To Connect With The Right Employer Or To Hire The Perfect Domestic Helper

Industry

Social Network

An app that connects families and helpers



Software Development

### Platform

Web & Mobile (Android / iOS)

# Туре

Cross Platform



.

## **App Features**

- Families and helpers can post or find jobs.
- Users can make payment, chat, video call and manage history in the app.



# **Business Challenges**

 Our client wanted to make it transparent for both parties involved, so that families can find reliable helpers, and helpers can make money in a safe environment.

Our team suggested developing an app that offers babysitters and families' background check and recommendations features to make the app even more trustworthy to both parties.





# **Technical Challenges**

 Users' private data and phone numbers being leaked must be prevented.

Our team used Twilio Voice and Twilio SMS to avoid data breach.

Accurate distance between users
 must be calculated.

Our team used Geocoding and Google Maps to support exact distance calculation.



- Technology: Twilio Voice / Twilio Programing Video / Twilio SMS / Google Maps / FCM / Vouched
- Programming Language: Dart / Java / Swift / PHP / JS
- Framework: Flutter / Laravel
- Management Tool: Trello
- Management Methodology: Agile

## **Newwave Solutions' Roles**

- Analyzing
- Management
- Development













# **Client Quote**

The site's design receives uniformly positive feedback, and the traffic to the website is satisfactory. The professional team at Newwave Solutions is communicative, responsive, and timely, meeting all deadlines.

# The Best Virtual Mailbox Service You'll Ever Need

A virtual digital mailbox service that allows customers to view and manage postal mail and packages right on their phones



Software Development

Social Network

Industry

## Platform

Web & Mobile (Android / iOS)



**Technology Stacks & Dependencies** 

**Type** Cross Platform

# **App Features**

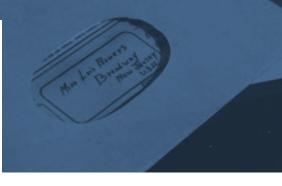
- Customers can access to mail 24/7.
- Customers can view and manage mail anywhere with cloud-based platform.
- The company can manage the whole process with a digital system.

# A A A

**Business Challenges** 

- Our client is oceans away from us, so they worried that time zone difference would be a barrier.
- → We follow the agile model and focus on project communication. Our team is committed to offering at least 4 hours of overlapping time to ensure real-time communication.





# **Technical Challenges**

 Migrating a complicated legacy system with more than 1000 lines of codes can lead to architectural problems.

→ We had to carefully analyze the current state of the system, identify the problems and then conduct the legacy migration incrementally to prevent issues.



The whole system are built with Microsoft technologies:

- .NET framework for backend and web portal
- Xamarin/Xamarin.Forms for mobile applications
- MS SQL Server for storing data

# **Newwave Solutions' Roles**

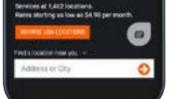
• Development

# View and Manage Your Postal Mail Online with a Virtual Mailbox

Locations

=

A virtual matters allows you to manage postal mult & packages on the go from your phone so you can eased united acetal mult. Reward packages, where and dependent. And there and be truly location independent.











# **Client Quote**

Although the product is not yet live, it performed well in user testing and with multiple stakeholders. Flexible and responsive, the team is quick to receive and deliver feedback while continuing to adjust to their client's needs. Clients can expect a dedicated and experienced partner.

# Managing Real Estate Agents' Business Just Got Easier Than Ever

An app that allows real estate agents to communicate with each other and manage their properties

Industry



# Software Development

Real Estate

# Platform

Web & Mobile (Android / iOS)

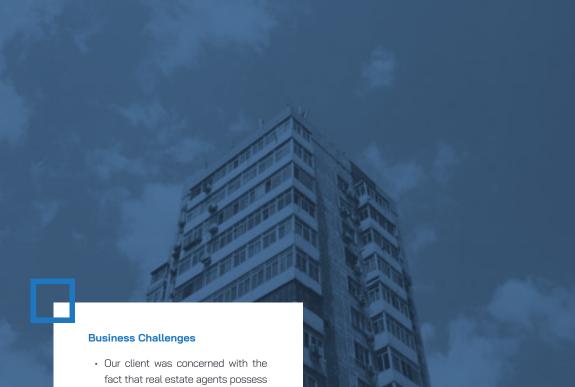


Cross Platform

Type

## **App Features**

- · Real estate agents can manage their human resources.
- Provides users with features such as booking, chatting, etc.
- Information about property for sale and to rent is shown on the website.



 Our client was concerned with the fact that real estate agents possess sensitive data, so it is important to prevent any unauthorized access to the system.

→ Newwave Solutions guarantee to keep client's system and data safe and secure.



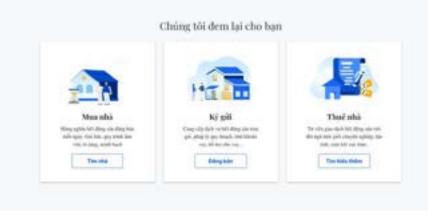
## **Technical Challenges**

- This is a rare case in which the development team had to develop from our client's source code.
- There were not any business analysts, only one product owner in the client's team. Also, not enough materials were provided.

In 3 months, our team members travelled frequently from Hanoi to Ho Chi Minh city to maintain effective communication, and were able to solve problems related to source code and client's materials.

- Technology: API google / Rocket Chat / Live Stream / Zoning Map
- Programming Language: JS / PHP
- Framework: React native / Phalcon /
  Laravel / Leaflet / Remap
- Management tool: Jira
- Management Methodology: Agile





# Newwave Solutions' Roles

• Development







# 66

# **Client Quote**

Newwave Solutions illuminated necessary changes to interactions with customers and confirmed a strategy the client had made a multimillion-dollar investment in. Flexible and responsive, the team provided helpful guidance through the process and worked quickly. They proved to be thought leaders in the space.

# Web System



# Stay Up To Date On The Latest Events, And Community Happenings In One Place

A homepage for a Singapore based start-up co-working space and community

Industry

**Business** 



Software Development

Platform

Web

Type

# Ø





Web System

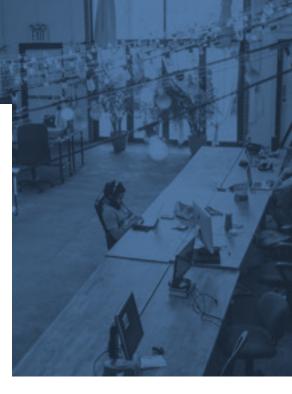
# **App Features**

- Users can browse, create and promote local events which take places in the working space.
- Users can buy tickets to events and subscribe to membership.
- The company can manage working spaces, events and ticketing.



· Like many startup teams, our client was using many Cloud services platforms, such as Zoho CRM, Klaviyo Email marketing, EventBrite for managing events, Xero for accounting and offline POS system to collect payment, etc. They are all useful and cheap solutions with a small team size, but now it is hard to track and needs a lot of handworks to make it consistent with fast growth rate of our clients' users and business. The CEO needs a full-stack developer who can understand their problems at the back end and can build beautiful websites that support multiple devices with perfect pixel at the front end.

After several interviews with our client's CTO and CEO, our experienced, full stack developer passed and quickly proposed a solution for a system from scratch. After 4 months of development, we released the first version. a professional website, and get rid of the old CRM tools. Memberships and payments can be automated and centralized with the Stripe payment gateway. So far so good, by applying Agile methodology in Software Development on a weekly basis, we have a new version and zero downtime for upgrading.



# **Technical Challenges**

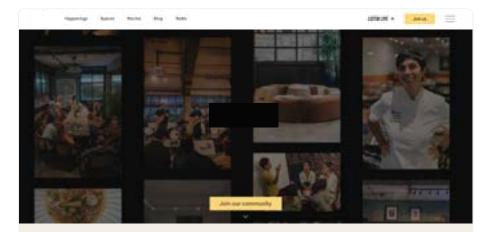
· Our client had many teams using different tools for various purposes, to understand them and to be able to integrate them into a centralized system was a big challenge.

Website built with modern technology for RAPID development: Reactis, Tailwind CSS at the frontend, Nodejs, and MongoDB at the backend. The system was deployed in the AWS cloud with Amplify Service and Elastic Container Service. Luckily, all cloud services previously used by our client have APIs for integration. Our developer worked with all people in charge to gather requirements and integrate these requirements into one centralized system.

- Technology: ReactJS / NextJS / NodeJS / mongoDB
- Programming Language: JavaScript
- Framework: ReactJS / NestJS
- Management tool: Jira
- Management Methodology: Agile



- Analyzing
- Management
- Development



### EXPLORE HAPPENINGS







View, All Haspenings



Partner's Brandt Hadrobe

SAR SIMPLE









# EXPLORE MEMBERSHIP PLANS

### BEAUTHY: CRARE LIVING







-

# See Al.Prohibite

## LISTER & LEADE CRAME RADIO

burned.





a shareho when the off sately find

66

**Client Quote** 

97 <<<

Sec. in

# Streamline Your Company's Internal Communication

A web-based app for internal communication in a company



# Software Development

Industry Business

## Platform

Web



**Technology Stacks & Dependencies** 

# Type

Web System

# **App Features**

- Users can join different channels and communicate with each other.
- Users can organize schedules for themselves or for the team.



• Our team had to delivery the project to a tight deadline.

We kept a close track of the process and frequently communicated with each other to prevent missing the project's deadline.



# Technical Challenges

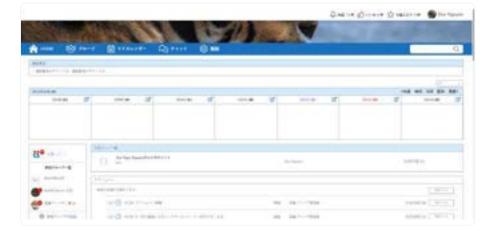
• Our development team used Firebase, a third-party application that requires proper configuration to work effectively and costefficiently.

We have several team members that have a great deal of experience in working with Firebase.

• There is a large number of users so the system performance must be optimized to ensure that the response time is fast and does not cause system bottlenecks.

We tried our best to optimize the infrastructure by adopting suitable services to enhance system performance.

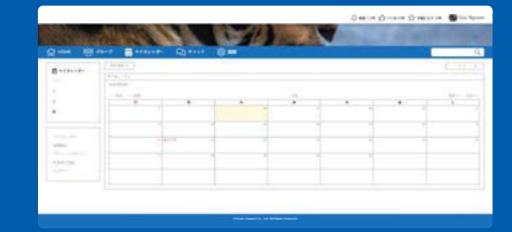
- Technology: Web Development / Firebase
   Real-time Update / SQL Management
- Programming Language: PHP / MySQL / Javascript
- Framework: Laravel / Vue2
- Management tool: JIRA / Backlog
- Management Methodology: Agile



		0.00.00	trate (2 serates
	14-7 BHILLER DL1+++ BH		
	m. 529		
and the	28-112 ( 1-1-18 ) AN		
	and an or the line		
	0 0	14 Terr - 16	anaras (1967)
	C matrix a contract to the second	10 Tele 10-	and a little
	· ····································	Armer 1	antenia.
	series of the		1116 ( 1977)
	· ····································	in here	and the second

# Newwave Solutions' Roles

- Analyzing
- Management
- Development



		t (Directer (Director) et 👔 🕫	-78.88 inogan.
@ HHE \$	gener Strennen Sterne State		P.
Ø.7111	(Martin and State)	(A)	1.000
	Contraction of the second second		
	The first second s		
	O management		
	Distances and		
	Contraction of the second seco		
	Grand and a second seco		
	Contraction of the state of the		
			11

Client Quote

While the tool is not currently in use, the product has received positive feedback from the internal team, leading to an extended engagement. Newwave Solutions delivers quality work through a driven and dynamic project management process. Their team is dedicated and knowledgable.

# E-Commerce Website Optimized For Customer Conversion

A web-based e-commerce app of a Japanese upmarket grocery store chain



Software Development

Ecommerce

Industry

# Platform

Web



# Туре

Web System

# **App Features**

- Users can choose stores and buy products from them online.
- Users can make payment through Paygent
- The company can manage stores, products, orders and users.



 We had to integrate a payment gateway, which is used exclusively in Japan and has no global document, into the website.

A Japanese-speaking team member read carefully the document related to the gateway and arranged a meeting to help other members in the team deeply understand it.



## **Technical Challenges**

 The configuration for synchronization between databases was very complicated, requiring accuracy so as not to cause any errors.

Our team members worked very attentively to make sure there would be no mistakes.

# Newwave Solutions' Roles

Analyzing

Management

Development

- Technology: Web Development / SQL
   Management / Online Payment
- Programming Language: PHP / MySQL / Javascript
- Framework: Laravel / Vue2
- Management tool: JIRA / Backlog
- Management Methodology: Agile

# **Results & Benefits**

• Human error on store management has been reduced by 26% during the gatheringand comparing of the data. This equates to an average daily saving of one hour of staff time.







# 

The website developed by Newwave Solutions is highly functional and works as intended. The team was instrumental in defining the client's idea to make it a reality. Throughout the project, they've been timely and responsive, and they've demonstrated an impressive ability to explain their work simply.

Client Quote

# Streamline And Automate Processes Of A Museum In Singapore By An ERP System

An ERP system of a turtle & tortoise museum in Singapore which includes a WordPress site, a gamification app and an ERP management site

# Service

Software Development

Industry Business

# Platform

Web

	axelor	WordPress	V Vue.js
Java		wordpress	v ac.js

**Technology Stacks & Dependencies** 

# Туре

Web System

# **App Features**

• A system that includes an E-Commerce site, a gamification app and an ERP system, which are beautifully designed and easy to use.



 We were aiming for developing a visually appealing and easy-touse system, yet our client's system was quite complex with a lot of data.

Our team sent a BrSE to our client's site to thoroughly understand their system and convey the information to the offshore side.



# **Technical Challenges**

• Axelor is an open-source ERP solution that is particular and complicated. Also, filling the canvas with color in JavaScript is a difficult technique.

We created an internal wiki to record the analysis and development process to understand the problem better and share knowledge with each other in the team.



**Newwave Solutions' Roles** 

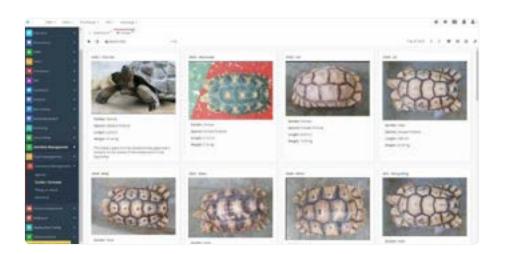
Analyzing

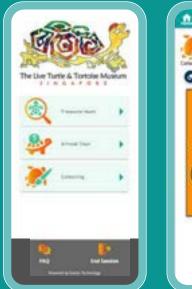
Management

Development

# Solutions

- Technology: Web Development /
   Scanto Technology / SQL Management
- Programming Language: Java / WordPress / HTML / CSS / JS
- Framework: Spring Framework / VueJS
   Axelor Open Source
- Management Tool: Jira
- Management Methodology: Agile









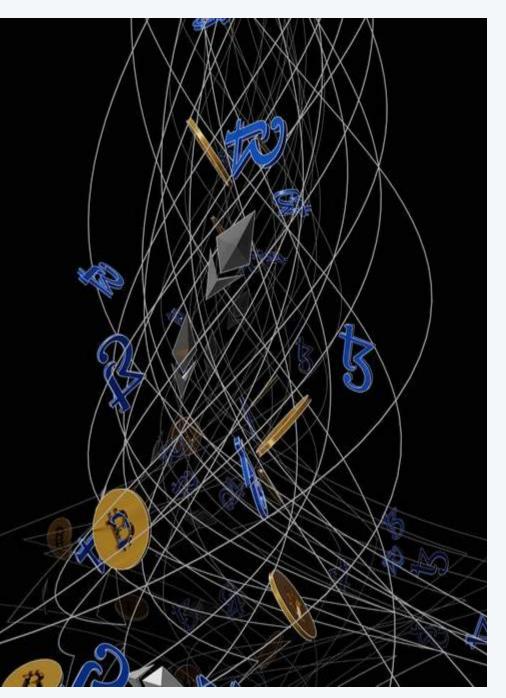


66

**Client Quote** 

Newwave immediately addressed any issues, working and delivering outputs as planned. They were always available and communicated the project well, providing weekly reports and keeping everything on track. Above all, their patience, dedication, and attentiveness were truly remarkable.

# Blockchain



# A Blockchain PoC Application With Various Functions

A blockchain project where we were responsible for the operation of a blockchain infrastructure, source code and Proof of Capacity (PoC) development. It also involved mining and plotting tool, explorer, web wallet, mobile wallet, etc.



php iOS android

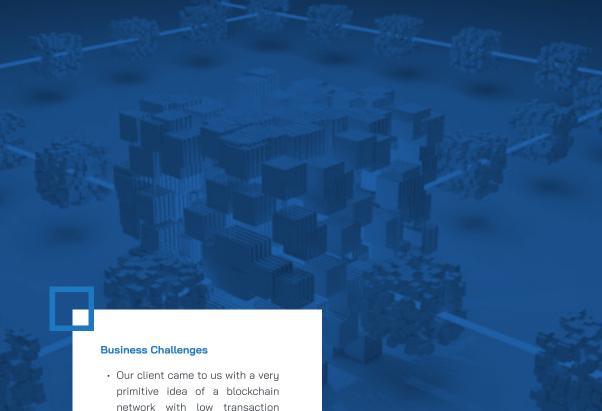
Blockchain

Type

Service

# **App Features**

- Node: A file built to act as a node in the blockchain network.
- · Web Wallet: A digital wallet on a web platform.
- Mobile Wallet: A digital wallet in a form of a mobile app.
- Scan Web: An explorer that provides an easy way to search for blockchain information.
- · Pool: A mining space that allows users to mine cryptocurrency blocks
- · Grower: A mining tool.



network with low transaction costs based on Proof of Capacity consensus.

We help our client write white papers, implement IDOs and ensure the project stays on schedule.



# **Technical Challenges**

- Proof of capacity (PoC) is an unfamiliar mechanism algorithm.
- Building and operating a blockchain system is more challenging than other regular systems.

> We have experienced engineers who can customize the blockchain network, support operation, integration with exchanges and develop services for securely expanding the network.



- Technology: Blockchain
- Programming language: Java / PHP / Javascript
- Framework: Angular
- Management tool: Backlog / Jira
- Management methodology: Kanban / Spiral

# Newwave Solutions' Roles

- Analyzing
- System Design
- Management
- Development
- Test



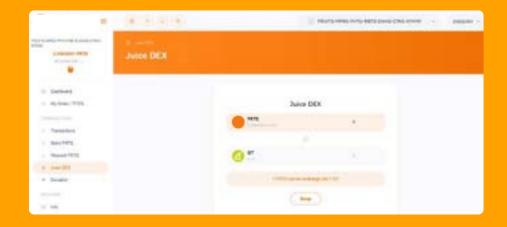
• The initial POC was rapidly put into production and provided the customer's first consumer facing responsive website that included features such as accepting online consumer payments.



Your personal cryto wallet to inter ant support that about tuetred representation



		Code
4,565.6 FRTS	4 Fada	4. Send 
SITEROPOLO	4385.67975	managar agra ann an 🗰 🗆
Not there bear	( A A )	10
		A.0.
© <b>⊶</b>		Barran Annan Martin Martin Anna Barran Annan
		Tural 0.00 Hitts
2 V 0		Rever Farry



66

The team played a key role in driving the product's direction, working closely with a large-scale end client directly. Their technical acumen and industry experience allowed them to produce a final product that impressed all involved. They established confidence in their abilities early in the work.

**Client Quote**