



# Cloud Migration

## Final Paper

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Prepared for Emoro Inc.

## Executive Summary

Emoro, Inc. is a high-end corporate gifting company that has expanded nationwide, serving mainly technology companies. Half of Emoro's employees work remotely, which has resulted in a lack of collaboration and connection between colleagues due to outdated business processes. Implementing cloud migration with Emoro can provide better collaboration, major data security, cost-effectiveness, and overall better business processes to reduce human error, turnout time, and consistency throughout documents, presentations, and business materials. The advantages of implementing cloud migration include organizational scalability, enhanced efficiency and cost savings, increased agility, better reliability, stronger cybersecurity, and compliance. However, there are some disadvantages to transitioning to a cloud platform, such as incompatibility of current architecture, unwanted disruptions, delays, weak security measures, wasted cloud costs, and no proper cloud infrastructure strategy. It is imperative for Emoro to take all these key factors into consideration before implementing cloud migration. The best recommendation of implementing a cloud platform is to negotiate a contract with Google Cloud Platform. Upon receiving a quote from a representative of Google Cloud Platform, Emoro's desired needs will be met as costs will be spent efficiently in order to provide a safer and more secure working environment.

## Introduction

Emoro, Inc. is a high-end corporate gifting company based in San Rafael, CA. The small business started in the late 1990s and has only expanded since then nationwide. Emoro has a big portfolio of high-end clients mainly including technology companies. From a pen to a whole conference, Emoro offers companies the services for an effective conference, employee incentive, sales strategy via corporate gifting. Emoro is a small business that includes an office and warehouse in San Rafael, yet the business has expanded to serve clients internationally.

Since COVID-19, the company has evolved into a hybrid and remote company. The team consists of not more than 20 employees, from which half of employees work hybrid in the San Rafael office and the other half work from different locations throughout the country.

## Problem Statement

Since Emoro is a small business, most of the business processes are not automated and mainly rely on human interaction and output. Management has come to the realization that because half of the company is remote-based, the collaboration between colleagues has suffered lack of connection due to the nature of the business processes. The company doesn't have a well integrated platform environment and still depends on multiple applications that do not communicate with each other.

The company has since then considered that migrating to the cloud would be beneficial for the company and could bring easier and more efficient collaboration, major data security, cost effectiveness, and overall bettering of the business processes to reduce human error, turnout time, and consistency throughout documents, presentations, and business materials. The company has hired Andrea and Angie to look into possible cloud solutions that would help benefit the company and recommend the best option for Emoro.

## Implementing a Cloud Solution

Cloud migration can be defined as transferring enterprise infrastructure into a public or private cloud. Cloud migration consists of infrastructure, can be private as in being on premises while cloud capabilities are in full effect or public, where off premise cloud capabilities are in full effect. Implementation of the cloud is very important because it provides easy access with a working network, availability on-demand, and pay-as-you-go subscriptions to meet the company's needs at any time. It is cost-effective, and there are many computing resources and services that are available within a cloud platform that can be

added on at any time, providing flexibility with the company's needs. With remote access, many employees are able to access the cloud wherever they are and whenever they want, the data will be right there and always available. It can also lessen management from humans, as the cloud is able to provide monitoring and easy management of workloads. Implementing cloud can also boost innovation and advance the logistics of a company's service. It also provides scalability, leverages virtualization by incorporating Kubernetes and virtual machines.

## Advantages of Cloud Migration

Cloud migration provides many advantages when it comes to having a cleaner, more efficient, and effective work environment. It can provide organizational scalability, and flexibility. According to Emoro's needs, implementing cloud migration can provide an easy expansion of their services through a cloud provider meeting their needs and ensuring cost savings. Even though Emoro is a small company, implementing cloud migration can be efficient as the company continues to grow and expand, without having to transfer data and keeping it accessible within the cloud. Another advantage is enhanced efficiency and cost savings. Emoro can benefit from scaling their infrastructure by implementing cloud computing, enhancing the efficiency instead of taking the time and manual tasks of planning and implementing human-based. It will save time when it comes to maintaining the platform, as keeping it in the cloud will help make sure that all services are monitored and up to date, working at their best. With cloud migration, all services can be available within one platform, making it more organized, accessible, and cost effective, as Emoro is able to provide services according to their needs. With cloud migration, there is increased agility, better reliability and stronger cybersecurity and compliance. A cloud platform can provide easy access to creating, testing and launching applications that will be readily available with a smooth process, no matter how big or small the business is. It can also provide fast services, while also being affordable all within one platform. Within the cloud's platform, Emoro can be sure to have the latest functioning cybersecurity and up to date protection, providing a safer environment for the company and clients of Emoro. Overall,

implementing cloud migration with Emoro can be very beneficial.

## Disadvantages of Cloud Migration

Even though cloud migration may sound convenient and effective for a company, there are some downsides to transitioning to a cloud platform. There may be incompatibility of the current architecture, which can create some obstacles when trying to migrate to the cloud. It is good to make sure that the IT architecture is good enough to transfer onto the cloud. Extra latency may occur, or unwanted disruptions, delays could occur, so it is important to make sure that everything is functioning properly or being prepared with alternative solutions if these happen. Although incorporating a cloud environment helps with security measures, it may also be a downside if security measures are not updated and strong enough, providing a protected environment for the company and clients, ensuring that data and information is secured. There have been experiences where companies have had security breaches and have had to learn from the consequences of sensitive information being exposed to unwanted users. A significant disadvantage to new users implementing cloud migration can be wasted cloud costs. Being able to plan out and know exactly what is needed is very important for a company to ensure that costs are effective in all measures and that all purchases are being used to their full potential. If other costs are essentially needed, they can be purchased at a different time, instead of purchasing early and ultimately wasting it as it is not used at its potential. As cloud migration occurs, having no proper cloud infrastructure strategy can also be a downside as it can bring many unwanted issues onto the existing process. It is best to make sure that the process is set and stone with a clear understanding of the strategy approach before moving to the next steps. Data loss can also occur as data is being migrated. It is imperative to have a backup of all the data, in case any errors occur during migration. Overall, cloud migration is a great idea to implement within a company's infrastructure, but there are key things to consider before migrating. However, these downsides can be avoided as long as the right measures are taken and key factors are taken into consideration for Emoro's best needs.

## Recommendation

Each department within Emoro currently uses applications such as UPS Worldship, Excel, Microsoft Word, Outlook, Powerpoint, ESP, Quickbooks, Adobe Acrobat, and Slack. Although these are great applications that can provide efficiency throughout the company. We recommend implementing a cloud platform where all services can be used and accessed throughout one platform within the company. With the implementation of a cloud platform, there will be easier accessibility within departments throughout the company, streamlining business processes, data management of sensitive information, outsourcing of IT, and enhanced organization of files and departments within the company. Based on the cloud platforms that are available, our best recommendation is to go with the Google Cloud Platform. We best recommend the Google Cloud Platform because it provides many great features and services that will be able to meet the needs of Emoro. Considering the different departments such as warehousing, operations, sales, and accounting, services such as data management, cloud storage, and a recommendation system will be ideal for Emoro. With the implementation of cloud migration, remote workers will be able to easily collaborate with workers at the office and warehouse, providing flexibility and a better working environment.

## Cost Analysis

To get an idea of the analysis for implementing the Google Cloud Platform, we reached out for a quote for Emoro. Our best recommendation is the Business Plan for Emoro. The edition includes a Shared Drive for the team, to keep documents owned at the organization level rather than the user, Google Vault for archiving and retention, and Advanced Endpoint Management for control and insight into employee use of mobile devices for work purposes. The plan also covers email needs, and provides a videoconferencing and direct messaging team tool with Google Meet, including recording, Google Chat, and Jamboard. The recommendation we were provided from who we reached out to worked with the finance team to give us an

idea of the costs with a user count of 20:

	Retail price (flexible term)	1 or 2 year fixed-term	3 year fixed-term
Business Plus	\$18.00	\$16.20	\$14.40

Business Standard	\$14.40	\$10.80	\$9.60
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*prices are in USD, cost per license per month
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## Implementation/Strategy

In order to start implementation of Google Cloud Platform for Emoro, we would need to sign a contract with Google through the Google Cloud website then someone from the team would reach out to Emoro to set up a one-time complimentary call with the DeLight Onboarding Team. The purpose of the call is to understand GWS features and tools and how to set them up properly for the organization and offer deployment advice and best practices. Another next step of implementation would be signing up through a Google Premier Partner. Google partners are third party companies that are authorized by Google to be an extension of their professional services arm. They can take on the full scope of this project and provide some change management training and resources for admins and end users as well.

In order to implement a cloud migration. The following is our recommended strategy on what the next steps are for Emoro:

1. Setting a clear purpose and defining why cloud migration should be the solution while also setting a clear and attainable goal. In order to achieve this we need to make sure Emoro has :
  - a. Clear assessment of the business model/plan
  - b. Identify main points or opportunities that cloud computing can help address
  - c. Set realistic migration goals based on the need identified

d. Use Gartner's 5R cloud migration process

- i. Rehost (lift and shift): Moving applications to the cloud, providing a quick and easy transition
- ii. Refactor (repackage): Optimizing applications for the cloud by making minor adjustments, improving the performance, leveraging cloud capabilities
- iii. Revise (re-architect): Redesigning applications, leveraging cloud-native features, enhancing scalability, flexibility, and efficiency.
- iv. Rebuild from scratch: Developing new applications, utilizing latest technologies and services
- v. Retire or replace: Discontinuing or replacing outdated applications

2. Choosing a suitable vendor and negotiating a contract

a. Choose a vendor with:

- i. Successful track record, good reputation, securing cloud offerings, good customer support, good technical support, ensuring adequate help during migration

3. Implementing a cloud migration strategy

a. Deployment - understanding the workloads, tasks, processes, or jobs requiring the computing resources for cloud migration. Deployment factors to keep in mind:

- i. cloud environment, deployment model, workload type, data sensitivity, scalability, network, and data center requirements

4. Setting up governance and managing risks

- a. preventing disruptions, security issues, data breaches during cloud migration
- b. in order to maintain a good cloud governance, setting up maintainable policies and procedures will help manage the cloud

- i. defining roles, responsibilities, communication and plans which includes backup scenarios, outages, cyberattacks, and unexpected events



## 5. Optimizing the cloud environment

- a. keeping a consistent monitorization of cloud resources and analyzing which areas need attention
- b. using automation tools to keep up with effective cloud optimization
- c. being prepared for any changes or unexpected events that can help adapt the cloud infrastructure

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