

Seat Finder App

Innovative Way to Optimize Utilization of Office Space

About VMware:

VMware, a global leader in cloud infrastructure and digital workspace technology, accelerates digital transformation by enabling unprecedented freedom and flexibility in how our customers build and evolve IT environments. With VMware solutions, organizations are improving business agility by modernizing data centers and integrating public clouds, driving innovation with modern apps, creating exceptional experiences by empowering the digital workspace, and safeguarding customer trust by transforming security. VMware was founded in 1998 and serves around 500,000 customers with offices in more than 100 countries and Headquartered in Palo Alto California.

Abstract

VMware India has 5,000+ employees with expectation to grow at double digit percentage in FY19. Real Estate Office space expansion is lagging the workforce growth, thus resulting in lack of dedicated seats for appreciable proportion of workforce. To address this problem an innovative solution was developed and implemented to optimize the use of existing workspace by identifying free space when an employee is out-of-office and have it available for the work force without assigned seat, thereby reducing the need for more touch down spaces. In addition to avoiding substantial capital expenditure, it is also to align with our company's goal to achieve and maintain carbon neutrality¹. The solution had a successful pilot run in one team and is being rolled out across multiple teams in India. It has potential to avoid expenses of \$ 1.2 million dollars for entire India site.

Introduction and Background:

VMware India has been growing at very fast pace, with an expectation of headcount growth at double digit percentage in FY19. Increase in the employee strength and dynamic business environment attributed to the continuously changing customer needs, has resulted in volatile surge of resource demands which is internally met by Full-Time and Contractual workforce. Given this scenario, having an accurate plan of office workspace to accommodate additional resources is not a feasible option. It goes without saying that providing a better employee workplace experience continues to be a top priority for the management. Also, according to ISO 16745-2:2017 it is evident that office space expansion poses significant environmental impact such as higher Carbon footprint and energy consumption². Hence it becomes imperative to optimally utilize the existing office space.

The volatile nature of the problem needs to be addressed through a solution which is adaptable, scalable and real-time.

In such a scenario, among the traditional approaches that are taken are:

- Rationalization of seats across teams
- Procuring additional office space and equipment
- Work from home

After analyzing these approaches and measuring their effectiveness individually, it was found that these are not sustainable solutions to meet the transient surge in demand. Hence the journey started to develop an innovative solution which can address the dynamic nature of the problem, easy to implement, sustainable and scalable.

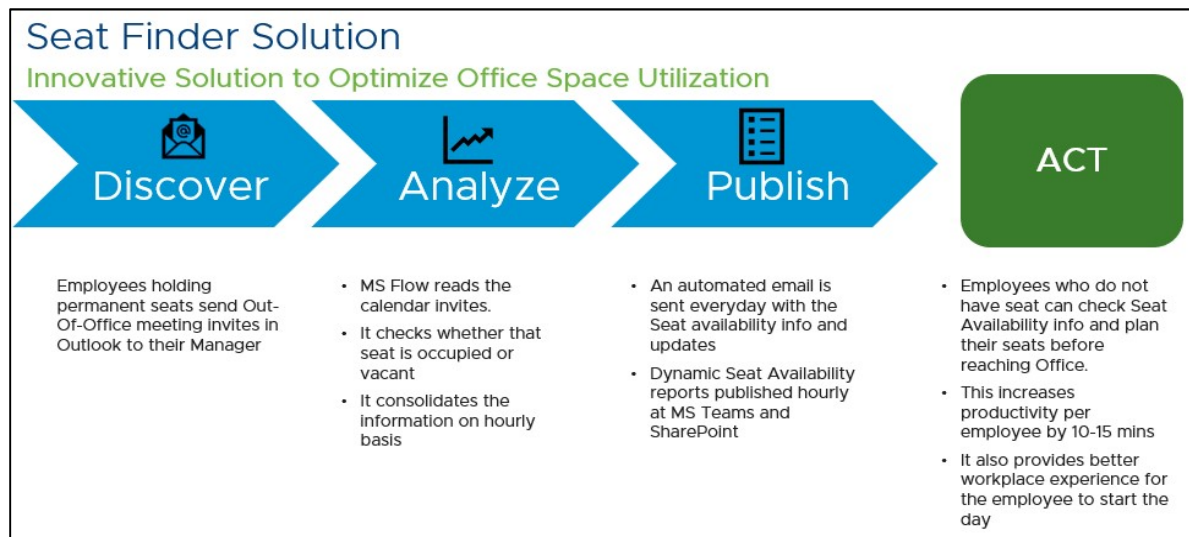
The Seat Finder Solution

The solution design was aimed to:

- Increase the existing Seat Utilization
- Avoid cost by foregoing procurement of additional real estate space
- Avoid indirect expenses on energy and miscellaneous cost (electricity for air-conditioning, lighting, housekeeping, security, etc.)

It has been observed that a significant percentage of the existing seats remain unoccupied everyday due to employees being Out-of-Office for various reason such as planned leave, sick leave, work from home, on travel etc. The Seat Finder Solution helps to optimize the utilization of the unoccupied seats by discovering and publishing the information, using a cloud-based application, to the workforce who do not have an assigned seat. This increases the utilization of otherwise unoccupied seats.

The solution was developed using the **D**iscover, **A**nalyze and **P**ublish approach.

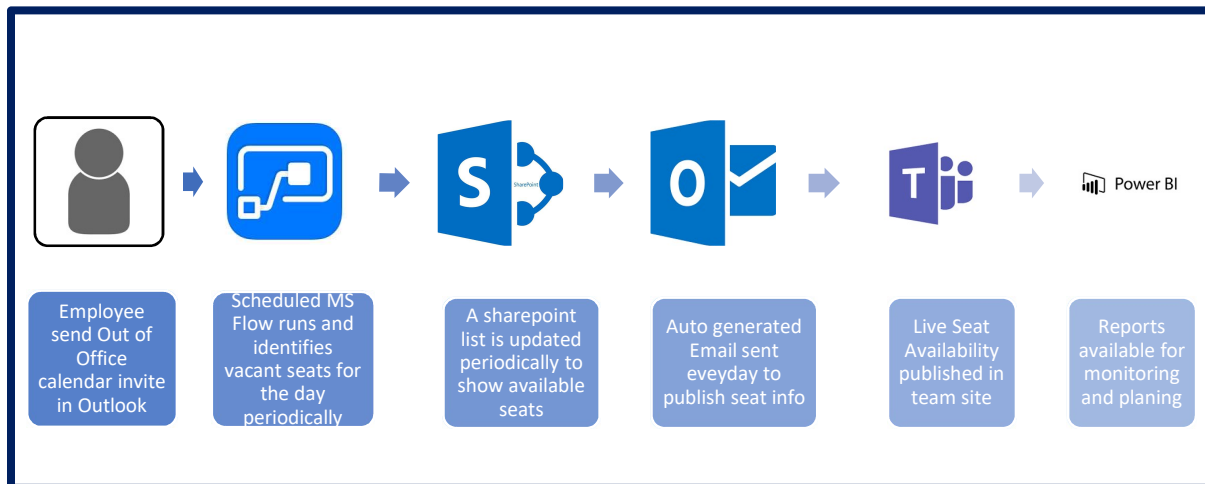


How the Solution Works

Microsoft Flow is a cloud-based Process automation tool, part of Office 365 enterprise suite. MS Flow is capable of orchestrating process across multiple Office applications.

This solution works on the enterprise wide Microsoft license available to employees. As part of developing this solution, a best practice of all employees sending Out-of-Office meeting invites to their Managers, was implemented through a change management approach. This also brought in a good team hygiene where the manager is always informed and has visibility to employee's availability in office.

Process Flow with Application Landscape:



Solution Implementation Journey

August			September	October	November	December – January
Empathize	Define	Ideate	Prototype	Incubate	Implement	Roadmap
Identified Seat deficit problem Empathized with employees who did not have permanent seats Articulated larger problem statement Proposed Ideas to solve the situation and Identified potential solution paths			Developed Prototypes based on UiPath, Excel VBA, and Microsoft Flow Conducted best fitment and solution feasibility analysis, App based on MS Flow was chosen for implementation	The solution was pilot run within BTA Solutions Team Fine tuned based on feedback Prepared roll-out approach for India site	Achieved stability and modularized design for quick roll out Solution Implemented in 2 teams	Rollout planned for 5+ teams Enhance product capability

Adaptation and Business Impact



BTA Solutions – Desk Cost Avoidance	
Allocated Desks	40
Avg Actual Utilization (80%)	32
Available Seats on avg	8
Average Cost per Desk*	\$100/Month
Cost Avoidance/Month	\$800
Annual cost avoided	\$9,600

The solution has been deployed in 2 teams having a total of 40 allocated seats. Results show an average of 80% utilization of office space. Upon deployment of this solution, the problem of short-term workplace shortages was addressed without adding extra capacity. The overall employee adoption of the solution has received positive feedback.

This led to a cost avoidance of approximately \$9,600 for a team size of 40. The solution is currently being rolled out to a business group of 500 employees which will translate to a cost avoidance of \$120,000.

The time to implement the solution to a new team was about 8 hours.

This solution eliminated the risk of undergoing interruptions in operations and customer service posed due to the traditional way of rearranging seats to rationalize per team's requirement.

It also eliminated any capital expenditure in addition of extra workspace capacity (instead used the existing capacity to its fullest) which would have not only required long-range planning, had long lead times but also would have had detrimental effects on the environment.

Future Offering

This solution is currently packaged as a product which comes along with a User Guide and deployable across various teams in VMware India. This being a fully automated solution doesn't require any maintenance, except for a System Admin for very minor touches only if required.

In near future, the Seat Finder App will be available as a mobile application with workplace floor maps to allow employees reserve seats easily and more widely. Mobile application user interface will also provide navigation to the location of the seat and suggestions for best available seat based on user preferences.

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1. <https://www.vmware.com/radius/achieving-carbon-neutrality/>, Achieving carbon Neutrality.
 2. <https://www.iso.org/obp/ui/#iso:std:69970:en>, Buildings contribute approximately one-third of global greenhouse gas (GHG) emissions. Operational energy use in buildings typically accounts for 70 % to 80 % of energy use over the building life cycle.
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