

# G-ASIAPACIFIC CASE STUDY

## Summary



Malaysian apparel company Padini Holdings Berhad modernized its IT infrastructure with G-AsiaPacific as their cloud consultant and deployment specialist. The cloud transformation began with the switch of its email hosting platform to the cloud with G Suite (formerly known as Google Apps for Work), followed by developing and hosting its E-Commerce online store on the cloud with Amazon Web Services (AWS).

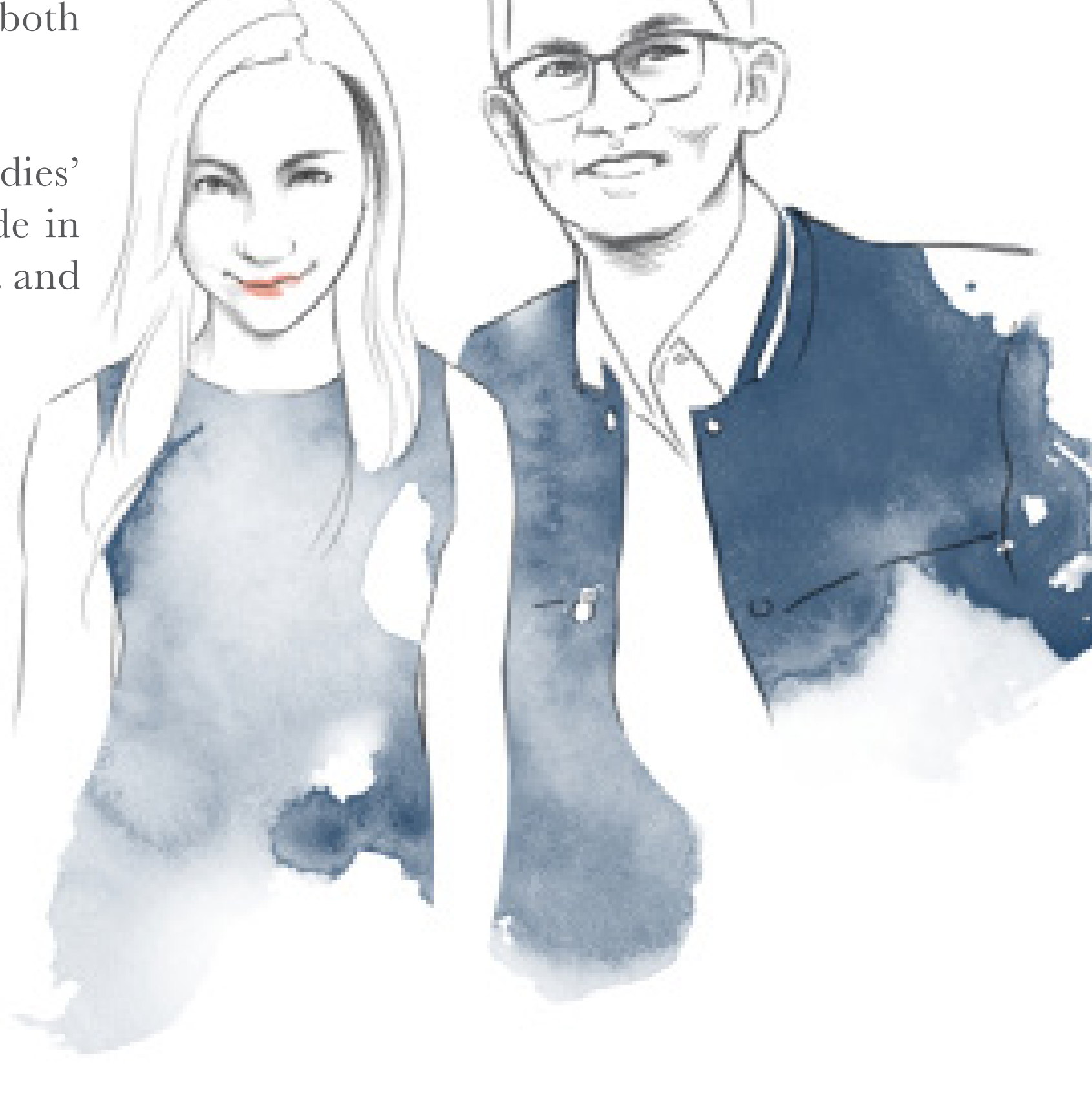
From Software as a Service (SaaS) to Infrastructure as a Service (IaaS), Padini adopted G Suite as a stepping stone to cloud, before trusting the cloud to host their E-Commerce store with AWS. With its journey in cloud transformation, Padini has emerged as a frontrunner in the apparel industry in Malaysia and a strong contender in its E-Commerce online presence.

G-AsiaPacific continues to provide G Suite IT support remotely for Padini and Managed Services for their E-Commerce platform.

## Background of the Company

Padini Holdings Berhad is a leader in the apparel and garment industry in Malaysia, having nine labels under their belt that caters for consumers of both genders and all ages.

Padini operates with over 3,600 employees, selling kid's, men's and ladies' shoes and accessories, and garments. Their labels proudly carry the 'Made in Malaysia' stamp in more than 200 stores and franchised outlets in Malaysia and around the world, alongside its online E-Commerce store.



## Cloud Transformation by G-AsiaPacific

Padini's cloud transformation can be divided into 2 phases: the **Stepping Stone** of switching its collaboration suite to G Suite and **Crossing the River** of moving its E-Commerce & Loyalty system to Amazon Web Services (AWS).

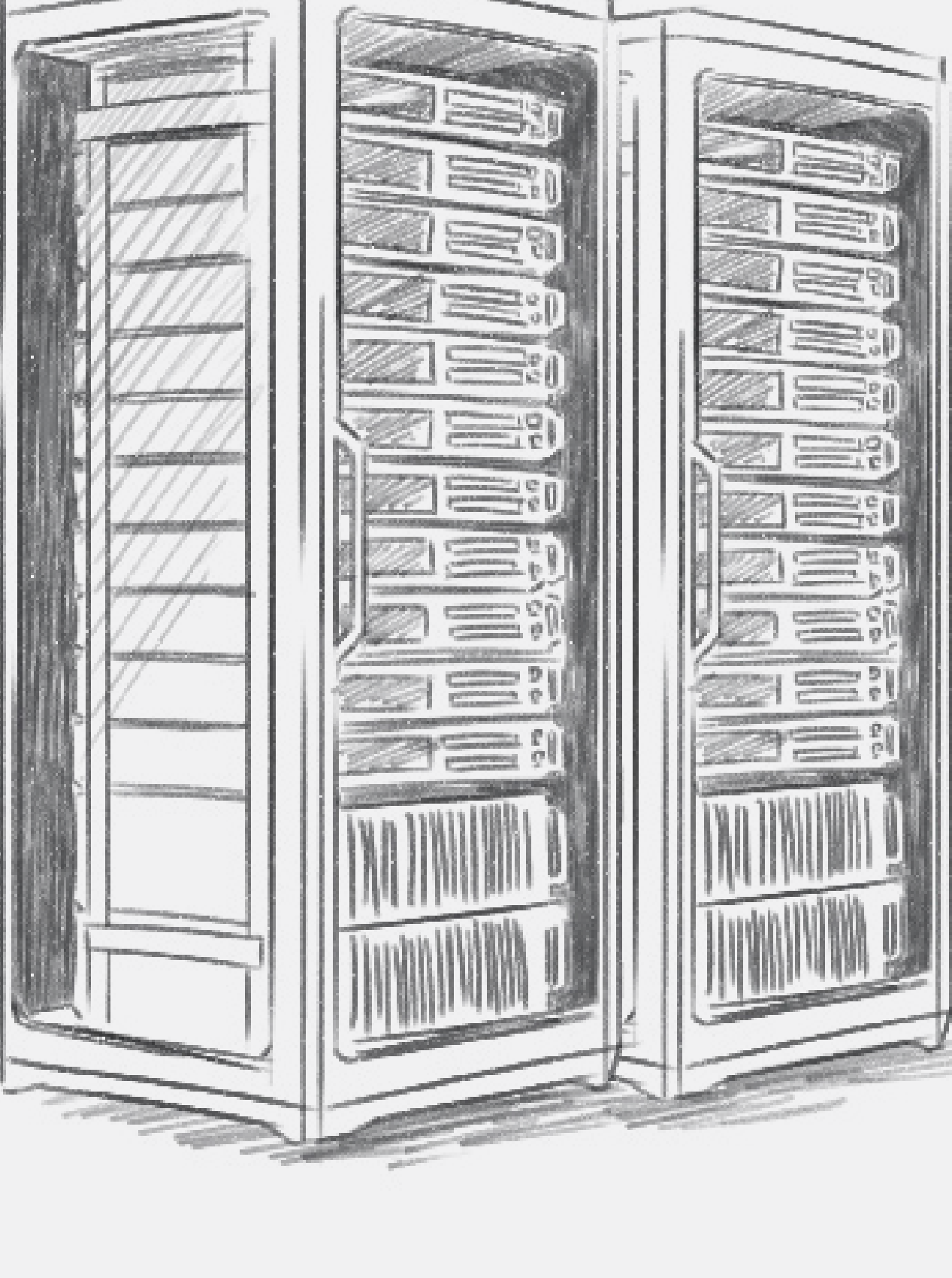
## Stepping Stone: from MDAemon to G-Suite

In October 2011, Padini was introduced to G-AsiaPacific through the Google Partner Program. Padini was seeking to modernize its IT infrastructure and started their IT transformation by modernizing their email solution.

Their existing email hosting solution was MDAemon Messaging Server (a Windows-based email and groupware server) that is hosted on premise. Padini was keen on adopting Cloud as the first step of IT innovation, with the main objective of mobility. In November 2011, Padini started adopting G Suite for 90 store users under the domain padini.com.my. After a couple of months, Padini finds the cloud technology beneficial and produces more seamless workflows. In February 2012, Padini decided to move all its 442 corporate users under the domain padini.com to G Suite.

G-AsiaPacific started their 3-phase change management: first by engaging Padini's core IT team, then proceeding with the Early Adopters phase, and ending with the Global Go-Live phase. G-AsiaPacific has continued to provide IT support to Padini for 6 years and counting (as of year 2017).

## Crossing the River: creating an E-Commerce and hosting it on the cloud



In 2015, Padini was in the midst of launching their E-Commerce platform. They planned to host the platform with a local third party hosting solution. Upon learning this, Toh from G-AsiaPacific met up with Padini and gave some insight on the implications of hosting locally with physical servers as well as the benefits of hosting E-Commerce on cloud.

### Hosting locally with physical servers:

Hosting locally with your own infrastructure or a local third-party solution means that there are physical servers in your office or buildings that stores blocks and racks of servers. These servers are required to run 24/7 as your online store (E-Commerce) has to be up at all times for consumers to access.

During off-peak hours, the online store receives a steady stream of visits. However, during peak seasons (holiday seasons, discount offers, clearance sales etc), the online store naturally receives huge amount of traffic with consumers leveraging on the promotions offered.

The main problem with having physical servers is that when website traffic increases, the number of servers needed to cope with the traffic will have to increase too. This will force Padini to buy more physical servers, ranging from 1 server to hundreds depending on traffic!

### But what happens to these servers when holiday seasons pass and website traffic reverts to a steady stream of visits?

These underutilized or unused servers still require continuous maintenance like HVAC (heating, ventilation and air conditioning), software upgrades and patches, security measures like ongoing CCTV etc. Not to mention the risks of a hazard, if the servers crash or when servers become obsolete. Hence the concept of buying 50 servers for the sole purpose of catering temporary but large traffic is unsustainable. Moreover, the value of servers plummets after usage, rendering it unprofitable to resell the servers.

Upon consideration, Padini decided to proceed with the sustainable solution - hosting their E-Commerce platform on cloud. Padini explored Amazon Web Services (AWS) upon G-AsiaPacific's suggestion due to its prominent scalability feature. Gordon Chen, the Chief Technology Officer (CTO) of G-AsiaPacific was brought in to discuss on the specifications of the project. We worked closely with the E-Commerce platform development partner of Padini throughout the process.

## Implementation

Padini started using AWS with a single server environment, which was only scalable vertically.

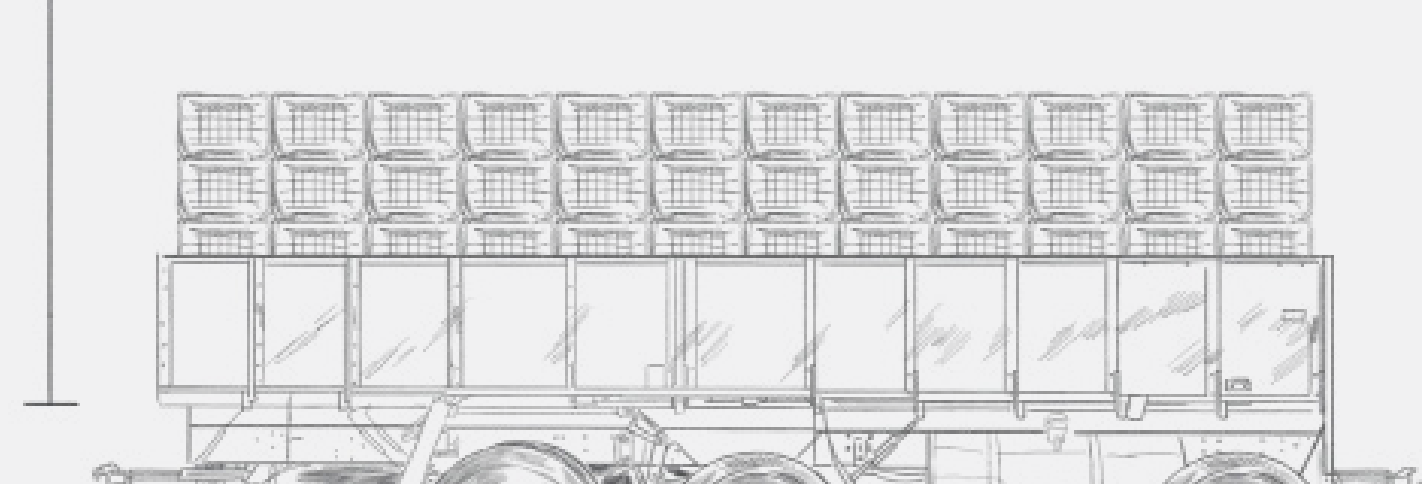
### Benefits of hosting on cloud:

Apart from benefits like eliminating the need to rent rooms and carrying out regular maintenance of the servers, one prominent feature of the cloud is its ability to scale automatically as your website traffic increases or decreases. There are two ways of scaling:

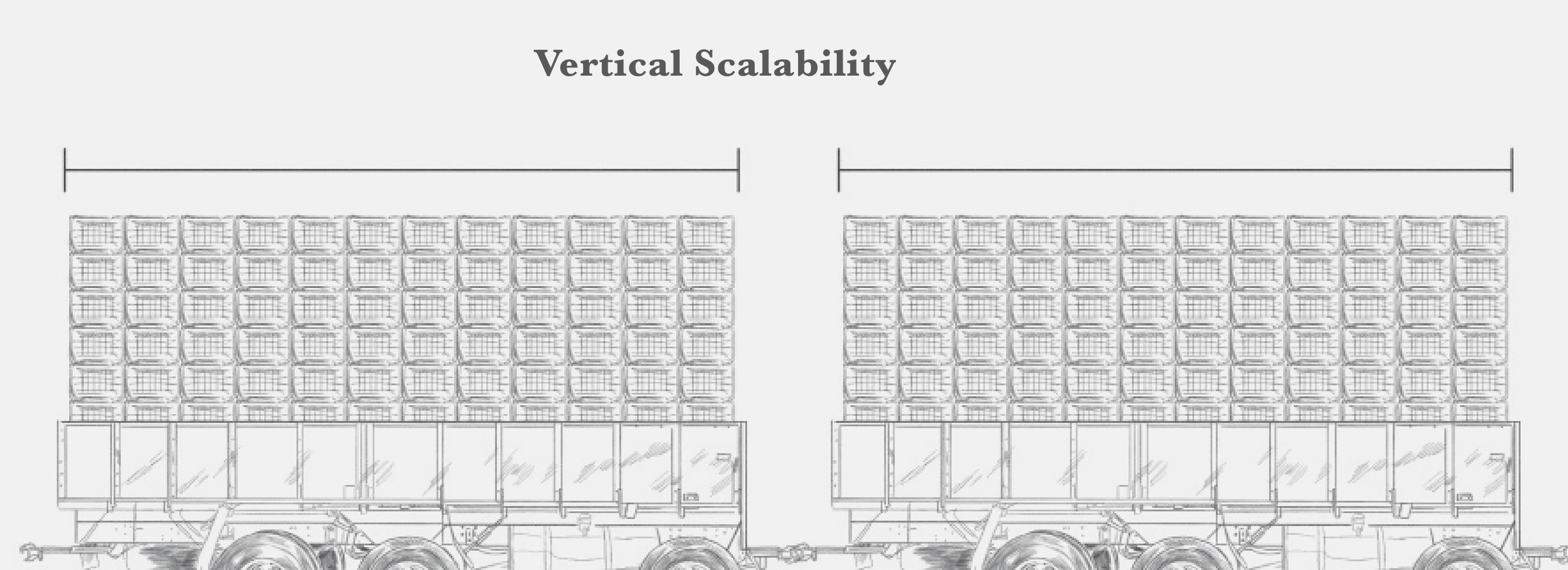


- Scaling vertically means buying one server, and being able to control or maximize the specifications.
- Scaling horizontally means buying multiple servers.

### Using a metaphor to explain vertical and horizontal scalability:



Vertical Scalability



Horizontal Scalability

Think of a freight train that transports goods everyday. Freight trains are build up of wagons. In one single wagon, you can load it to be half-full (half spec) or fully loaded (full spec) -- this is vertical scalability. Once you hit the ceiling of the wagon, you have reached your maximum specifications and no more can be added in that wagon. However, you can add in more wagons to the tail of this train to transport more goods -- this is horizontal scalability.

In June 2016, Padini launched their E-Commerce. A few months after the launching, traffic increased dramatically, inducing Padini to upgrade its single server specifications. There was a gradual specification upgrade until the 11th of November 2016, - the Singles' Day Promotion. Padini upgraded to the highest specification of a single server in AWS, alas it was still unable to cope with the huge incoming traffic.

G-AsiaPacific advised Padini to scale it horizontally, or in other words, to enable their E-Commerce store for auto-scaling. G-AsiaPacific modernized Padini's E-Commerce application before moving it from a single server environment to an auto-scaling environment.

## Post Deployment Services/ Support

After 2 months, Padini's E-Commerce collected enough data for G-AsiaPacific to optimize the CPU load range, allowing Padini to run its E-Commerce smoothly depending on traffic while paying only for what the application uses.

Apart from some other fine tuning carried out by G-AsiaPacific, Padini E-Commerce has been running smoothly since. Visit the E-Commerce website at [www.padini.com](http://www.padini.com).

Padini subscribed to G-AsiaPacific's annual managed services support.



## Testimonial from Padini

"When we decided to go digital, G-AsiaPacific came in with sound advice on leveraging with cloud. The team worked well in crafting a solution plan for our E-Commerce website to be scalable and powerful enough to cope with incoming traffic. The auto-scaling environment has given a compelling shopping experience to our online customers.

Whether it is our E-mail, E-Commerce hosting or loyalty system, G-AsiaPacific has displayed strong cloud IT expertise as well as dedication in managing their support and services.

Thank you to G-AsiaPacific for the responsive and professional support which has allowed us to develop with agility."

