2023 Global Automotive Consumer Study

Key Findings: SOUTHEAST ASIA (SEA)

May 2023

About the study

From **September through October 2022**, Deloitte surveyed more than **26,000 consumers in 24 countries (including 6,048 respondents in the SEA region)** to explore opinions regarding a variety of critical issues impacting the automotive sector, including consumer interest in electric vehicle (EV) adoption, brand perception, and advanced technologies. The overall goal of this annual study is to answer important questions that can help companies prioritize and better position their business strategies and investments.

Survey timing

September 26 to October 17, 2022

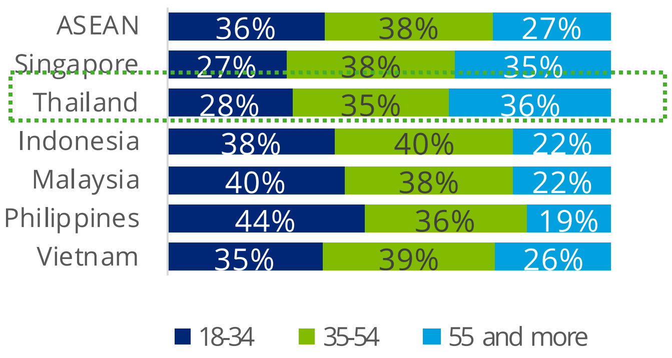
Sample

The survey polled a sample of 6,048 consumers in Southeast Asia (Singapore = 1,003; **Thailand = 1,009;** Indonesia = 1,003; Malaysia = 1,006; Philippines = 1,008; Vietnam = 1,019). The survey has a margin of error for the entire sample of +/-1.4%

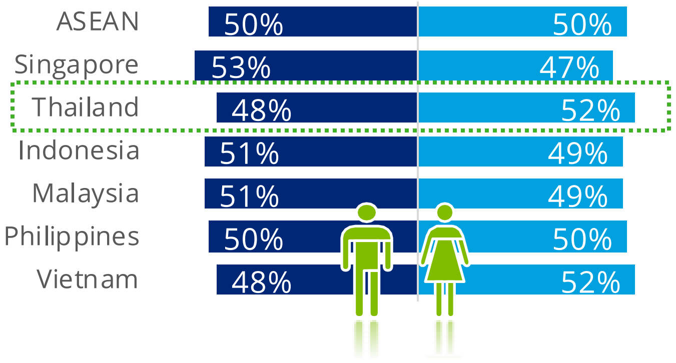
Methodology

The study is fielded using an online panel methodology where consumers of driving age are invited to complete the questionnaire (translated into local languages where applicable) via email.

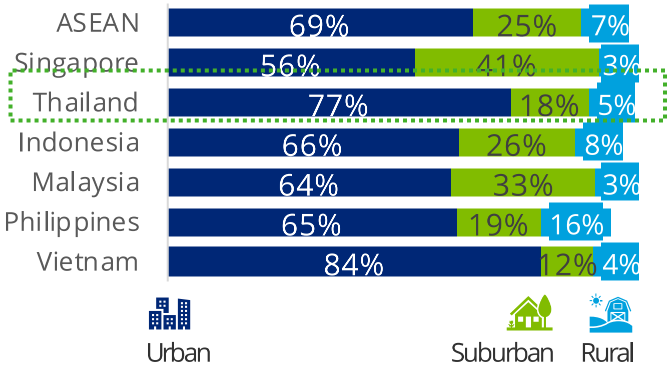
Age Group



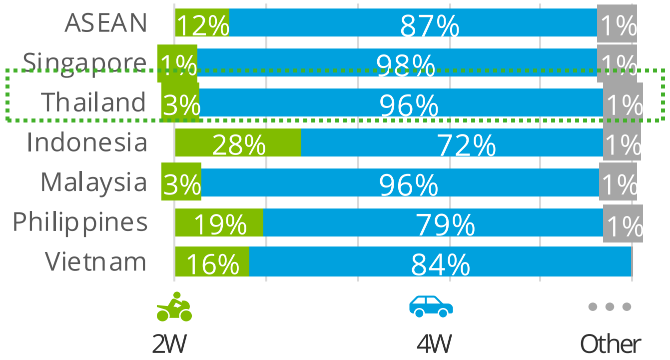
Gender



Location



Type of Vehicle Owned



SOUTHEAST ASIA (SEA)

Main Findings

1

Vehicle electrification

Interest in EVs is growing across Southeast Asia as consumers, pressured by hyper-inflationary conditions, look to lower their operating costs. However, a focus on building public charging capacity – and making it easy for EV owners to pay for public charging – will be critical for overall adoption.

2

Future vehicle intentions

Expectations regarding the acceptable length of time to wait for delivery is starting to stretch out in some Southeast Asia markets on the back of the semiconductor crisis – potentially opening the door for a more "built-to-order" retail paradigm. In terms of their purchase experience, consumers place significant emphasis on getting a good deal with transparent pricing.

3

Vehicle brand and service experience

When asked who they trust most, Southeast Asia consumers point to the relationship they have with either their selling or servicing dealer, signalling the important role that dealers play in the regional automotive value chain – particularly in the conversation around direct-to-consumer sales.

4

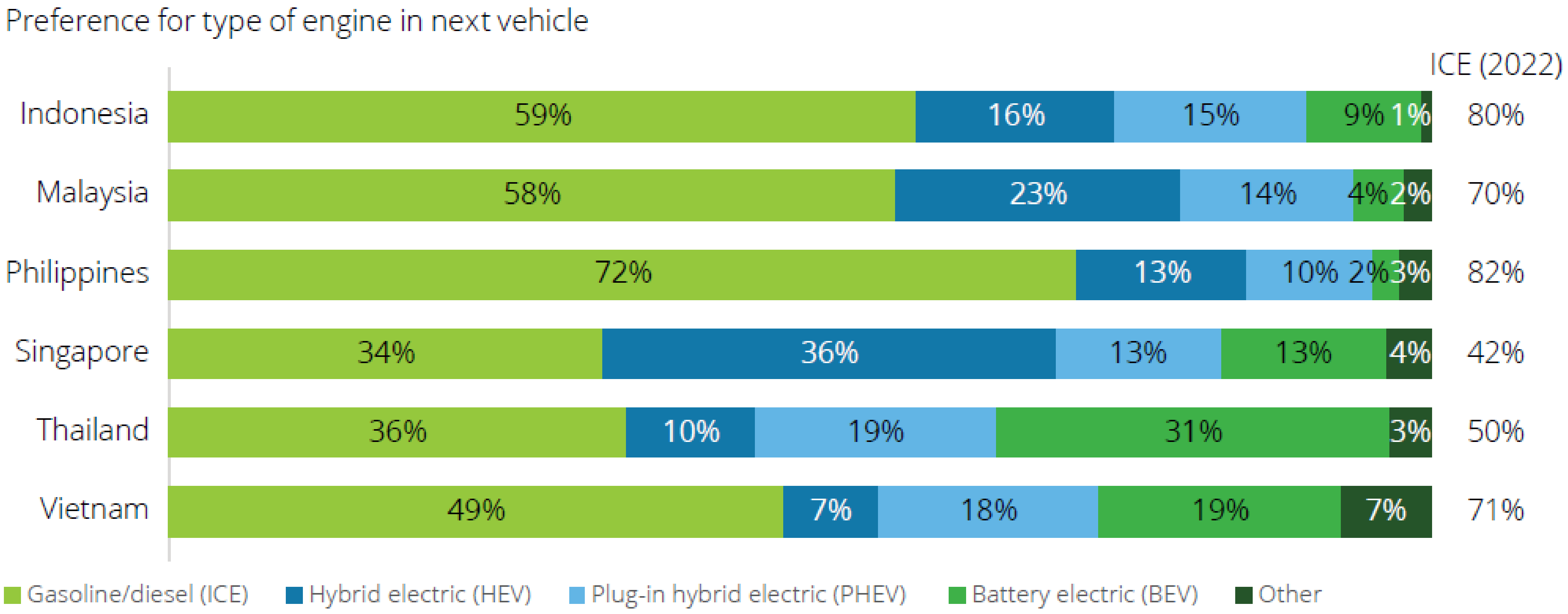
Connectivity

Consumers in Southeast Asia are willing to share their data for connected vehicle features, but most would rather pay for them as part of the upfront cost of the vehicle or on a per use basis, instead of a subscription.

1

Vehicle electrification

Interest in Hybrid Technology



Note: Other includes vehicles with engine types such as compressed natural gas, ethanol, and hydrogen fuel cells; don't know responses weren't considered.
Q40. What type of engine would you prefer in your next vehicle?
Sample size: n=803 [Indonesia]; 910 [Malaysia]; 828 [Philippines]; 706 [Singapore]; 943 [Thailand]; 899 [Vietnam]

Motivation for Choosing EVs

Top reasons to choose an EV as next vehicle

Factors	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
Concerns about climate change	8	8	6	7	5	5
Concerns about personal health	7	7	4	8	6	2
Lower fuel costs	1	1	1	1	1	1
Less maintenance	4	2	3	3	3	7
Ability to use the vehicle as a backup battery/power source	3	5	5	6	4	4
Peer pressure	9	9	9	9	9	9
Better driving experience	2	3	2	4	2	3
Government incentives/subsidies/ stimulus programs	5	4	8	2	8	6
Potential for extra taxes/levies applied to internal combustion vehicles	6	6	7	5	7	8

Top reason

Note: Sum of the percentages exceed 100% as respondents can select multiple options.
Q41. Please rank the following factors in terms of their impact on your decision to acquire an electrified vehicle (highest to lowest).
Sample size: n=321 [Indonesia]; 367 [Malaysia]; 211 [Philippines]; 438 [Singapore]; 571 [Thailand]; 397 [Vietnam]

Concerns Regarding Use of Full BEVs

Greatest concern regarding all battery-powered EVs

Concerns	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
Driving range	48%	44%	43%	34%	44%	41%
Cost/price premium	32%	59%	40%	46%	45%	36%
Cold weather performance	42%	23%	33%	18%	36%	36%
Increased need to plan my trips	18%	25%	24%	23%	30%	28%
Uncertain resale value	34%	28%	19%	23%	20%	23%
Potential for extra taxes/levies associated with full BEVs	27%	27%	24%	25%	20%	29%
Time required to charge	53%	54%	51%	49%	46%	43%
Ongoing charging and running costs	44%	41%	35%	38%	41%	41%
Lack of knowledge or understanding about EVs/EV technology	42%	36%	36%	26%	34%	29%
Lack of public EV charging infrastructure	63%	61%	55%	48%	48%	48%
Lack of charger at home	40%	42%	35%	37%	32%	32%
Lack of alternate power source at home	25%	36%	43%	29%	26%	42%
Safety concerns with battery technology	44%	42%	45%	37%	34%	38%
Lack of sustainability	27%	38%	41%	28%	29%	37%
Lack of choice	16%	23%	13%	15%	26%	21%

Most commonly cited

Note: Sum of the percentages exceed 100% as respondents can select multiple options.
Q51: What are your biggest concerns regarding full battery-powered electric vehicles? Please select all that apply.
Sample size: n=823 [Indonesia]; 932 [Malaysia]; 861 [Philippines]; 764 [Singapore]; 967 [Thailand]; 917 [Vietnam]

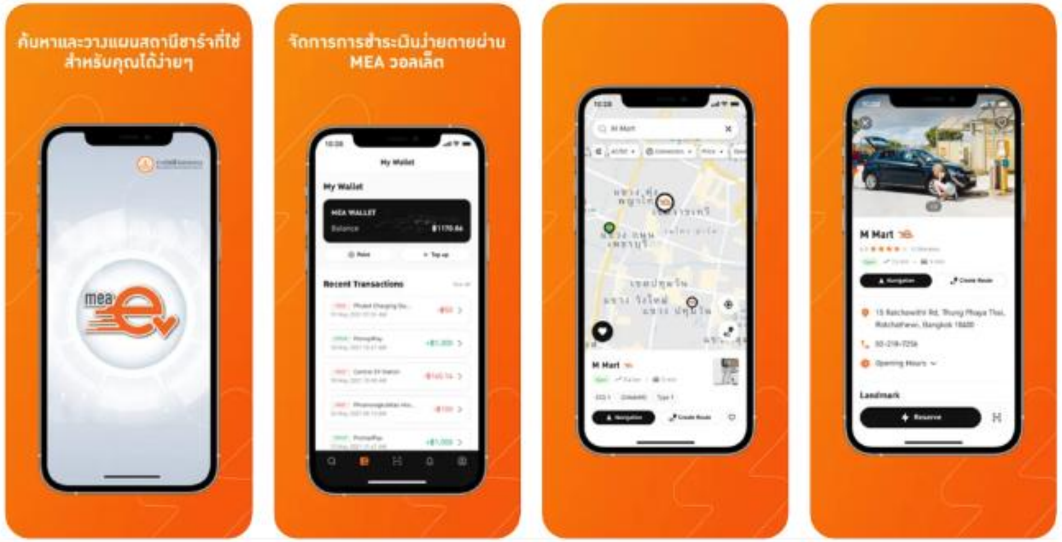
Preferred Payment Methods for Public Charging

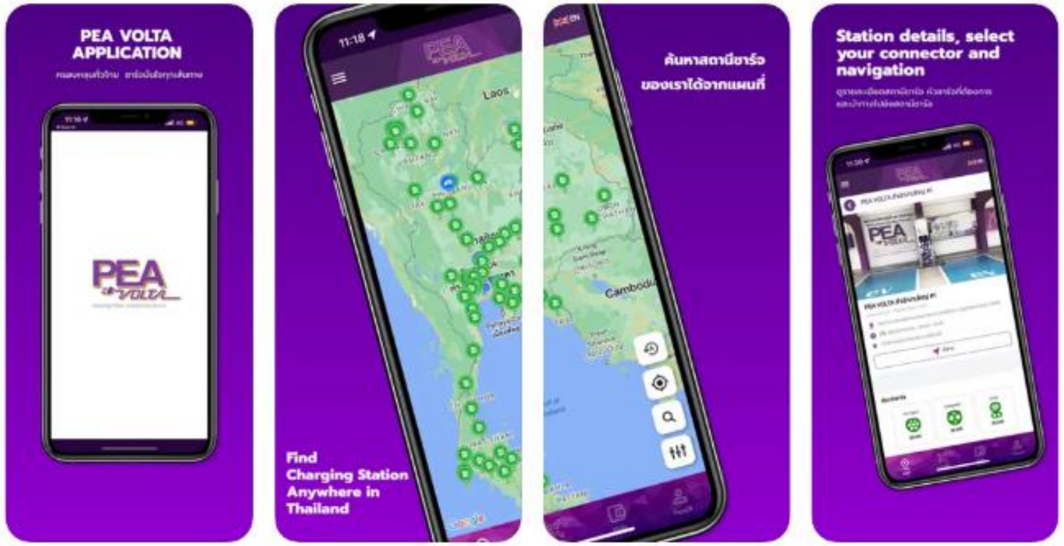
Most preferred way to pay for public EV charging

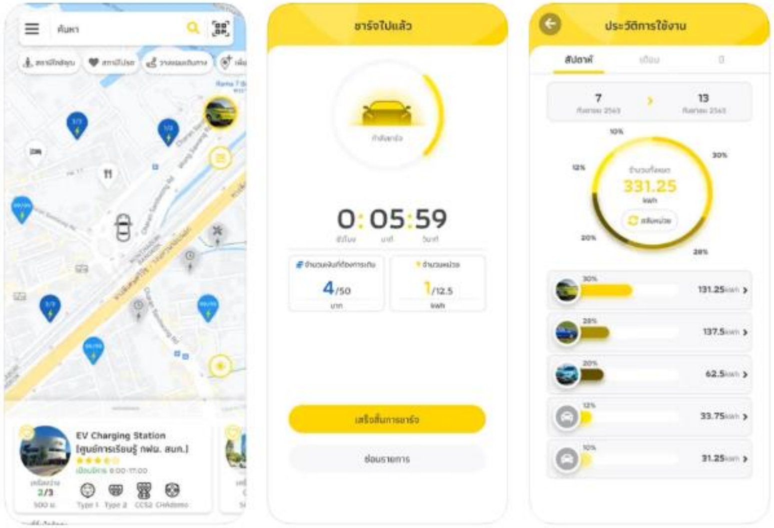
Payment methods	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
Smartphone app	59%	44%	40%	30%	67%	60%
Credit/debit card	23%	40%	38%	52%	18%	23%
Pre-paid subscription plan	11%	7%	14%	9%	8%	9%
Loyalty points	5%	8%	8%	8%	6%	7%
Other	2%	1%	0%	0%	1%	0%

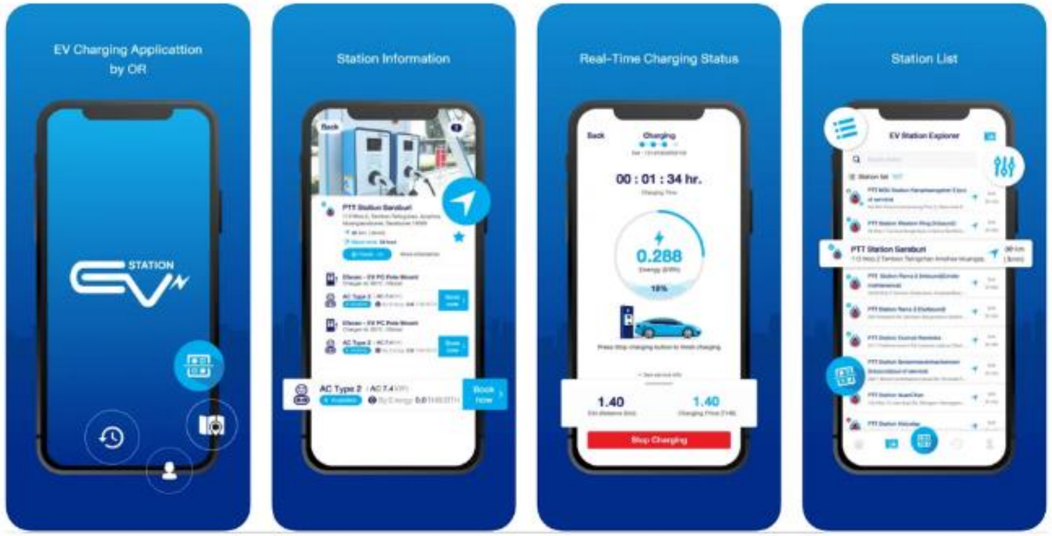
Most preferred mode of payment

Note: Sum of the percentages exceed 100% as respondents can select multiple options.
Q49: How would you most prefer to pay for public EV charging?
Sample size: n=321 [Indonesia]; 367 [Malaysia]; 211 [Philippines]; 438 [Singapore]; 571 [Thailand]; 397 [Vietnam]



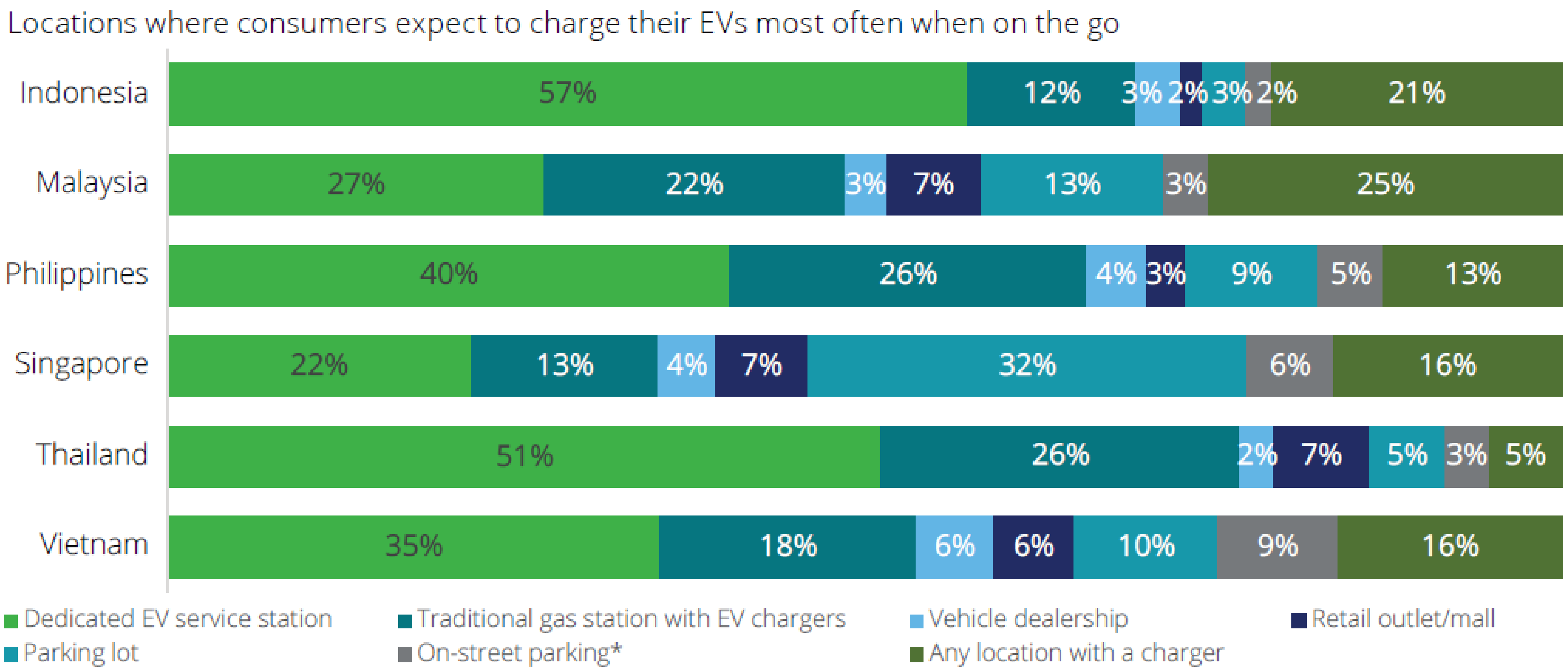






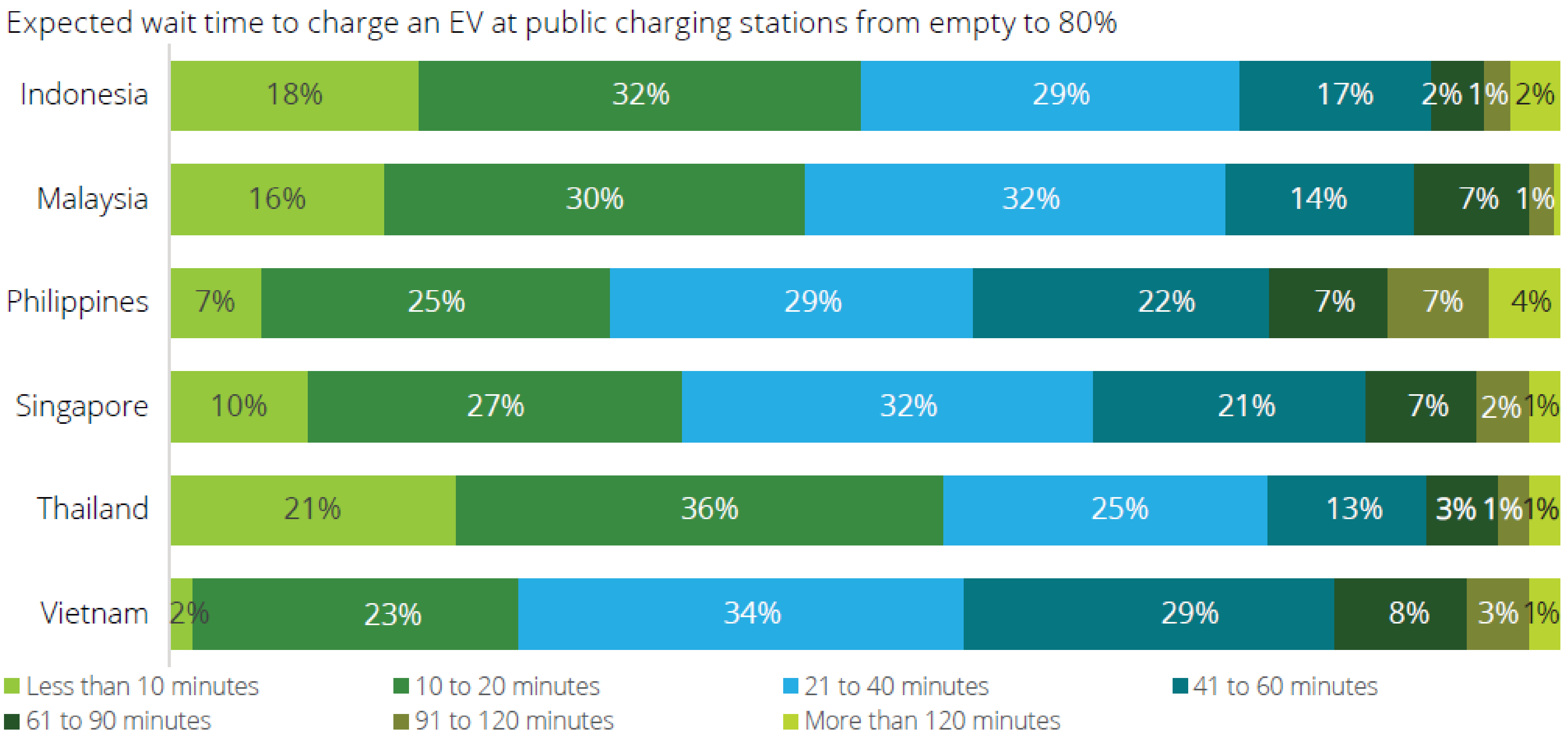
Source: autospinn.com

Preferred Locations for Public Charging



*On-street parking includes community/public buildings, hotels, etc.
Q46: Which of the following public locations makes the most sense to charge your EV when you are away from home?
Sample size: n=321 [Indonesia]; 367 [Malaysia]; 211 [Philippines]; 438 [Singapore]; 571 [Thailand]; 397 [Vietnam]

Expected Charge Times



Q47: How long would you expect it to take to charge your EV from empty to 80% at a public charging location?
Sample size: n=321 [Indonesia]; 367 [Malaysia]; 211 [Philippines]; 438 [Singapore]; 571 [Thailand]; 397 [Vietnam]

Preferred Amenities at Public Charging Locations

Type of amenities that consumers want to have access to while their vehicle is charging at a public location

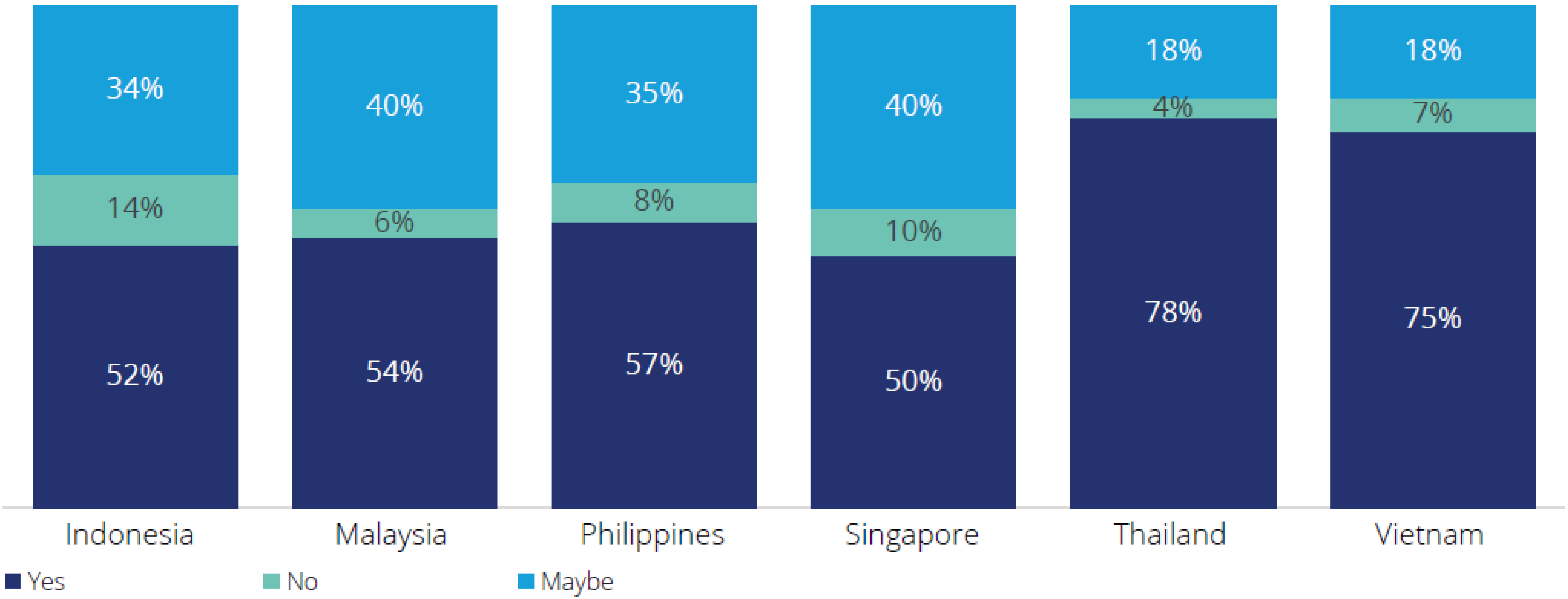
Amenities	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
Coffee/beverages	80%	**80%**	77%	66%	**78%**	**76%**
Snacks/light meals	68%	68%	75%	54%	53%	56%
Full-service restaurant	57%	42%	44%	25%	69%	38%
WiFi connectivity	78%	68%	**89%**	65%	68%	74%
Private meeting room	22%	14%	15%	14%	33%	18%
Washrooms	79%	74%	70%	**67%**	72%	57%
Lounge/sitting area	**84%**	70%	73%	55%	53%	43%

Top choice

Note: Sum of the percentages exceed 100% as respondents can select multiple options.
Q48: What type of amenities would you want to have access to while your vehicle is charging at a public location?
Sample size: n=321 [Indonesia]; 367 [Malaysia]; 211 [Philippines]; 438 [Singapore]; 571 [Thailand]; 397 [Vietnam]

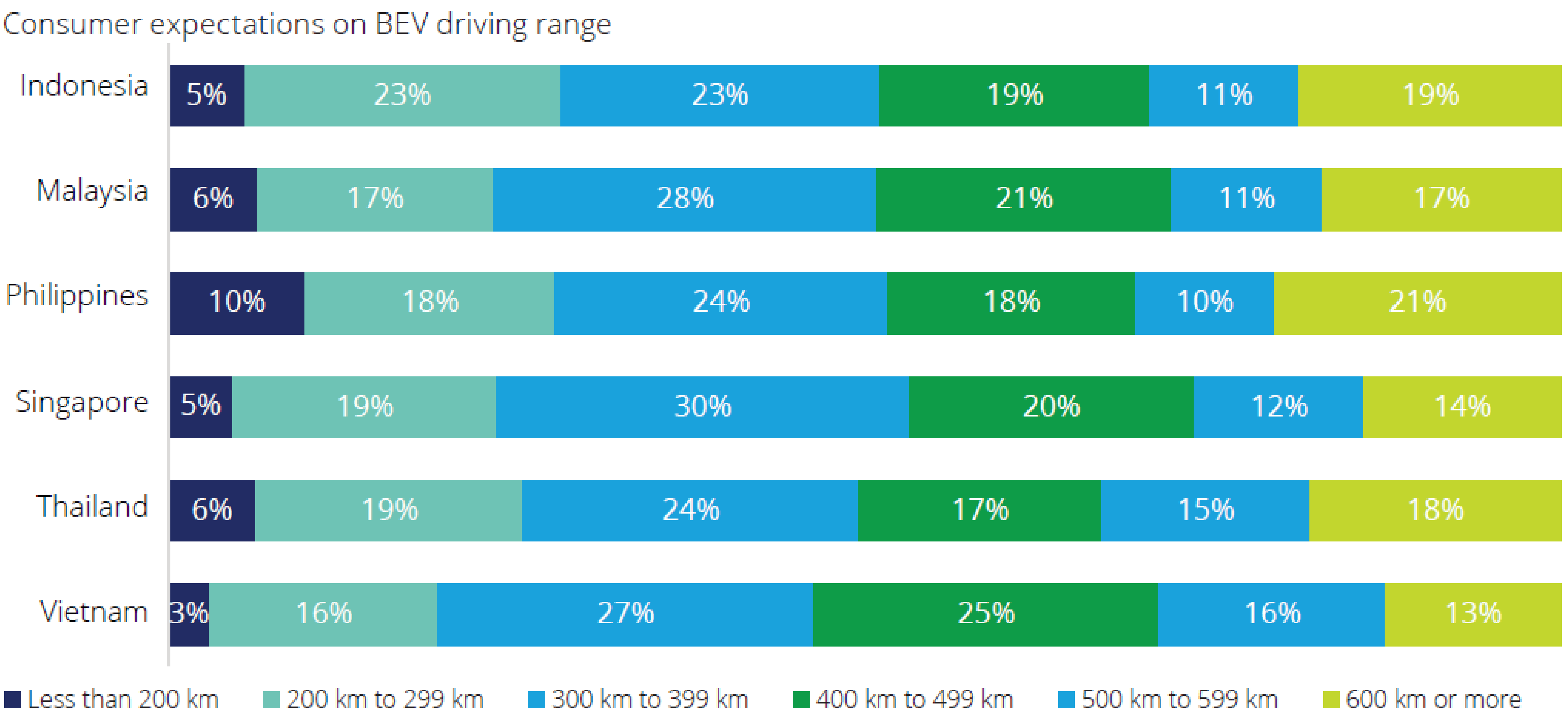
Willingness to Rethink EV Purchase in Favor of ICE Engines Capable of Utilizing Sustainable Fuel

Percentage of consumers who would rethink purchase of an EV if an environmentally sustainable fuel alternative is available for ICE engines



Q42. In a scenario where an environmentally sustainable, synthetic fuel alternative (i.e., carbon-neutral gas) that would work in traditional internal combustion engines was readily available, would you rethink your decision to purchase an EV?
Sample size: n=321 [Indonesia]; 367 [Malaysia]; 211 [Philippines]; 438 [Singapore]; 571 [Thailand]; 397 [Vietnam]

Expected Driving Range of BEVs



Q52: How much driving range would a fully charged all-battery electric vehicle need to have in order for you to consider acquiring one?
Sample size: n=750 [Indonesia]; 896 [Malaysia]; 844 [Philippines]; 671 [Singapore]; 672 [Thailand]; 745 [Vietnam]

Most Southeast Asia consumers looking to purchase BEV, except Indonesia and Philippines, are concerned about residual value of the vehicle given lingering questions around long-term battery health.

Percentage of consumers who are concerned about the resale/residual value of an all battery-powered electric vehicle (BEV)

	ASEAN	**Thailand**	Indonesia	Malaysia	Philippines	Vietnam	Singapore
Not concerned	20%	23%	**41%**	14%	29%	15%	19%
Neutral	33%	32%	28%	28%	**57%**	31%	34%
Concerned	**48%**	**45%**	31%	**58%**	14%	**54%**	**46%**

Q50: To what extent are you concerned about the resale/residual value of an all battery-powered electric vehicle?

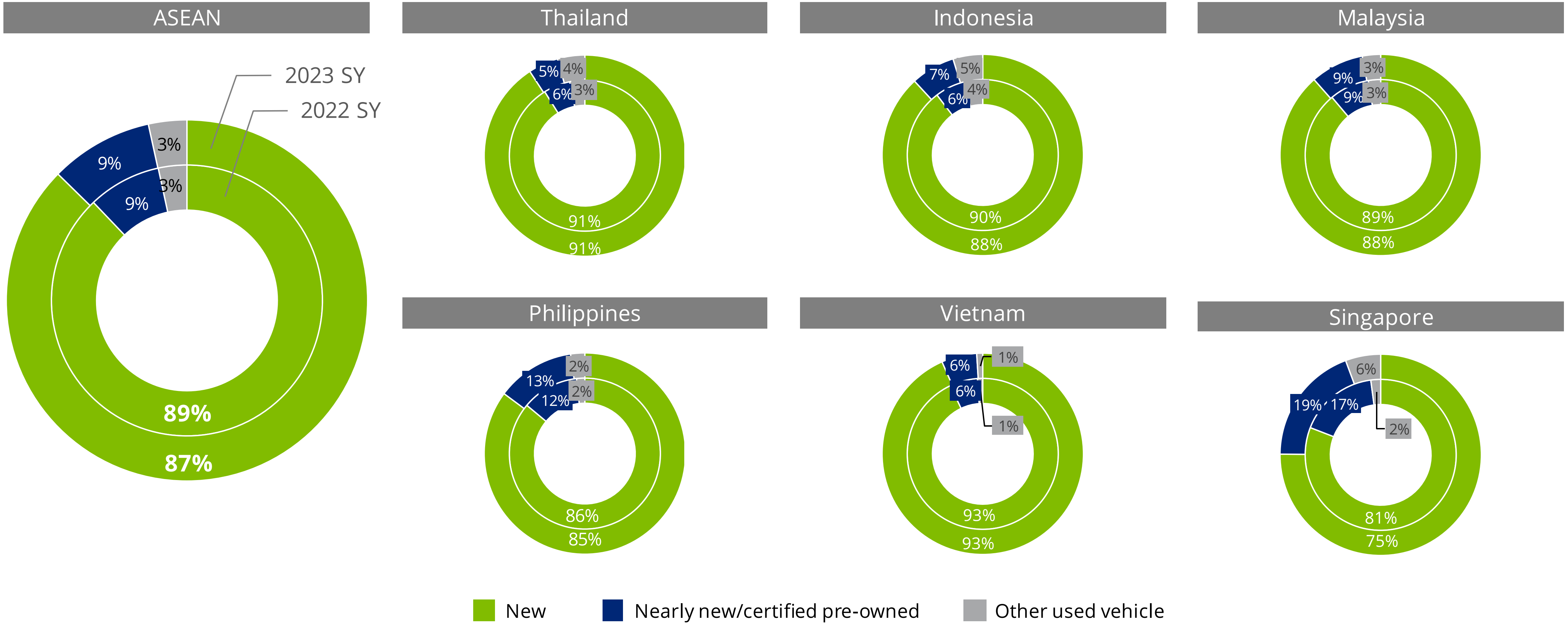
Sample size: n= 631 (TH = 295; ID = 64; PH = 10; VN = 172; MY = 36; SG = 93)

2

Future vehicle intentions

Majority of vehicle owners across the region still prefer new vehicles for their next purchase. However, Singapore seen a noticeable rise of interest in used vehicle, likely due to increasing cost of COE (Certificate of Entitlement).

Next vehicle type intended to acquire



Q30. Will your next vehicle be new or used?

Sample size: n = 4,781 (TH = 956; ID = 691; PH = 748; VN = 829; MY = 886; SG = 671)

Sample size: n= 4,894 (TH = 967; ID = 674; PH= 739; VN = 818; MY = 932; SG = 764)

Purchase Considerations for Next Vehicle

Most important factors driving brand choice for next vehicle

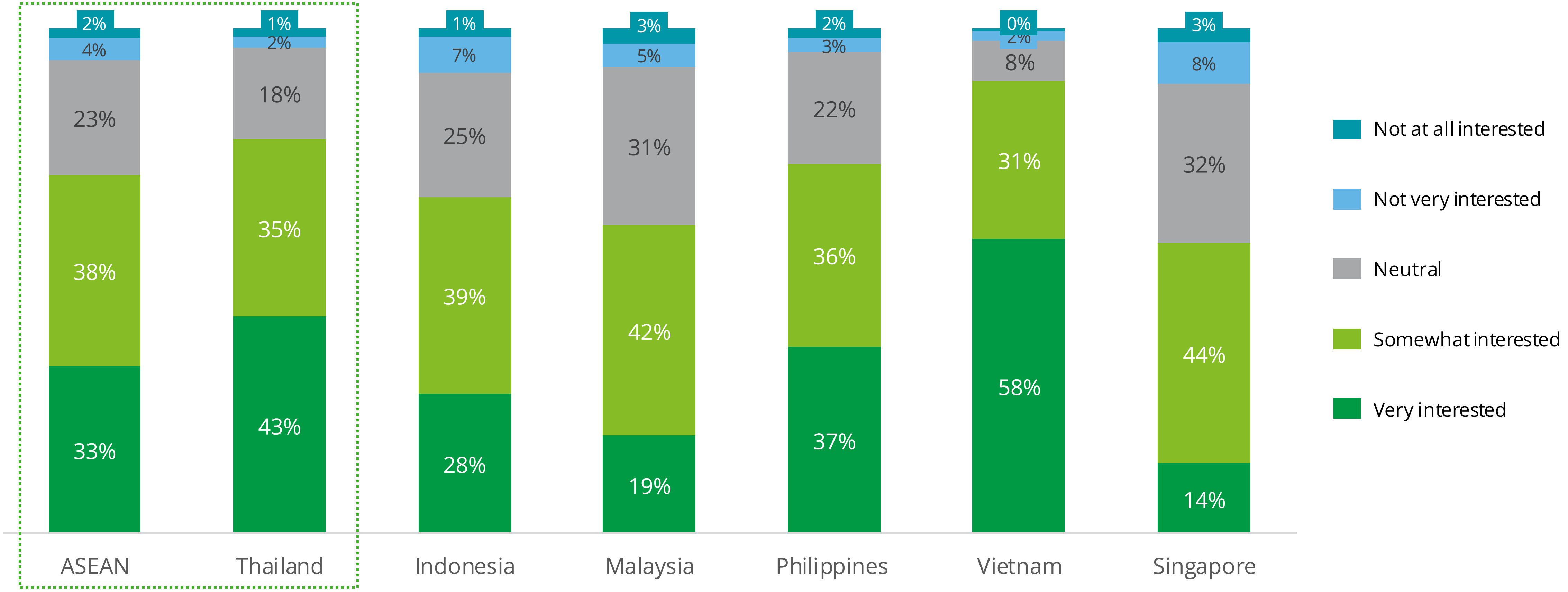
Drivers of brand choice	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
Previous sales experience	24%	18%	18%	15%	34%	18%
Previous service experience	29%	21%	24%	17%	33%	33%
Product quality	78%	74%	78%	65%	64%	64%
Brand advertising	20%	16%	17%	12%	25%	32%
Brand image	43%	36%	41%	27%	37%	48%
Brand affiliations	15%	11%	11%	9%	19%	24%
Brand familiarity	31%	33%	38%	32%	33%	36%
Quality of overall ownership experience	42%	38%	39%	29%	29%	41%
Vehicle features	54%	55%	58%	43%	49%	52%
Availability of BEVs/hybrid options	23%	22%	26%	24%	29%	27%
Vehicle performance	49%	54%	61%	43%	26%	37%
Price	34%	41%	41%	36%	18%	23%

Most commonly cited

Note: Sum of the percentages exceed 100% as respondents can select multiple options.
Q35. What are the most important factors driving the choice of brand for your next vehicle? (Please select all that apply).
Sample size: n=823 [Indonesia]; 932 [Malaysia]; 861 [Philippines]; 764 [Singapore]; 967 [Thailand]; 917 [Vietnam]

Original equipment manufacturers (OEMs) may look at every potential profit pool going forward, including offering their own insurance products.

Percentage of consumers who would purchase insurance directly from the manufacturer



Q60: The next time you acquire a vehicle, how interested would you be in purchasing insurance directly from the vehicle manufacturer?;

Sample size: n= 4,894 (TH = 967; ID = 674; PH= 739; VN = 818; MY = 932; SG = 764)

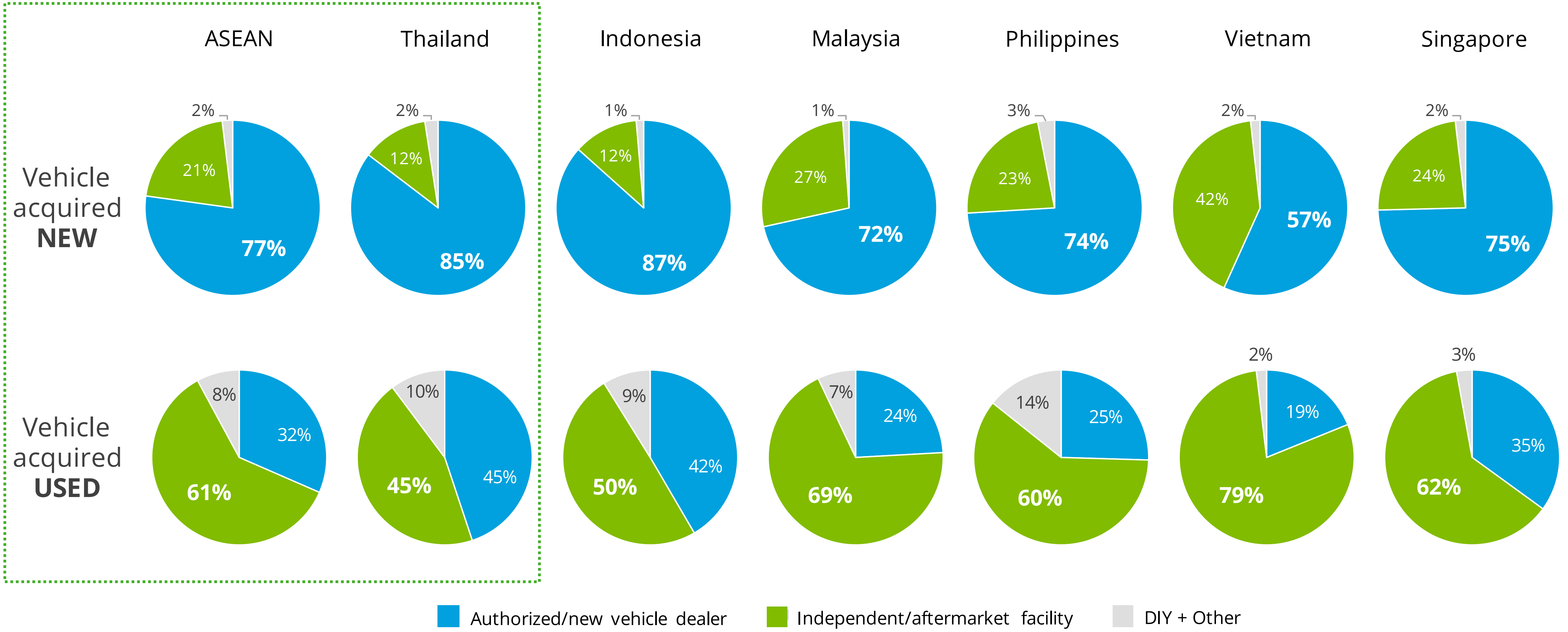
3

Vehicle brand and service experience


Image source: Freepik

3 in 4 consumers who acquired their vehicle new would prefer to service the vehicle back to the dealer, whereas 2 in 3 consumers who own used vehicle will go for independent aftermarket facility instead.

Preferred vehicle service provider by how current vehicle was acquired



Q24: Where do you normally service your vehicle?
Sample size: n= 3,564 [New] (TH = 697; ID = 516; PH = 420; VN = 689; MY = 773; SG = 469)
Sample size: n=837 [Used] (TH = 147; ID = 113; PH = 161; VN = 106; MY = 170; SG = 140)

Reasons for Preferring a Vehicle Service Provider

Reasons for choosing vehicle service provider (by preferred provider)

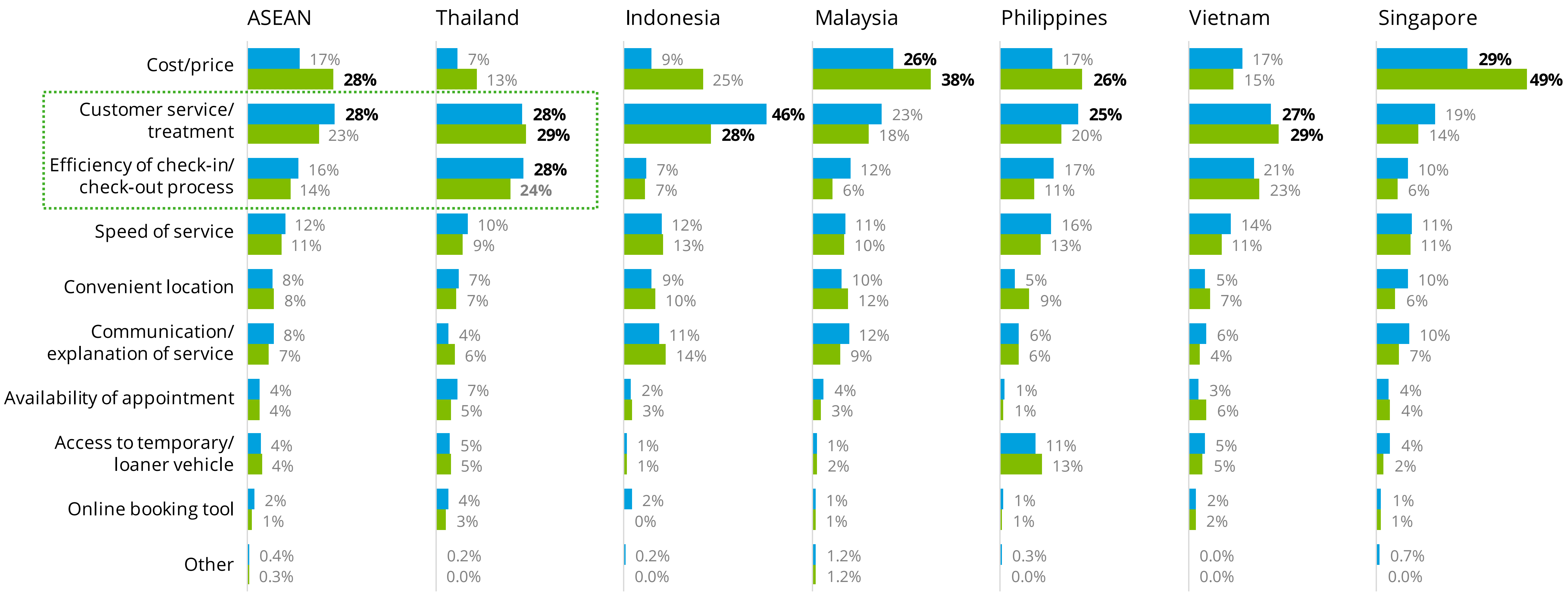
	Dealer					Aftermarket				
	Cost	Trust	Convenience	Quality of work	Customer experience	Cost	Trust	Convenience	Quality of work	Customer experience
Indonesia	4%	28%	13%	**44%**	10%	24%	24%	8%	**33%**	12%
Malaysia	11%	19%	11%	**46%**	10%	28%	15%	16%	**32%**	9%
Philippines	8%	22%	15%	**46%**	8%	24%	14%	19%	**33%**	10%
Singapore	16%	27%	9%	**36%**	11%	**38%**	13%	12%	28%	9%
Thailand	4%	**56%**	17%	7%	16%	26%	24%	**29%**	9%	12%
Vietnam	5%	**42%**	9%	34%	10%	10%	28%	15%	**43%**	4%

Primary reason for choice

Note: Sum of the percentages exceed 100% as respondents can select multiple options.
Q25. What is the most important reason for your preferred choice of vehicle service provider?
Sample size: n for dealer= 494 [Indonesia]; 594 [Malaysia]; 352 [Philippines]; 411 [Singapore]; 661 [Thailand]; 411 [Vietnam];
n for aftermarket= 118 [Indonesia]; 328 [Malaysia]; 193 [Philippines]; 185 [Singapore]; 151 [Thailand]; 370 [Vietnam]

When it comes to the service experience, customer service and cost/price rank as most important. For consumers in Thailand and Vietnam, check-in/out efficiency is more important than cost/price.

Most important aspect of the vehicle service experience (by preferred provider)



Note: "Other" reasons not shown for choosing a vehicle service provider.

Q26: What is the most important aspect of a vehicle service experience?
Sample size: n= 2,923 [Dealer] (TH = 661; ID = 494; PH = 352; VN = 411; MY = 594; SG = 411)
Sample size: n= 1,343 [Aftermarket] (TH = 151; ID = 118; PH = 193; VN = 370; MY = 326; SG = 185)

Preferred Features for a Vehicle Brand App

Most important features of a vehicle brand app

Features of vehicle brand app	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
Chat with a live agent	36%	29%	35%	20%	30%	28%
Make payments	34%	41%	48%	32%	44%	52%
Learn about vehicle features	**66%**	52%	**64%**	39%	40%	**53%**
Track service appointments	37%	56%	45%	43%	**49%**	41%
Track vehicle location	36%	36%	39%	30%	28%	41%
Build and price your next vehicle	26%	19%	23%	15%	22%	29%
Schedule service appointments	45%	**61%**	55%	**47%**	31%	31%
Locate a dealer	31%	27%	26%	16%	23%	30%
Purchase accessories	32%	29%	38%	22%	39%	43%
Remote start	28%	20%	22%	15%	22%	29%
Lock/unlock vehicle	36%	33%	39%	22%	22%	34%
View/redeem loyalty points	14%	25%	21%	21%	14%	28%
View and add features to enhance vehicle	34%	29%	40%	23%	29%	42%
View and add battery life	22%	33%	32%	28%	29%	29%
Search and pay for public vehicle charging access	25%	15%	19%	17%	19%	23%
Search and pay for public parking	14%	15%	16%	14%	8%	17%

Most commonly cited

Note: Sum of the percentages exceed 100% as respondents can select multiple options.
Q28. What are the most important features of a vehicle brand app? (Please select all that apply).
Sample size: n=629 [Indonesia]; 943 [Malaysia]; 581 [Philippines]; 609 [Singapore]; 844 [Thailand]; 795 [Vietnam]

4

Connectivity

Interest in Connected Vehicle Features

Level of consumer interest in connected vehicle features

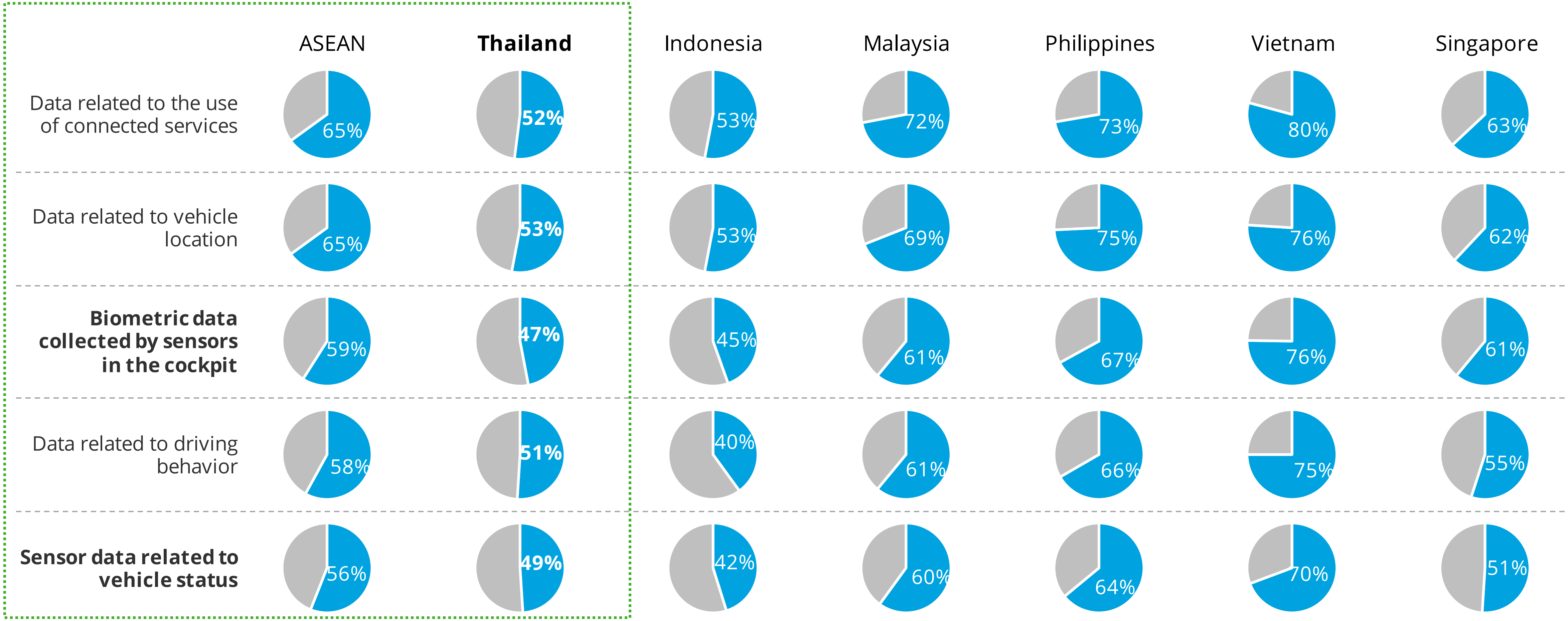
Connected vehicle features	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
Updates regarding traffic congestion and suggested alternate routes	83%	**77%**	80%	**71%**	83%	**89%**
Suggestions regarding safer routes (i.e., avoid unpaved roads)	77%	73%	81%	66%	84%	86%
Updates to improve road safety and prevent potential collisions	**87%**	**77%**	**82%**	67%	83%	**89%**
Customised/optimised vehicle insurance plan (e.g., "pay how you drive" plans)	74%	61%	70%	58%	80%	85%
Maintenance updates and vehicle health reporting/alerts	83%	**77%**	81%	70%	85%	88%
Maintenance cost forecasts based on your driving habits	79%	74%	76%	69%	84%	86%
Customised suggestions regarding ways to minimise service expenses	79%	71%	76%	65%	**86%**	84%
Over-the-air vehicle software updates that correct or improve your driving experience	76%	67%	74%	61%	80%	87%
Access to nearby parking (i.e., availability, booking, and payment)	74%	73%	75%	**71%**	79%	84%
Special offers regarding non-automotive products and services related to your journey or destination	66%	58%	67%	56%	81%	85%
Receiving a discount for access to a Wi-Fi connection in your vehicle	75%	61%	73%	58%	79%	79%

■ Most commonly cited (very/somewhat interested)

Note: Sum of the percentages exceed 100% as respondents can select multiple options.
Q55: How interested are you in the following benefits of a connected vehicle if it meant sharing your own personally identifying data and/or vehicle/operational data with the manufacturer or a third party?
Sample size: n=823 [Indonesia]; 932 [Malaysia]; 861 [Philippines]; 764 [Singapore]; 967 [Thailand]; 917 [Vietnam]

Southeast Asia consumers generally have concern if data related to connected services usage and vehicle's location is shared. Among all, Vietnam has highest number of consumers who are concerned with data sharing.

Percentage of consumers concerned by sharing data with vehicle manufacturer, dealer, insurance company, and/or other third parties

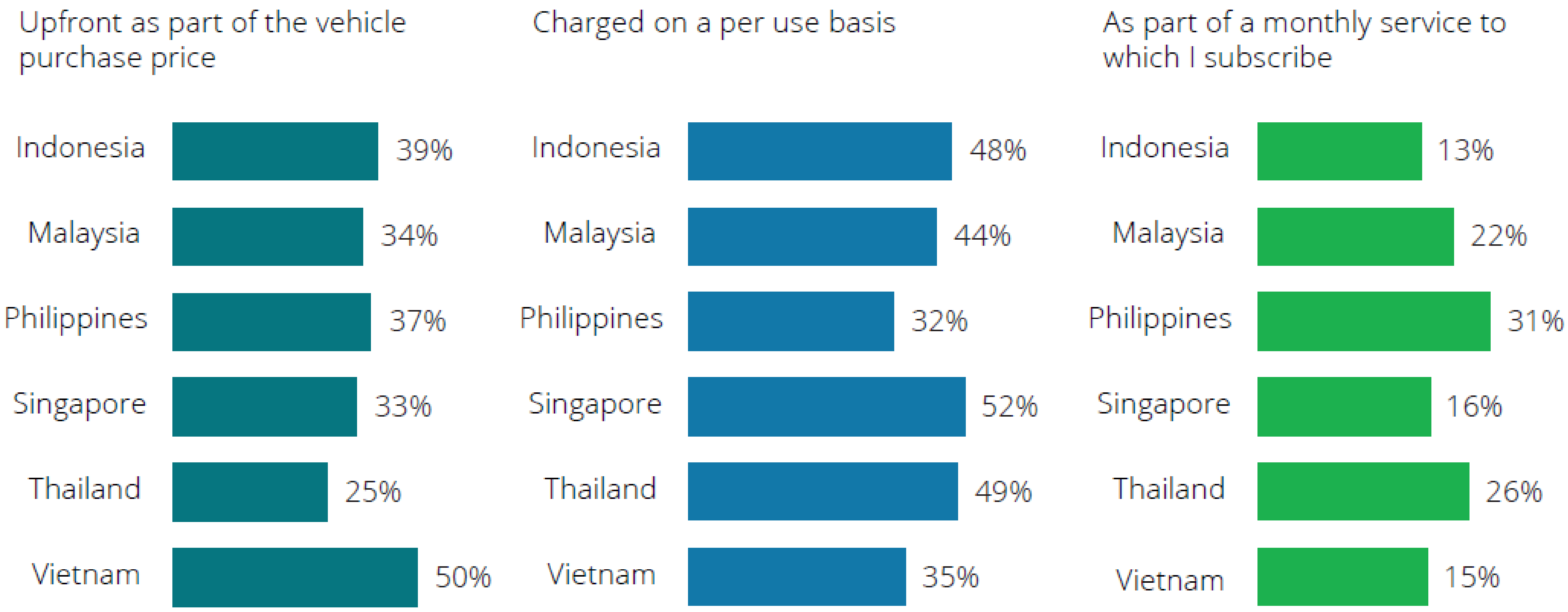


Q56: As vehicles become more and more connected to the internet, how concerned would you be if the following types of data were shared with your vehicle manufacturer, dealer, insurance company and/or other third parties?

Sample size: n= 4,894 (TH = 967; ID = 674; PH = 739; VN = 818; MY = 932; SG = 764)

Preferred Payment Arrangements for Connected Vehicle Services

Preferred ways to pay for additional connectivity technologies



Q58: How would you prefer to pay for additional connectivity technologies in your vehicle?
Sample size: n=823 [Indonesia]; 932 [Malaysia]; 861 [Philippines]; 764 [Singapore]; 967 [Thailand]; 917 [Vietnam]

สรุป

1.	Vehicle electrification	พาหนะที่ใช้เครื่องยนต์สันดาปภายในยังคงเป็นทางเลือกหลักของภูมิภาคเอเซียตะวันออกเฉียงใต้ 31% ของคนไทยคิดว่าจะเลือก BEV เป็นพาหนะคันต่อไป นับเป็นสัดส่วนสูงที่สุดในภูมิภาคเอเซียตะวันออกเฉียงใต้ เหตุผลสำคัญที่สุดของคนไทยและภูมิภาคคือต้องการลดรายจ่ายด้านราคาเชื้อเพลิง สำหรับผู้ที่เลือกจะใช้ BEV เป็นคันต่อไป ความกังวลเกี่ยวกับสถานี Charge สาธารณะเป็นอันดับสูงสุดของคนไทยและภูมิภาค โดยที่ Charge ที่สร้างเฉพาะสำหรับ BEV เป็นตัวเลือกอันดับ 1 และ รับได้กับการรอระหว่าง 10-60 นาที และ ระยะที่รับได้ของคนไทยอยู่ในช่วง 400KM +-
2.	Future vehicle intentions	คนไทยและภูมิภาค SEA ระบุว่า อยากได้รถมือหนึ่งเป็นรถคันต่อไป โดยคนไทยจะตัดสินใจเลือกซื้อรถคันต่อไปจากจากคุณภาพผลิตภัณฑ์ ระบบการทำงาน (Features) และ ภาพลักษณ์ของ Brand
3.	Vehicle brand and service experience	Dealer ยังคงเป็นทางเลือกที่ผู้บริโภคให้ความไว้วางใจมากที่สุดโดยเฉพาะกับรถมือหนึ่ง แต่ก็มีช่องทางสำหรับศูนย์บริการ After Market ในกลุ่มลูกค้ารถมือสองที่ตอบโจทย์ด้านราคา และ ความสะดวกสบายมากกว่า
4.	Connectivity	กลุ่มตัวอย่างลูกค้าคนไทยเปิดใจที่จะอนุญาตให้รถเชื่อมต่อเพื่อแลกเปลี่ยนข้อมูลมากกว่าภูมิภาค โดยคาดหวังประโยชน์ด้านการซ่อมบำรุง การประเมินค่าบำรุงจากนิสัยการขับขี่ และ การแนะนำเส้นทางขับที่ปลอดภัย มีคำแนะนำที่เฉพาะสำหรับการลดค่าซ่อม ข้อมูลที่คนไทยยอมรับได้ในการให้รถแลกเปลี่ยนกับการเชื่อมต่อ ได้แก่ Biometric Data และ Sensor ต่าง ๆ ของตัวรถ หากต้องมีการจ่ายค่าบริการเสริมอื่น ๆ เพื่อการเชื่อมต่อ คนไทยและคนส่วนใหญ่ของภูมิภาคเอเซียตะวันออกเฉียงเลือกที่จะจ่ายตามจริงสูงที่สุดเมื่อเทียบกับการจ่ายครั้งเดียว หรือ จ่ายรายเดือน

Business opportunities

		Auto			Non-Auto			
		OEM	Dealers	After Market	Consumer Businesses	Energy, Resources & Industrials	Financial Services	Technology, Media & Telecommunications
1.	Vehicle electrification	✓			✓	✓		✓
2.	Future vehicle intentions	✓	✓				✓	
3.	Vehicle brand and service experience	✓	✓	✓			✓	✓
4.	Connectivity	✓	✓					✓

Deloitte.

Contacts

Mongkol Somphol
Auto Sector Leader
Deloitte Thailand
msomphol@deloitte.com

Chodok Panyavaranant, Ph.D.,
Clients & Markets Manager
Deloitte Thailand
cpanyavaranant@deloitte.com