

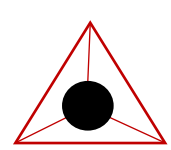
# Where to set up office for Startup in Singapore

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29 April 2020

A Case Study  
for prospective clients

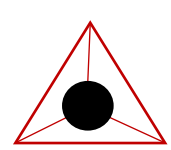
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# Problem Statement

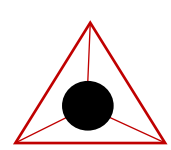
Startup entrepreneurs and business owners do not have experience, time and energy to search around for office space

Business owners from foreign countries who have not acclimatised to the local professional, social and cultural norms, making the search for an office space more challenging



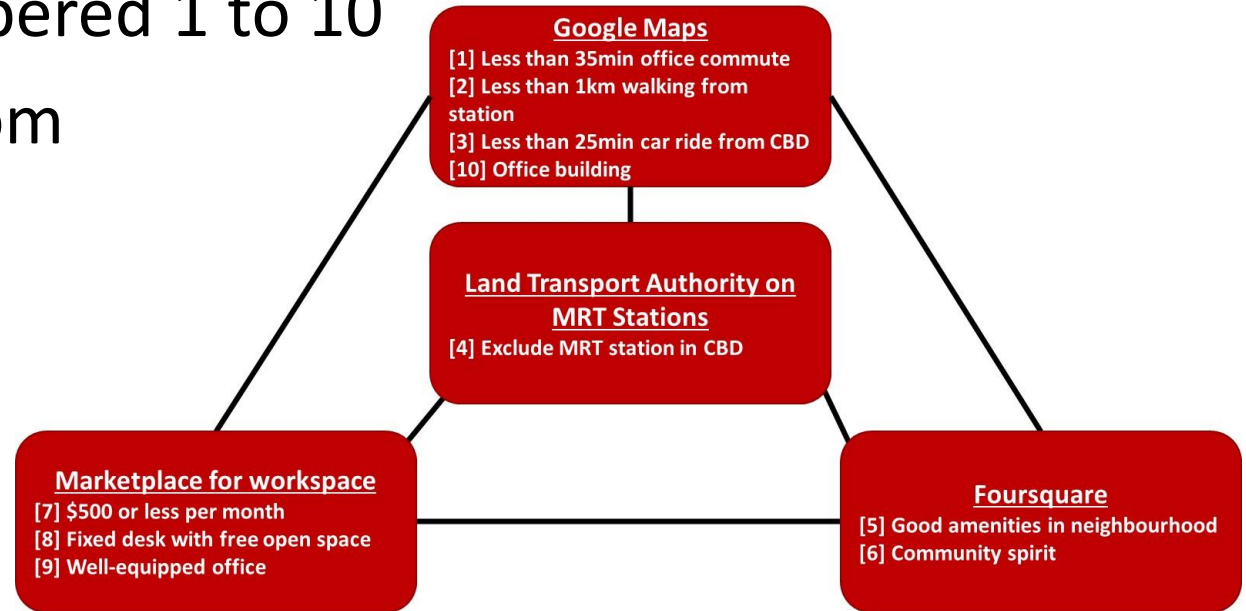
# Customised Solution based on client requirements

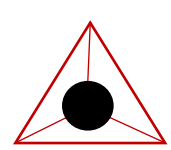
1. Location
  - Commute time, transport mode, walking distance
  - Amenities in neighbourhood
  - Community
2. Budget
  - Monthly rates, minimum tenure
3. Space
  - Workspace, free open space, future expansion
4. Infrastructure and Technology
  - Amenities at workspace
5. Style
  - Image



# Data (1/2) - Requirements

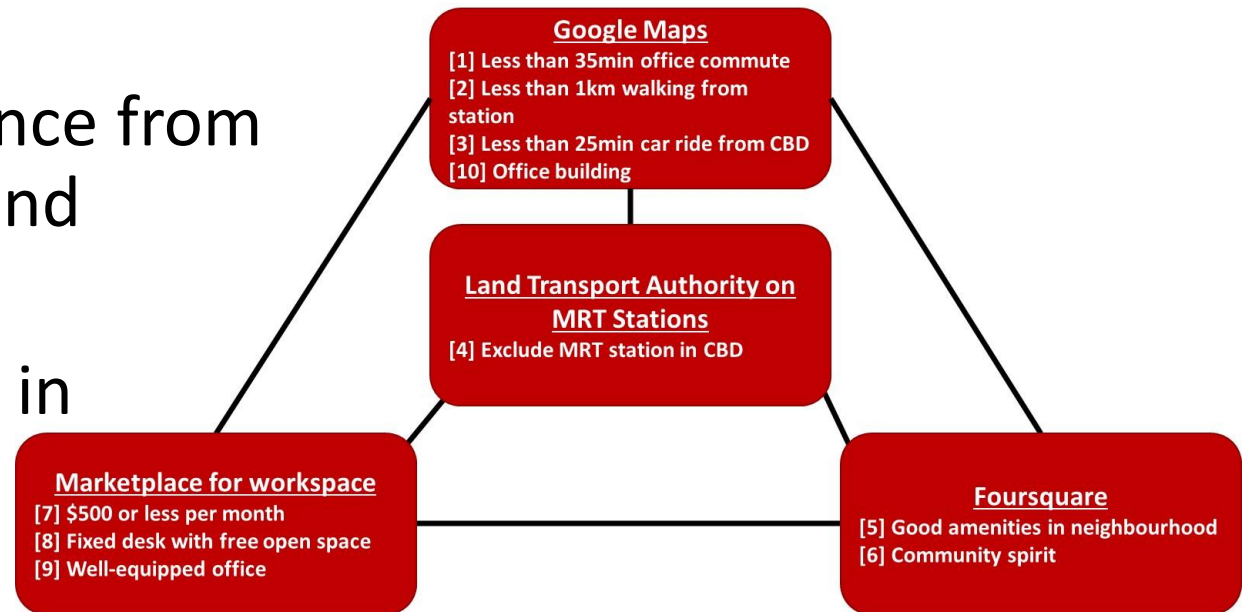
- Client provided 10 requirements based on 5 components: Location, Budget, Space, Infra & Tech and Style
- Clients requirements are numbered 1 to 10
- Data required are collected from standard sources
  - MRT Stations
  - Marketplace for workspace
  - Google Maps
  - Foursquare

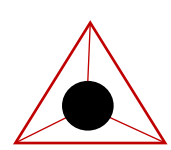




## Data (2/2) - Sources

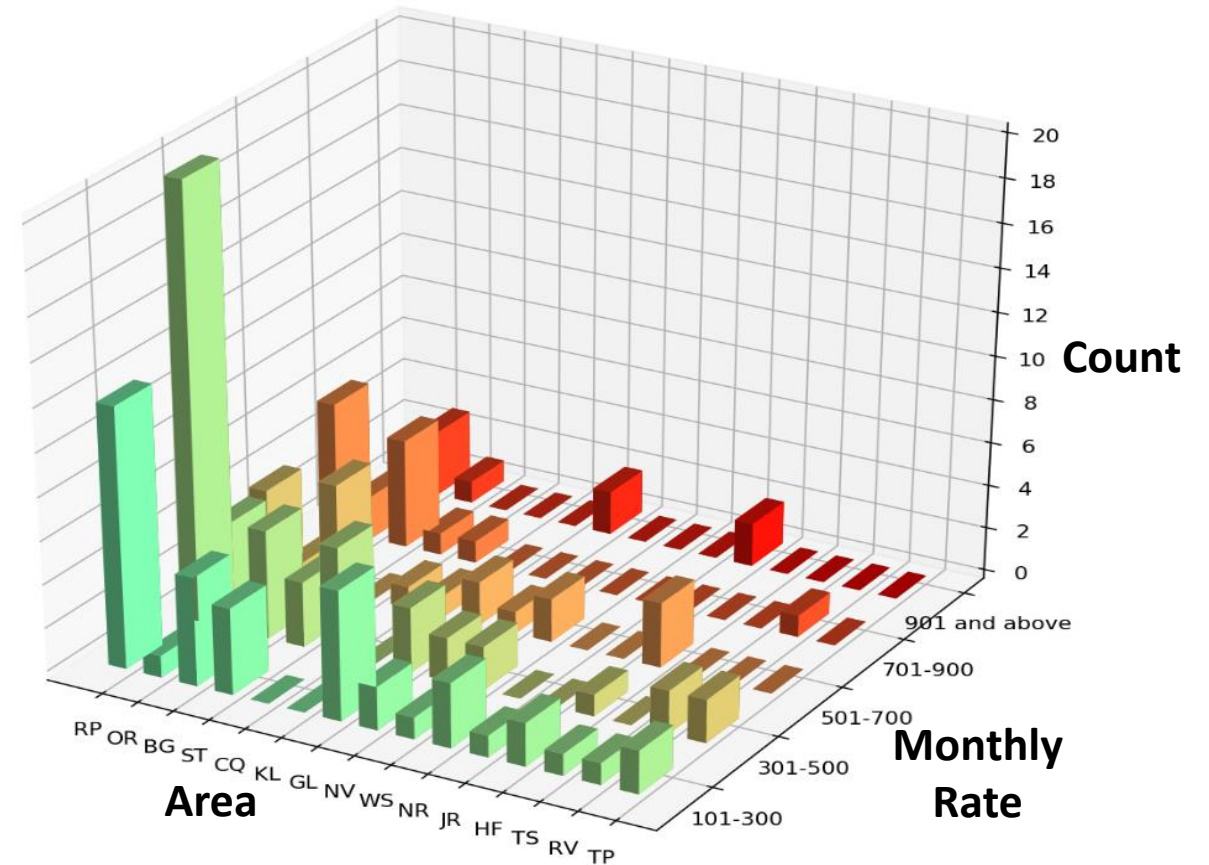
- MRT Stations – Identify and exclude MRT Stations in CBD
- Marketplace\*- Available workspaces, rental rates, desk types, office equipment
- Google Maps – Time and distance from each venue, distance to walk and building type
- Foursquare – Common venues in vicinity, community

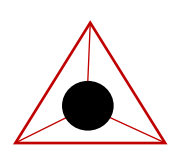




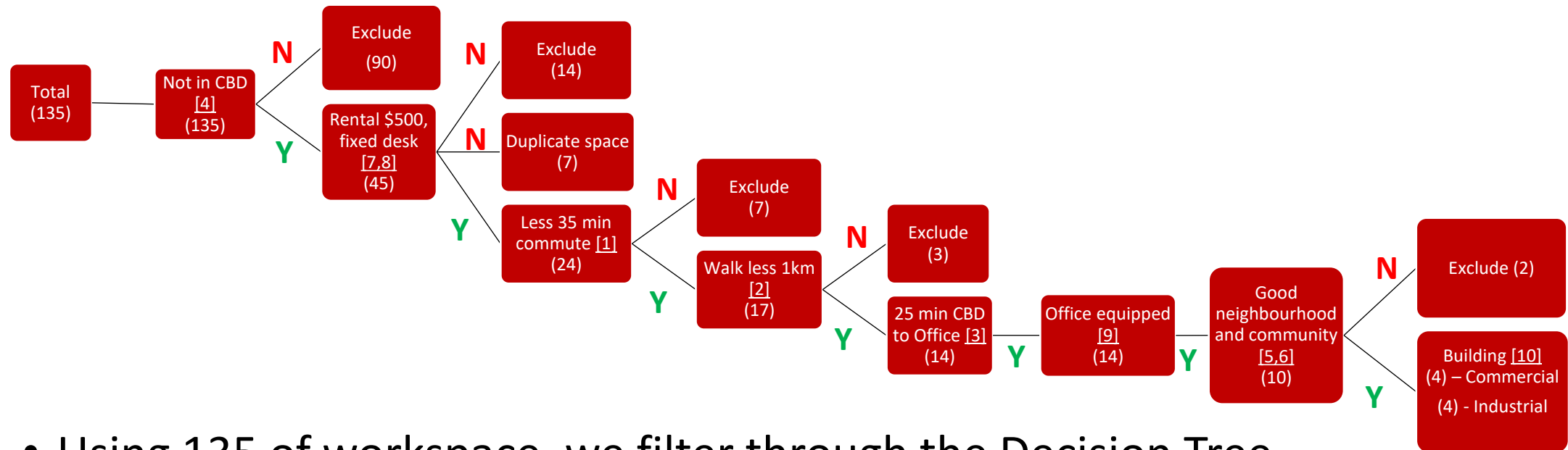
# Methodology (1/3) – Exploratory Data Analysis

- 135 coworking spaces available
- 90 available in CBD  
60 of them rent \$500 or less
- 45 not in the CBD region  
31 have rent rates \$500 or less





# Methodology (2/3) – Decision Tree



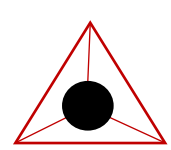
- Using 135 of workspace, we filter through the Decision Tree
- Each Node represent a client's requirement, numbered in square brackets
- In the end, 8 workspaces have been identified as the final candidates

**Y - YES**

**N - NO**

[#] Numbers underlined in square brackets refer to the numbered requirement

(#) Numbers in round brackets refer to number of workspace entering this node



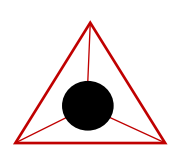
# Methodology (3/3) - Foursquare

- At the node - Good neighbourhood and community [5,6], we have used Foursquare location data to extract the most common venues of 10 workspaces in 8 neighbourhoods

	Neighborhood / MRT Station	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue	11th Most Common Venue	12th Most Common Venue	13th Most Common Venue	14th Most Common Venue	15th Most Common Venue
1	Eunos	Coffee Shop	Chinese Restaurant	Asian Restaurant	Noodle House	Train Station	Gym	Pizza Place	Bookstore	Breakfast Spot	Bubble Tea Shop	Food Court	Vegetarian / Vegan Restaurant	Seafood Restaurant	Food Stand	Electronics Store
2	MacPherson	Food Court	Hobby Shop	Gym / Fitness Center	Office	Climbing Gym	Metro Station	Cafeteria	Furniture / Home Store	Thai Restaurant	BBQ Joint	Asian Restaurant	Other Repair Shop	Gym	German Restaurant	General Entertainment
3	Marymount	Chinese Restaurant	Outdoors & Recreation	Bakery	Thai Restaurant	Food Court	Yunnan Restaurant	Fried Chicken Joint	Electronics Store	Fast Food Restaurant	Filipino Restaurant	Flea Market	Food Stand	Gastropub	Furniture / Home Store	Diner
4	Novena	Café	Coffee Shop	Hotel	Japanese Restaurant	Italian Restaurant	Ramen Restaurant	Pharmacy	Restaurant	Sandwich Place	Chinese Restaurant	Bakery	Supermarket	Thai Restaurant	Asian Restaurant	Hong Kong Restaurant
5	Paya Lebar	Fast Food Restaurant	Shopping Mall	Coffee Shop	Asian Restaurant	Food Court	Vegetarian / Vegan Restaurant	Noodle House	Supermarket	Chinese Restaurant	Dessert Shop	Ramen Restaurant	Halal Restaurant	Hotpot Restaurant	Café	Snack Place
6	Tampines	Bakery	Café	Coffee Shop	Pharmacy	Bubble Tea Shop	Chinese Restaurant	Clothing Store	Shopping Mall	Dessert Shop	Fast Food Restaurant	Asian Restaurant	Gym	Hotpot Restaurant	Food Court	Mediterranean Restaurant
7	Ubi	Food Court	Asian Restaurant	Coffee Shop	Hobby Shop	Restaurant	Supermarket	Chinese Restaurant	Diner	Bus Station	Food Stand	Electronics Store	Fast Food Restaurant	Filipino Restaurant	Flea Market	Furniture / Home Store
8	one-north	Coffee Shop	Café	Indian Restaurant	Bus Station	Thai Restaurant	Pharmacy	Noodle House	Sandwich Place	Food Court	Pizza Place	Yunnan Restaurant	Filipino Restaurant	Italian Restaurant	Middle Eastern Restaurant	Dess

- MacPherson and Marymount do not have Coffee Shop or Café listed as common venues, implying there is less place and tendency to meet up. This will not appeal to the client.

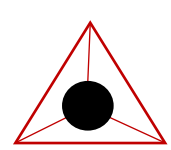




# Results

	Name of Workspace	Postal code	Data Source	Google Maps				Foursquare		Marketplace			Google Maps
			Requirements	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
			MRT Station	Shortest Time to office from Bishan MRT, Singapore 579827. (minutes)	Distance on foot (metres)	Time for client to reach office from CBD, assuming client is at Marina Bay Financial Centre, Singapore 018981. (minutes)	Not in CBD	Amenitiies in the neighborhood (out of 6)	Community with Coffee shop and Café in Top 5	Price \$ / Month	In addition to fixed desk, check photos posted on the workspace to get a better feel	Facilities (% of requirements fulfilled)	Style - Corporate, Industrial, Commerical, vs Professional, Casual, Vibrant
1	Regus Coworking Spaces	307591	Novena	11	350	11	TRUE	4	2	405	Professional	82%	Commercial
2	OneSpace Coworking Spaces	408555	Ubi	24	500	15	TRUE	4	1	300	Minimum	73%	Industrial
3	MENDAKI SENSE Coworking	419718	Eunos	30	700	15	TRUE	4	1	250	Minimum	64%	Industrial
4	Regus Coworking Spaces	409051	Paya Lebar	16	150	13	TRUE	3	1	228	Professional	73%	Commercial
5	Regus Coworking Spaces	389777	Paya Lebar	27	950	14	TRUE	3	1	188	Professional	64%	Commercial
6	The Drop Coworking Spaces	408555	Ubi	24	500	15	TRUE	4	1	180	Homely, small scale	55%	Industrial
7	Regus Coworking Spaces	529653	Tampines	34	400	21	TRUE	5	2	461	Professional	73%	Commercial
8	Ucommune Coworking Spaces	139950	one-north	27	750	15	TRUE	3	2	250	Casual with ample space	100%	Industrial

- The above 8 candidates have their respective strengths and weaknesses.
- On further consultation with the client, he places more importance to requirements [1], [5] and [7]
- For requirement [8], we added a visual review on the workspace to get a better feel of the space setup



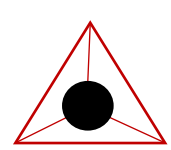
# Recommendation and Discussion

## Recommendation

- 3 workspaces, namely (1) Commune, (2) Regus - Paya Lebar @ 409501 and (3) Regus – Novena.
- Ucommune
  - Rental rates one of the lowest at \$250 monthly
  - A casual setup with ample space for social and private matters.
  - Community spirit of entrepreneurship and ecosystem.
- Regus – Paya Lebar and Regus – Novena,
  - Located nearer to Bishan MRT station
  - Both have professional office in commercial buildings.
- We recommend the client visit the recommended coworking spaces to get a personal feel of the neighbourhood and workspace.

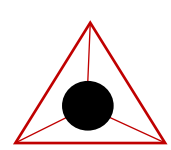
## Discussion

- Our Custom solution will provide recommendations based on client's requirements
- Methodology, Process and Analysis are repeatable to target business owners looking for office space
- This can also be applied to Marketplace for workspace operators to design their landing page and algorithm to best serve their prospective clients
- Tailored recommendations can be provided to each prospective clients. This can be done through data mining, machine learning and most importantly systemisation to improve user experience significantly



# Conclusion

- Based on the client's requirements for a workspace for his startup, we provided 3 recommendations for his consideration
- Used data analysis and techniques to address the client's complex problem of finding an office workspace
- Methodology and approach can be replicated
- Business owners can benefit through time and effort
- Marketplace platform service providers can use approach to develop a seamless process that enriches users' experience.



# Reference and Acknowledgments

- Land Transport Authority of Singapore
- Singapore MRT Corporation
- FlySpaces.com
- Google Maps
- Foursquare