Facultad de Ciencias Económicas y Empresariales
ICADE

INFLUENCING URBAN MOBILITY: EXPLORING E-SCOOTER STRATEGIESAND CONSUMER PERCEPTIONS ON INSTAGRAM, TRABAJO FIN DE GRADO

Autor: Evelyn Mary Keane
Director: Victoria Labajo Gonzalez

MADRID | Junio 2025

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Abstract

This study explores how leading e-scooter companies, Tier, Dott, and Lime, use Instagram to shape public perception and user behaviour, with a focus on safety, sustainability, and lifestyle branding. Through qualitative and quantitative content analysis of Instagram posts from September 2023 to October 2024, the research identifies the key narratives and visual strategies employed by these companies to engage urban users aged 18 to 35. While e-scooters are often promoted as convenient, eco-friendly alternatives for urban transport, this research finds that safety messaging is significantly underrepresented. Helmet use, adherence to traffic regulations, and responsible riding are rarely depicted. Instead, brand content typically centres on aspirational imagery and carefree urban mobility.

The study categorises posts by tone, character representation, and safety indicators, revealing that all three brands prioritise emotional appeal and lifestyle association over educational or precautionary messaging. Tier positions itself as eco-conscious and efficient, Dott emphasizes technology and community, while Lime focuses on dynamic, youth-oriented storytelling. The absence of safety narratives suggests a deliberate branding choice, potentially influencing rider behaviour and public attitudes toward risk.

This research contributes to the growing body of literature on micromobility by examining social media marketing as a powerful and underregulated force shaping urban mobility norms. It calls for greater ethical responsibility from brands and encourages regulators to integrate safety requirements into digital advertising. The findings aim to inform marketers, urban planners, and policymakers about the socio-cultural impact of e-scooter promotion and support the development of safer, more transparent communication strategies.

Keywords: E-Scooter companies, Instagram marketing, Public perception, User behaviour, Safety Messaging, Sustainability, Lifestyle branding, Urban mobility, Micromobility, Content analysis.

Chapter I: Introduction

1.1 PURPOSE AND CONTEXT

My goal in my research is to analyze and critically review the utilization of Instagram by market-leading e-scooter companies Tier, Dott, and Lime as an instrument to modify the attitudes and behaviors of electric scooter users, while building public opinion towards these personal mobility vehicles. I focus particularly on how the brands tackle issues of safety, sustainability, and lifestyle branding through visual and textual content. Employing a qualitative content analysis of 13 months' worth of Instagram posts, I analyze the rate at which safety is discussed or witnessed, what language and tone are employed, and how engagement is established with the target groups across the media types. The time frame of posts that I have studied begins in September 2023 and ends in October 2024. The geographical scope of this study can be considered international as the platform is engaged with by users all over the world.

The incentive for performing this research is generated from the recognition of an obvious disparity between what e-scooters are promoted as on the internet and true concerns being placed on using them, specifically within city surroundings. Although such entities prefer to make mention of convenience, environment friendliness, and the joy of riding upon an e-scooter, safety risks are never discussed nor advocated for in encouraging safe traffic habits (Allem & Majmundar, 2018; Dormanesh, et al., 2020). I would like to know whether this failure of safety messaging is an unintentional mistake or a deliberate choice in order to remain faithful to the free-spirited brand image. I feel that making this determination will aid in a greater comprehension of how social media is being used to create one-way messaging with the ability to influence the behavior of the riders and opinions of the public.

I apply a framework of predefined variables structured into three dimensions within my analysis. The first one is tone and messaging support: that is, whether it is a photo or reel, whether it is for information, persuasion, or for storytelling purposes, and on what benefit it focuses, like environmental sensitivity, convenience, or enjoyment. The second element takes into account the representation of character, i.e., how many people are depicted, in what age group they are, and whether children are included. The third and most significant element looks at how firms report prevention and safety, measuring the incidence of helmets, reflective gear, and other protection.

In comparison with one another's handling of these issues, I aim to highlight similarities and main differences in their marketing practices. Tier, for example, is more serious and eco-centric in tone, while Lime concentrates on lifestyle branding and youth market outreach through storytelling. Dott positions itself as tech-centric and sustainable. Acknowledging the differences allows me to make an inference about how each brand seeks to engage specific

consumer values and avoid messaging that could lower appeal.

My study also has practical intent. I hope to provide recommendations and observations that might encourage more responsible social media promotion for the micromobility industry. I believe that adding safety messaging does not have to be in conflict with brand identity, it can actually help to build greater consumer confidence and prove social responsibility. As e-scooters become a more ubiquitous sight in cities worldwide, marketing campaigns need to more fairly reflect not only the benefits but also the risks of their use.

Ultimately, my research draws on a developing argument about social media marketing as a site of power and agency with respect to public opinion, specifically towards emerging modes of transportation. By focusing on the ways Tier, Dott, and Lime interact with their audience through image and rhetoric, I aim to illuminate the ethical responsibilities involved in promoting lifestyle commodities that directly interface with public infrastructure, conduct, and safety.

My research is part of the broader history of changing trends in urban transportation, where e-scooters have quickly become popular for their inexpensive, convenient, and sustainable means of mobility. Such popularity is in an even broader trend toward micromobility options, like bike-sharing, scooter-sharing, and electric modes, that could do away with city maladies like traffic congestion, emissions, and last-mile transportation gaps (Krusade Scooters, 2024). I chose to write about this topic because I believe e-scooters are not only a convenient technology but also a cultural phenomenon, especially among young urban groups.

However, the sudden growth of e-scooter use has also created new challenges, especially regarding safety, regulation, and public perception. In the majority of cities, infrastructure has been behind e-scooter deployment, and legal frameworks are extremely heterogeneous. While e-scooters have been welcomed by some cities as a green city mobility option, others have complained about accidents, pedestrian blockage, and reckless riding practices. These problems come into stark focus where firms still pitch e-scooters mainly on the basis of uplifting and riskless stories, normally avoiding any mention of the safety issues that have been raised (McRae & Shaw, 2024).

This is where Instagram, the site I selected for my analysis, comes into particular significance. As a visually oriented, engagement-focused site with a strong popularity among the 18–35 age range, Instagram enables brands to build powerful emotional connections through carefully crafted imagery and narrative. Tier, Dott, and Lime leverage this site not just to promote their services but to build aspirational lifestyles around their products (Two99 LinkedIn, 2025) This kind of lifestyle branding can work but it also risks covering over the more somber responsibilities that are involved in riding e-scooters through populated public spaces.

The period of my research, between late September 2023 and late October 2024, was selected to allow for a wide enough timespan to be able to take in several seasons, marketing promotions, and changes in strategy, as well. For example, in October 2024, Tier announced its merger with Dott in a manner as to have immediate bearing on branding and marketing tone. Content throughout this time would be a chance to see some transformation in how companies

respond to the conditions, trends, and perhaps even the public reaction.

In addition to examining Instagram posts, I also used existing academic literature that criticizes social media promotion of micromobility. Several previous studies note that safety is always underemphasized in promotional campaigns, and I wanted to see if this was still true today (Dormanesh, Majmundar, & Allem, 2020). I was also influenced by broader debates surrounding the morality of online marketing and the responsibility of technology-driven businesses to be honest and transparent in how they show their products to consumers.

What is so interesting in this context is how e-scooters intersect with generational trends. For example, my research overlaps with the "kidult" trend, where adults adopt products constructed around youth culture for fun and convenience, and younger users' increasing independence of using privately owned scooters, often outside the age boundaries established by shared schemes. These trends highlight the marketing role in determining who e-scooters are "for," and what kind of user behavior is normalized (Bernardini, 2014; Useche et al. 2022).

Situating my analysis within this vibrant and multifaceted context, I intend to show not only how marketing shapes perception but also how it intersects with broader questions of urban design, mobility justice, and technology responsibility. I intend to spark a conversation that balances innovation against safety, style against substance, and commercial success against public health.

1.2 OBJECTIVES

My key aim is to examine how leading e-scooter companies, Tier, Dott, and Lime, construct their brand messages on Instagram and how these messages influence public attitudes towards safety, environmental issues, and city life. My study has four primary objectives. First, it analyzes Instagram brand safety communications, examining visible safety signs (e.g., helmet use), safety messaging, and educational content, while questioning if safety is genuinely a concern or just a façade. Second, it explores how e-scooters are branded as environmentally friendly in urban contexts, assessing how sustainability narratives resonate with city dwellers.

Third, the study examines user profiles in posts, analyzing age, appearance, and behavior to understand how identity, lifestyle, and risk are portrayed, highlighting the contrast between childlike freedom and adult responsibility. Finally, it investigates how e-scooter usage is emotionally framed, whether it is shown as efficient commuting or playful leisure, and considers how these portrayals shape public perceptions, user behavior, and the cultural meaning of micromobility.

Collectively, these objectives guide a research effort that reveals not only what is depicted in advertising but also what is omitted, how it is presented, and the social narratives it creates. My goal is to provide a deeper understanding of how advertising influences behavior and social norms, and to assess the responsibility associated with promoting mobility technologies.

I believe this research is necessary because it offers insights into how e-scooter brands use

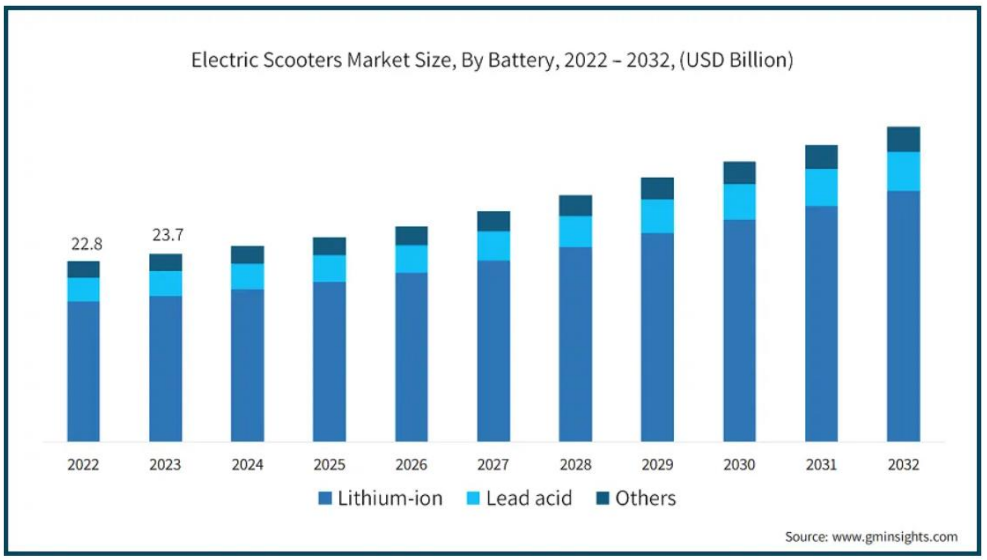
Instagram to influence perceptions of safety, sustainability, and urban life. It is intended to benefit researchers, policymakers, city planners, public safety advocates, and marketing professionals. By highlighting what companies choose to include and omit, I hope to encourage ethical discussions on marketing mobility technologies and their impact on consumer behavior.

1.3 JUSTIFICATION

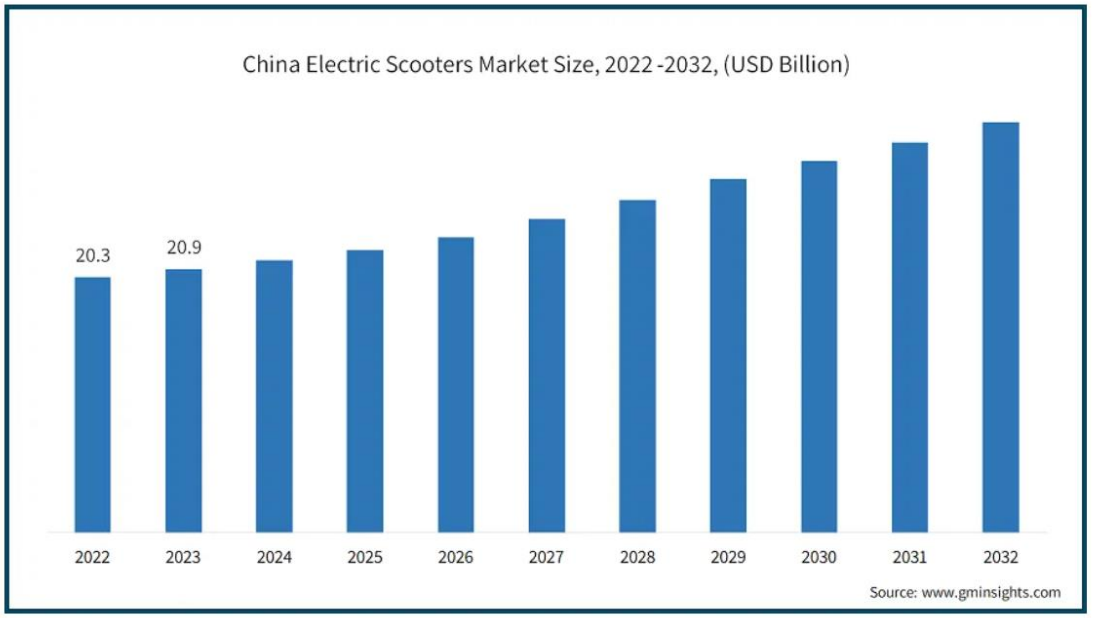
The justification for my research stems from the intersection of some important academic, practical, and ethical concerns regarding the rise of e-scooters as a leading urban micromobility trend. While these vehicles have found widespread use in urban cities everywhere for being environmentally friendly in addition to being easy to use, the disparity between their advertising, especially on visual platforms like Instagram, and practical use in crowded, disorganized, and also dangerous urban regions is huge. My research hopes to cover this gap by performing a close content analysis of how three of the largest e-scooter companies, Tier, Dott, and Lime, present themselves and their product on Instagram. This platform is particularly well-suited, as it is not merely widely used by the target group of e-scooter users (18–35 years old) but also structured around visual storytelling, lifestyle brand-building, and emotional attachment, all of which are inherent in the way public opinion is being built.

One of the reasons I have chosen to carry out this study is the social relevance of the -scooter phenomenon. There has been huge growth in recent years. Phenomenal statistics put voice behind the increasing popularity of e-scooters in the recent past. In fact, the worldwide e-scooter market was valued at $23.7 billion in 2023 and is expected to grow at a valid compound annual growth rate (CAGR) of more than 6% from 2024 to 2032 due to urbanization and sustained demand for eco-friendly transport. It is estimated that from $19.43 billion in 2024, the size of the market will grow to $50.15 billion by 2032, at a CAGR of 12.6% over the period (Global Market Insights Inc., 2024)

Electric Scooters Market Analysis



The e-scooter sharing market is forecast to grow - from $1.82 billion in 2025 to $7.10 billion in 2033 (Straits Research, 2025). Regionally, Asia-Pacific dominated the market with 83.08% of total global shares in 2023. This means that there was an extremely high adoption in both China and India while Europe and North America also had improvements made possible through shared mobility platforms (Global Market Insights Inc., 2024).



Strong green consciousness among users encouraged such adoption; Government incentives further fuel adoption; Increasing Costs of Fuels bring mounds of Traffic Congestion on city

roads, making e-scooters very fiscally feasible for short-distance trips. Newer technologies, such as long-lasting batteries and network inter-connectivity among charging networks, create added attraction about e-bikes (Gosavi, 2024). Safety and regulatory issues are held as hot-button topics, but are seen to spur innovation in safety features and regulatory compliance. All in all, e-scooters can emerge as the most common public mode of urban transport and become increasingly accepted for the convenience, comfort, and eco-friendliness with which they can provide.

One of the key parts of the justification is structuring and justification of the data I've collected and examined. In designing the spreadsheet underpinning this research, I have selected variables along with three concepts that are vital: support and tone, character representation, and safety and prevention. They are not haphazardly selected dimensions but are the necessary elements of how Instagram posts work visually as well as rhetorically. The tone and support dimension determines whether the post is presented as a picture or a reel, the narrative style it employs (such as whether it is informative, persuasive, or story-telling), the kind of benefits being sold (such as environmental conservation, convenience, or enjoyment), and the language style. This array of variables allows me to observe and quantify the marketing strategies every brand employs in creating its identity and securing its engagement.

The second dimension, character representation, examines who shows up in these posts, e.g., whether single or together, what their perceived age is, and if children are represented. This enables me to ascertain the implied or explicit targeting of specific groups and how e-scooter usage is normalized for them. The final dimension, safety and prevention, is most relevant to the overall aim of my research. It includes whether helmet use is modeled, whether reflective or high-visibility elements are visible, and whether any safety practices are promoted or graphically depicted. This provides an empirical way of measuring how much each firm incorporates safety messaging into its brand.

The value of this dataset is that it can convert visual and narrative data, traditionally handled as qualitative or anecdotal, into formal, commensurable units of analysis. In this way, I am able to transcend surface-level impressions and offer empirical evidence of patterns, gaps, and differences among the three brands. This enables a more objective and academic contribution to a field that is still in its infancy at the crossroads of marketing, technology, and urban mobility. My study builds on existing research that has considered safety within micromobility more generally, but none if any have considered the branding strategy adopted by e-scooter companies on Instagram. Even fewer have constructed a detailed content taxonomy to facilitate brand comparison and longitudinal comparison.

My study also touches on an urgent ethical issue. With e-scooters now increasingly found in

cities, their use raises grave safety issues, many of which are not being satisfactorily addressed either by public information campaigns or by the companies themselves (Isin-Wheel, 2024) e-scooter accidents are on the rise in most large city centre areas, with again the operating companies presenting what they provide using imagery that does not mention safety at all. By not ruling out helmets, ignoring road signs and conventions, and merely presenting what it is like to travel on what they provide as free and easy, operating companies could be inadvertently, and perhaps deliberately, encouraging dangerous behavior from their users. On this front, my research not only becomes intellectually justified but socially necessary. It aims to place the onus on brands to be responsible for the visual and rhetorical choices they undertake and also to set foundations for more ethical marketing practices.

In conducting this study, I aim to fill a significant and under-researched gap in current micromobility studies: the relationship between online advertising, particularly on social media platforms like Instagram, and attitudes and behaviors towards safety among users. Although there is a growing body of literature addressing the rapid proliferation of e-scooters, the policy concerns they pose, and the public health implications of their use, few have considered how the services are marketed and, more narrowly, how marketing influences public opinion. Much fewer studies have studied the absence of safety messaging within e-scooter advertising or the implications of this absence on rider behavior and city regulation.

Research literature reviewed portrays the complex social, infrastructural, and regulatory effects of e-scooters on urban life. A paper by Kim et al. (2023) demonstrates how e-scooters have become part of meeting last-mile transport needs while also raising issues of safety, regulation, and infrastructure. This is complemented by Hollingsworth (2019) and Shaheen and Chan (2016), who not only identify the role of e-scooters in sustainable transportation but also environmental impacts and challenges in integrating them in existing transit systems. Schneeweiss et al. (2021) and Hardt (2019) further remark on safety risks, identifying increased risk of injury and seasonal variation in the use of e-scooters. Research by Morgan et al. (2022) and Davis (2023) explains the asymmetrical regulatory responses within cities, emphasizing the paradox between innovation and safety.

On the sociocultural level, Bernardini (2014) deals with the phenomenon of adultization of children and infantilization of adults, which is represented in how adults embrace e-scooters as a frivolous, low-investment means of transport while simultaneously offering children an early model of autonomy. Useche et al. (2022) provide proof of population patterns, which demonstrate that young, urban, educated males dominate the use of e-scooters, with females often citing safety concerns as a barrier. Pourfalatoun et al. (2023) and Sievert et al. (2023) also demonstrate that private versus shared use impacts safety behavior, with private riders being more risk-averse. Issues of perceived rider safety are echoed by Morgan et al. (2022) and Dormanesh et al. (2020), as they demonstrate the way marketing defers concern over safety to

appeal to fun and convenience. Public sentiment, often ill- disposed towards the disruption of scooters in urban spaces, is outlined in publications by Kantar (2020) and Davis (2023), with Cohen (2020) and Gibson et al. (2020) highlighting broader social justice and accessibility issues.

Most useful to my thesis is the work by Dormanesh et al. (2020), which examined critically the promotional campaigns of large e-scooter operators on Twitter and Instagram. Their findings are that only 9.1% of the posts featured helmet wearing, with operators predominantly representing e-scooters as liberating, enjoyable, and eco-friendly means of getting about, and eschewing largely safety messages. However, while Dormanesh et al. (2020) establish that safety is not represented enough, they fail to closely explore how these companies visually and narratively portray their brand identity on platforms like Instagram or compare across firms like Tier, Dott, and Lime.

This lack of information highlights the gap addressed by my research. While literature recognizes that the marketing of e-scooter companies promotes lifestyle over safety (Dormanesh et al., 2020; Useche et al., 2022), systematic examination of the precise visual and textual strategies used on Instagram to shape consumers' attitudes is scant. In addition, there is no comparison of how the images of various companies differ, or how these images connect with wider public issues regarding safety, city disruption, and social responsibility (Gibson et al., 2020; Morgan et al., 2022; Kantar, 2020). My research will therefore fill this gap by conducting a focused content analysis of Instagram posts by Tier, Dott, and Lime, offering new insight into how e-scooter companies construct their brand identities and communicate values, lifestyles, and risk narratives to their publics.

The selection of this subject is on the basis of a combination of personal, educational, and professional interests. On a personal level, the increase in the number of e-scooters on city streets and their promotion on social media sites, especially Instagram, caught my attention (Osgood, 2024). As a social media user and keen observer of urban mobility trends, I found myself wondering how corporations shape public opinion through careful curation of the image of their services on the internet. This led me to challenge the interaction between corporate communications policies, user cultures, and broader public concerns over safety, regulation, and urban space use.

Institutionally, the project aligns with current academic interest in the intersections of media, technology, and urban life. The topic contributes to research threads that critically examine how digital advertising configures consumer culture and public discourse of new technologies. Throughout my studies, the emphasis on synthesizing media analysis with contemporary social issues compelled me to consider how companies not only market a service but contribute to the

development of new urban ways of life through storytelling on social media. With an emphasis on content posted on Instagram, the project also aligns with institutional emphases on media literacy and critical reading of digital communication (Two99 LinkedIn, 2025).

At the professional level, the ability to analyze corporate brand strategies on social media becomes more valuable. Understanding how firms build and project their identities—and especially in new, developing areas like micromobility, will be key to a career in media, marketing, urban policy, and consultancy. Lastly, e-scooter firms fall at the intersection of technology, urbanization, and life branding, giving us a great case study rich with rich applied practice. Developing knowledge of their Instagram marketing strategies therefore provides me with analytical competencies transferable to future careers in media analysis, communications planning, or sustainable urban development-related work (Selby, 2024).

Wider still, the intersection of personal interest, institutional research agendas, and professional application of media analysis in urban industries today informed my decision to study how e-scooter companies represent their products on Instagram.

My research is based on the premise that social media platforms are not value-free forms of communication; rather, they are powerful sites wherein ideas, identities, and actions are made up of highly mediated visual and textual content. These brands are not merely advertising a product, commercializing a lifestyle. They do this by associating e-scooters with freedom, sustainability, and worldwide urbanity through imagery. The messages are often aspirational, urging users to imagine themselves as part of a liberal, mobile, and forward-thinking community. But at the same time, such messages skim or avoid entirely the realities and legality of e-scooter operation. Wearing a helmet is rarely shown, traffic rules are not obeyed, and there is no counsel regarding how to ride safely through built-up districts. My research demonstrates that this is not an isolated slip-up, it is a recurring and pervading trend that involves pressing concerns regarding corporate responsibility and public safety.

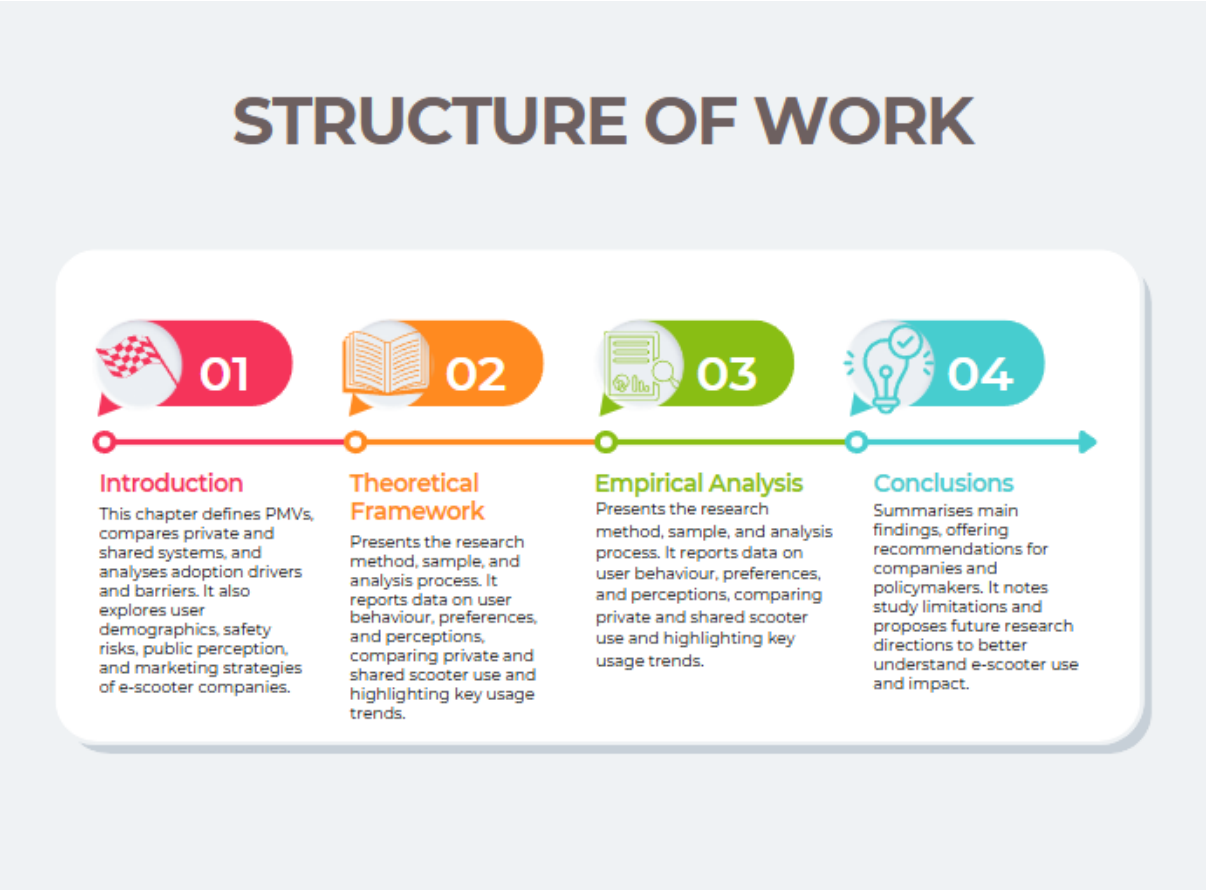
We already have proof elsewhere in public health and marketing research that visual communication can have a powerful impact on consumer behaviour, something that makes the gap in research here concerning. In just the same way that promotion of tobacco used to make smoking seem normal, or as promotion of alcohol and fast food affects eating behaviour, so micro mobility promotion can influence the way people respond to and think about risk. By presenting e-scooters as cool, fun, and safe, companies may be cultivating a culture where safety is perceived as uncool or undesirable. An absence of safety messaging may lead users, particularly young or inexperienced ones, to downplay the dangers of riding on roads, to skip helmet use, or to ignore legal restrictions on where and how to ride e-scooters (Dormanesh et al., 2020).

This dynamic is especially worth investigating considering the demographic most active on Instagram, young adults between the ages of 18 and 35, is also the demographic most likely to ride e-scooters. If these consumers are being targeted by businesses with marketing campaigns that explicitly exclude any reference to safety, then there is a real risk that real-world behaviour will mirror the stories being built on the internet (Fyhri et al., 2023). My study substantiates this connection by analyzing the material in a rigorous manner and ascertaining omission and emphasis patterns, and cross-brand strategy comparison.

E-scooter accidents have grown exponentially in recent years, with serious safety issues. In the United States alone, e-scooter injuries rose 22% between 2021 and 2022 with an estimated 50,000 emergency department visits in 2022 compared to slightly more than 40,000 in the prior year (Fyhri et al., 2023; Easton, 2024). There were approximately 190,000 reported e-scooter crashes between 2017 and 2022, growing injuries every year from 8,566 in 2017 to 56,847 in 2022 (Fernandez, 2025). There were 1,352 reported e-scooter crashes that had taken place between June 2021 and June 2022 in the United Kingdom alone, with 1,434 reported casualties and 11 reported fatalities and over 250 serious injuries.(E-scooters: Crash statistics reveal 1,349 collisions, 2025) Globally, unsafe riding modes such as single-handing and off-lane riding have been identified as the biggest culprit of such an accident, motor vehicle intersections being the most risk-prone points or pedestrian-motor vehicle collisions. These numbers validate the cause for which an urgent need to have stricter security features and guarded marketing practices should exist to curb the growing perils of the use of e-scooters (Chalmers University of Technology, 2025).

In responding to this research requirement, I also respond to a more general debate about the governance and accommodation of new technologies in the public sphere. Social media marketing is typically thought to be either a private or commercial sphere, but within the micromobility model, it takes form as a matter of public health. E-scooters are not merely lifestyle products, they are motorized transportation used in public space, and their promotion must be held to higher standards. I believe that my research is not only contributing to academic knowledge but also offering knowledge that could assist in informing more ethical marketing, smarter regulation, and better public education. By showing that the absence of safety messaging is not just an omission but rather an active brand choice, I hope to prod both companies and policymakers to be more considerate of the messages that are being conveyed to the public and their collective impact on urban mobility over the long haul.

1.4 STRUCTURE OF WORK



Chapter II: Theoretical Framework

2. LITERATURE REVIEW 'CONCEPTUAL BACKGROUND'

Literature for the study was obtained using a combination of academic and non-academic sources in preparing an extensive overview of the topic. Academic sources were obtained through performing Google Scholar, EBSCOhost, and JSTOR searches. The search terms "e-scooter safety," "micromobility regulation," "shared mobility," "urban transport infrastructure," "e-scooter marketing," and "rider behaviour" were used in searching for appropriate studies. Peer-reviewed journal articles and conference articles that were published in English from 2012-2025 were given preference. Non-peer-reviewed sources like consulting firm reports, industry reports, government reports, company websites, and blogs specific to the subject matter were also looked up to see the trend of the current market and people's attitude. Sources were selected according to their applicability to the goals of the study with primary importance given to safety, regulatory issues, marketing strategy, and socio-cultural impacts of e-scooters. This combination of secondary and scholarly sources ensures that the literature review will include both state-of-the-practice industry phenomena and theoretical constructs.

2.1 DEFINITION AND CHARACTERISTICS OF PERSONAL MOBILITY VEHICLES (PMV´S)

E- scooters have emerged as a transformative trend in urban transportation, offering convenience, affordability, and sustainability for short-distance commuting. Cities worldwide are adopting green mobility solutions, and e-scooters can be found everywhere, providing an alternative to conventional means of getting from point A to point B. E-scooters are a relatively new and increasingly relevant component of urban transportation systems. They have been praised for their sustainable value and their promise of contributing to "last-mile" solutions. Generally, two main types of e-scooters exist: privately owned and shared fleet models run by companies like Dott, Lime, and Tier Mobility. Their adoption is studded with grave concerns, nevertheless, touching on safety, infrastructure, regulation, and social acceptance. This review consolidates literature on the growing popularity of personal mobility vehicles (PMVs) like e-scooters, their social-cultural significance, determinants of risk, attitudes of riders, and regulatory issues (Kim et al., 2023). Through a combination of findings from various studies, this review provides an overview of e-scooters as a new urban transportation phenomenon.

E-scooters have changed transport patterns in urban cities, not just changing individual commuter behavior but also having an impact on general trends in infrastructure design. The shift towards micromobility options, including e-scooters, has been a massive change in how urban residents move around their environment. Their adoption is not issue-free, and policymakers, urban planners, and the private sector must collaborate to fully harness their benefits while minimizing downsides (Hollingsworth, 2019).

E-scooters solve the "last mile" problem—short trips too far to walk but impractical to drive. They provide a handy, affordable, and eco-friendly substitute for private vehicles and taxis (Schneeweiss et al., 2021). Integrated into public transportation networks through mobile applications, they enhance urban mobility by adding greater spontaneity and accessibility (Shaheen, 2016). Their rise reflects a growing demand for flexible, efficient transport solutions.

2.2 PRIVATE VS SHARED SCOOTER SYSTEMS

Private owners, to a greater degree, could give more attention to the safety rules and invest in protection means due to understanding the long-term risks of reckless riding. E-scooter adoption has also demonstrated gendered disparities, with men being more likely to use e-scooters as a means of transport than women, who identify safety concerns as the major barrier to adoption.

2.3 EMERGENCE OF E-SCOOTERS

2.3.1 Factors That Encouraged Adoption

The advantages of e-scooters are not only to do with convenience. They have also been instrumental in freeing up congested urban streets, particularly in populated cities where traffic congestion has remained a continuous challenge. Through offering a means of transport that not only comes in compact dimensions but is also agile, e-scooters are enabling effective utilization of roads and sidewalks (Hardt, 2019). This indicates that they are likely to reduce traffic congestion and enable more efficient flows of urban mobility.

Where public transport networks are congested in cities, e-scooters have filled the gap by providing a transport solution that is neither route-constrained nor schedule-constrained. The liberty they provide to users is part of the reason why they have been so readily adopted by commuters who want a more flexible transport solution. Another is the fact that e-scooters are affordable, which makes them a viable option for commuters who are on a low income. Relative to car ownership or ride-sharing services, e-scooters offer an affordable option for individuals who must make frequent short trips without breaking the bank. This depicts their attractiveness as an affordable and flexible transportation alternative for urban residents.

2.3.2 Barriers to Adoption

In spite of these advantages, e-scooters have necessitated a reimagining of urban transport infrastructure. Cities have been forced to alter roads, build special lanes, and designate parking spaces to provide for e-scooter riders with pedestrian safety in mind. Some city governments have instituted speed limits and restrictions on operations, weighing accessibility alongside safety concerns (Morgan et al., 2022). Even so, regulations remain uneven, with some cities like Berlin embracing flexible regulation, while others like Paris mandatorily require operators to be licensed (Kantar, 2020). The differing regulatory approaches reflect the broader argument

about how to balance the benefits of e-scooters against the risks of their use. This implies the ongoing need for regulatory approaches to trade off issues of accessibility vs. safety.

Some cities have gone the route of outright bans, whereas others have attempted to incorporate e-scooters into public transit infrastructure. The regulatory patchwork creates challenges, as well as opportunities, for adaptive policymaking to differing levels of acceptance and adoption across jurisdictions (Davis, 2023). This requires adaptive policymaking that is attuned to the particular requirements and levels of acceptance of individual regions.

The swift exponential growth of e-scooter sharing programs has helped create the regulatory challenges, with cities struggling to cope with the increase in usage and resultant demand for infrastructural growth. The popularity of micromobility among the public continues to grow, putting policymakers under pressure to adopt e-scooters but responding to safety issues and urban planning concerns. This need has spurred the creation of new public-private partnerships that look toward a more integrated approach to micromobility, in which cities can work in concert with e-scooter companies to enhance infrastructure and safety standards. These have involved reengineering bike lanes to accommodate e-scooters, expanding docking stations to avoid improper parking, and creating universal safety standards to manage accidents and abuse. They indicate the changing place of e-scooters within cities, demonstrating the necessity for sustainable, highly regulated, and well-accepted policies (Litman, 2021). This shows the significance of public-private collaboration in the development of highly regulated and sustainable micromobility.

2.4 INFANTILISATION OF ADULTS AND ADULTIZATION OF CHILDREN

The increasing popularity in e-scooters, is not only transforming how urban transportation systems are designed but it also signifies two larger social phenomena: juvenile adults and children grown too fast. It can be said that within the spheres of culture in effect today, there is prevalence of ‘youthism’ among many adult people (Bernardini, 2014). This phenomenon, often described as “kidult” culture, finds expression in adults’ preference for playful, nontraditional modes of transportation like e-scooters. Unlike cars or public transportation, which are typically seen as serious or responsibility-laden modes of transport, e-scooters offer a novel, low-commitment, and enjoyable way for adults to navigate urban spaces. Many riders are drawn to e-scooters for the liberty and sense of spontaneity they offer, enabling users to zip through city streets carefreely. In many ways, e-scooters line up with the changing values of modern society, where work-life balance and fun living are prioritised, allowing individuals to bring moments of joy into otherwise unexciting journeys.

There has been a cultural change happening to adults where there is an inclination towards play, and on the children where they have become ‘adultized’, since the contemporary youth are exposed to more responsibilities as well an adult-like independence. Mobility appliances like e-scooters, for instance, are offered to kids, giving them a sense of control over their movements without close supervision from adults. While users of most rental schemes may be required to be over eighteen years, younger people, through the availability of private scooters, can lay

their hands on these vehicles and use them for short trips within their areas or to go to school. This early exposure to independence introduces children to certain aspects of adulthood earlier in life, teaching them to manage transportation decisions and responsibilities. However, this change can also introduce risks, as children may lack the maturity, judgement, or knowledge required to handle the dangers associated with travelling through traffic-dense urban areas (Useche et al., 2022). The result is a blend of youthful independence with the responsibilities of adult commuting, reshaping traditional ideas of childhood and adolescence.

In society currently, quite a number of adults drift towards indulging in activities or exhibiting behaviours which are more often than not viewed as childlike in nature. Commonly referred to as a "kidult" culture, this new trait can be seen in the adult embrace of aesthetically and playful nonconformist means of transport, particularly e-scooters. Vehicles such as cars or the bus are modes of transportation that are viewed as being negatively serious or responsible, however, e-scooters bring a refreshing, stress-free, and most-in-demand 'I can move around a city as I please' approach for adults. Indeed, a good percentage of e-scooter users appreciate the e-scooter for the convenience, ease and adventure it brings as the riders can easily manoeuvre around the urban centres without a care in the world. In many cases, e-scooters correspond with the new consumer values propelling modern society, where balancing work with pleasurable experiences is more important than ever and it is encouraged to have fun in an otherwise boring journey to the office.

These two contradicting tendencies of infantilization and adultization of people complicate the conversation around e-scooters, creating a unique set of opportunities and challenges for urban regulators and public safety. On the one hand, the excessive e-scooter use by adults begs the issue of the availability of urban infrastructure that supports 'non-mundane' modes of transport. Alternatively, the growing number of young riders in urban areas calls for the establishment and provision of measures such as laws and educational campaigns aimed at children and adolescents to prevent or minimize their possible misuse of e-scooters. City planners must account for these age-related dynamics when designing infrastructure and creating policies that address the unique needs of both adult and child riders. Thus, the people living in such cities can have a mobility which is safe, available and responsive to changes in sociocultural practices of all the ages.

2.5 USER PROFILE AND USAGE PATTERNS; QUANTITATIVE DATA ON PMV USE AND MARKET PENETRATION

Demographic studies indicate that the most frequent users of e-scooters are males between 18 and 35 years old, usually highly educated and urban-based, as identified by Useche et al. (2022).

These users generally use e-scooters for shorter trips, including first- and last-mile connectivity. Commuters use these as supplemental modes of transportation, while tourist and recreational uses are common in cities where the shared-use rental markets have developed. According to the use trend, e-scooter-sharing services usually occur within trips below three kilometers,

while owned or private electric scooters create somewhat longer journeys. The patterns for e-scooter trips differ across season and weather: warm-weather months tend to attract more use, according to data. Different patterns of riding shared versus owned or private scooters also occur in research: The users of shared e-scooters would be less aware of traffic regulations, taking more risks by riding without helmets or using sidewalks where it is forbidden.

2.6 RISK FACTORS IN SCOOTER USE; SHARED VS PRIVATE E-SCOOTER USAGE

Risk factors in E-Scooter Use Safety concerns probably remain one of the most debated aspects of e-scooter proliferation. According to Morgan et al. (2022), some of the most common risk factors are injury patterns including head trauma, fractures, and facial injuries.

The age variation in findings reflects that the youngest riders are at highest risk for unsafe behavior practices whereas older age groups reflect more cautious riding habits. Private e-scooter owners are reported to be safer riders, particularly by wearing a helmet, than shared e-scooter users. Besides that, infrastructure-related risks also lead to safety issues: the lack of dedicated e-scooter lanes makes them share spaces with either pedestrians or vehicles, which again increases the likelihood of accidents. A lack of rider education on proper e-scooter use further heightens these risks. Many users are uninformed about local traffic laws or are not fully aware of the dangers of riding at high speeds in mixed-traffic conditions. Incidents related to alcohol consumption among e-scooter riders have also been under policymakers' radar, with research indicating that drunk riders are more than twice as likely to get into accidents. These risks heighten the call for stricter safety measures and increased awareness among riders.

The use of e-scooters is associated with different factors of risks that vary considerably with the age of the rider as well as whether the e-scooter is shared or owned. Private owners, to a greater degree, could give more attention to the safety rules and invest in protection means due to understanding the long-term risks of reckless riding. E-scooter adoption has also demonstrated gendered disparities, with men being more likely to use e-scooters as a means of transport than women, who identify safety concerns as the major barrier to adoption. It can be said that dults riding shared scooters mainly accessed through mobile phone-based applications are subject to different kinds of risks (Pourfalatoun et al., 2023). Unlike licensed, private portable scooters that have custom design and maintenance and care are done regularly, the e-scooters for hire are constantly used by different people and their service can be compromised. Even in the presence of numerous warning signs and cautionary notices, several hazards such as broken brakes, tires with less than optimal air pressure and poor battery status are prevalent in case of urban enclosures that have heavy e-scooter traffic. Moreover, there is a consistent absence of features on shared e-scooters such as proper lights, reflective panels, or sound bells; which results in accident cases especially when visibility is very low. For an adult, the fact that shared e-scooters are readily available also implies that users who are not well experienced with the vehicle will be more likely to use them, potentially contributing to the high rates of accidents due to unfamiliarity.

Private e-scooters come with their own risks when it comes to children and adolescents engaging with them. Younger participants are particularly at risk of accidents because they may

exaggerate their riding competence or fail to appreciate the risks of riding on busy streets - not fully understanding urban traffic dynamics due to age, immaturity or unfamiliarity (Morgan et al., 2022). Rental e-scooter for children is not always supervised, and therefore enables dangerous activities like fast riding, not obeying road signs, or riding without a helmet. Also, because children are generally not used to most road safety rules, and are often unaware of other people in the environment, the situation gets worse, as they do not see things that may be dangerous such as cars or other people. Furthermore, unlike adults who tend to have control over other vehicles like a car, children's safe riding knowledge is very limited, and therefore, they are prone to accidents. In this way, the finding that most children use e-scooters privately justifies the calls for the provision of safety information directed at both adults and children, as well as restrictions on the use of e-scooters in selected areas for their protection.

These various risk profiles emphasize the importance of implementing specific measures in different population segments to foster safe e-scooter utilization. For instance, adults could be provided with information on the proper use of shared e-scooters and the need for regular inspection by the lending companies, to ensure that the devices are in operable condition. As for younger riders, schools or recreation centers might introduce instruction sessions about the basic rules of road traffic, usage of protective headgear and why riding should be done with care. This helps address the problems posed by e-scooter use and encourages adults and children to ride responsibly as well as more efficiently ensuring a safe, sustainable urban environment for everyone.

2.7 SAFETY PERCEPTION AND PUBLIC ATTITUDES

The degree to which users perceive safety plays a pivotal role in the rates of e-scooter use and the riding patterns exhibited, especially between adults and children. The majority of adult riders see e-scooters primarily as a cheap and easy means of getting around the city, however safety concerns especially in crowding areas seem to limit their willingness to ride them (Sievert et al., 2023). When it comes to safety perception, however, some adult e-scooter riders may speak from experience, while others of them may have heard horror stories about e-scooter accidents from the news, thus deterring some potential riders from e-scooters altogether. For the adults who opt for riding, safety perception and the quality of infrastructure are interrelated. The presence of such amenities as dedicated bicycle lanes, proper directional signs and even the quality of the roads helps to maintain the sense of safety, while the absence of such facilities has always resulted in discomfort or even fear amongst the riders.

Safety perception for youth is less based on experience and more on the excitement of moving fast. E-scooters might not be seen by the young riders as a vehicle but rather a plaything hence their actions are intended to be fun rather than focused on safety (Useche et al., 2022). The risks in these activities are higher since there is no adult supervision in addition to the limited knowledge of proper traffic laws as children may be unable to identify any threats to their safety. This is why children are more prone to taking risks such as riding without any form of protective gear in place or disregarding traffic signals. To tackle such a disparity in safety views, education should be aimed at bringing awareness concerning safety measures and traffic compliances while riding. Initiatives in schools or through the community can help build

knowledge about safety thus promoting safe usage of e-scooters from a young age. Cultivating safety awareness among young riders is essential, as it encourages responsible behaviour that can reduce accident rates and improve the overall safety of urban mobility.

In response to the different safety perceptions, it is crucial that safety campaigns are developed to suit every demographic in question. Information campaigns can be directed toward adults via the use of digital media, which would promote the use of safety helmets and adherence to traffic rules (Dormanesh, et al., 2020). In the case of children, it could be possible to teach them about safety by including such topics in the school curriculum. Demonstrations or supervised riding experiences could also familiarise young riders with the rules of the road, instilling caution and responsibility from an early age. By stressing the importance of safety, cities can help raise a generation of responsible riders who can navigate their cities without endangering themselves or other people, a mutual benefit to both riders, pedestrians and other road users.

People's feelings towards e-scooters often vary and can relate to a certain degree controversial issues such as safety, environmental sustainability, and city planning. Many non-users bitterly criticize the e-scooters suggesting that they cause a lot of disorder and people feel quite unsafe especially in places dominated by pedestrians (Kantar, 2020). Among these complaints are the blocking of walking paths, erratic behavior of riders, and the danger posed by them to other pedestrians notably the elderly and young children. In cities where space is already limited, some citizens are afraid that the introduction of e-scooters may cause more injuries to the pedestrians considering that the e-scooters are often parked carelessly on the sidewalk. The presence of e-scooters has sparked a broader dialogue about shared public spaces, where the needs of various groups—pedestrians, cyclists, and e-scooter riders—must be balanced. When e-scooters are raised in public conversation, it is common to call for implementation of new and more restrictive measures aimed at regulating the use of such vehicles within the city.

Political attitudes towards e-scooters are far from uniform and indicate the ambiguous status of e-scooters in urban travel. In this sense, some local authorities consider e-scooters as a smart green technology, supporting their integration into public transit systems and promoting infrastructure changes such as dedicated lanes or parking zones to ensure their safe use.

The spread of e-scooters has extended beyond the parameters of mobility convenience, reaching social norms, cultural trends, and urban lifestyle profoundly. The adoption of e-scooters as a mobility convenience has resulted in tangible effects on individuals' attitudes towards their city surroundings and to each other. These phenomena have both beneficial and adverse effects on city social life. This highlights the deep influence of e-scooters on urban culture, reaching farther than mobility itself.

E-scooters are part of a more active and involved urban life since they get individuals to venture out into their neighborhoods and visit local businesses. They make for a very easy and fun method of checking out backstreet gems and feeling the pulse of urban life. This can make residents of the city feel more connected to their communities and more at home (Urry, 2012). This is an indicator of their role in a more involved and connected urban community.

A shared mobility phenomena, in which users are becoming more reliant on shared transportation rather than private vehicle ownership, has also been made possible by the rise of e-scooters. A more equitable transportation system, environmental sustainability, and road clearing are all benefits of this kind of transition toward shared mobility. This puts them in a position to improve equitable and sustainable transportation networks.

However, social justice issues have also been brought up by the adoption of e-scooters. Some groups of people, such as those with low incomes or those with disabilities, may not be able to afford to use e-scooters. This can create new barriers to opportunity and perpetuate transportation disparities (Cohen, 2020). In order for everyone to benefit from e-scooters, social justice issues must be addressed.

Furthermore, e-scooter use on city streets has occasionally resulted in disputes between e-scooter users and pedestrians, particularly in places where there are a lot of pedestrians. Poor parking, careless driving, and sidewalk riding can all lead to these confrontations (Harkin, 2024). In the interest of public safety, this necessitates taking steps to lessen potential confrontations between e-scooter riders and pedestrians.

These socio-cultural effects need to be tackled with a comprehensive approach that takes into account the perceptions and interests of all city dwellers. Cities must implement policies and initiatives that promote fair access to e-scooters, foster respectful riding behavior, and reduce possible conflicts between pedestrians and e-scooter riders (Gibson et al., 2020). This shows how crucial it is to use a comprehensive approach that deals with the varied interests of all city citizens.

2.8 PROMOTIONAL PRACTICES OF E-SCOOTER COMPANIES

E-scooters are also under criticism regarding marketing techniques: a study conducted by (Dormanesh et al., 2020) scrutinized social media content from major e-scooter providers and noticed minimal emphasis on safety. Only 9.1% of promotional posts depicted helmet use, and most advertisements were focused on convenience and enjoyment rather than responsibility. The lack of engagement with public concerns of regulation, accident risks, and user education has allowed the normalization of risky behaviors among riders.

The marketing strategies of e-scooter companies mirror the general trend in consumer engagement, whereby branding tends to focus on lifestyle rather than safety. These representations of e-scooters as fun, liberating, and green have encouraged uptake but often at the cost of key information regarding safety. Cities addressed the issue by requiring e-scooter

firms to introduce safety messages in their promotional materials, thus ensuring that users are aware of the legal requirements and best practices before embarking on their first ride.

Chapter III: Empirical Analysis

3.1 TECHNIQUE USED

This has involved a mixed-methods research design that combines both qualitative and quantitative methods in comprehensively analyzing social media marketing conducted by e-scooter companies. This is based on the fact that there is a need to assess both the thematic content of the posts and measurable patterns of how these themes are presented and received by the audiences. The qualitative part of this study focuses on discourse and thematic analysis that shows how e-scooter firms construct brand identity through language, imagery, and narrative structures. This aspect of the research is informed by theories of digital marketing, branding strategy, and media framing analysis. It seeks to uncover the implicit messages being given about e-scooter safety, convenience, and urban integration through captions, hashtags, visual choices, and engagement-driven strategies.

This research is based on secondary data collection, where posts were gathered directly from the official Instagram accounts of Tier, Dott, and Lime. Instagram was chosen because it is a highly visual social network, and therefore especially powerful in terms of how consumer perceptions of brand identity are created. The dataset includes posts from January to November 2024, ensuring a comprehensive view of how these companies structure their marketing efforts over time.

Extraction was done manually with subsequent coding following a standardized framework to ensure there was no variation in the level of consistency to avoid any subjective biases. These data include a mix of both static image posts and video reels, thus presenting an opportunity to compare engagement strategies. Each of the posts had been archived with metadata regarding date of publication, engagement metrics-likes, comments, and shares-textual elements such as caption and hashtags.

This was supplemented with academic literature, industry reports, and regulatory guidelines in order to place these findings into context. The previous research in the marketing of micromobility, digital branding, and consumer behavior contextualized these results within wider theoretical and policy frameworks. This combination of primary and secondary sources ensures that the study is well-embedded in both empirical evidence and scholarly discourse.

I also sought to build on previous study done on the social media posts of e-scooter companies. Most useful to my thesis is the work by Dormanesh et al. (2020), which examined critically the promotional campaigns of large e-scooter operators on Twitter and Instagram. Their findings are that only 9.1% of the posts featured helmet wearing, with operators predominantly representing e-scooters as liberating, enjoyable, and eco-friendly means of getting about, and eschewing largely safety messages. However, while (Dormanesh et al., 2020) establish that safety is not represented enough, they fail to closely explore how these companies visually and narratively portray their brand identity on platforms like Instagram or compare across firms like Tier, Dott, and Lime.

3.2 SAMPLE AND JUSTIFICATION

In the case of this research, the sample has been kept focused and representative by following a purposeful sampling strategy. This sampling technique allows the analyst to select the data that will best serve to answer the research questions, so that the focus is on important marketing strategies, not updates that do not concern the corporation itself. The posts needed to emanate from verified Instagram accounts for Tier, Dott, and Lime to ensure authenticity added to consistency.

Only consumer-facing posts were included in the dataset; thus, all posts that were purely financial updates, internal company news, or unrelated promotional announcements, such as partnership deals, were excluded. The study focused on content designed to engage consumers and allowed for an examination of how e-scooter companies craft narratives and interact with their audiences. This was done within a very consistent time frame, basically, from January to November of 2024, as it would allow catching seasonality and shifting focuses of marketing campaigns.

The dataset contained a balanced mix of reels and static images in order to have a proper insight into different techniques of engagement. The formats included in the study were numerous in order to gauge and establish how companies use visual storytelling and if dynamic content like reels drive more engagement than image posts. Through purposive sampling, it is ensured that the dataset was not only representative, but even the data which provided the required information for the research objective of a critical analysis of consumer-targeting marketing tactics.

3.3 VARIABLES AND ANALYSIS PROCESS

A structured coding framework was developed for the systematic analysis of Instagram content, where each post was categorized based on certain key variables. Each post was assessed for format, such as a static image or video reel, to consider how different types of content drive brand messaging and engagement. Posts were thematically categorized to reveal dominant motifs: sustainability, convenience, safety, and urban lifestyle.

Linguistic analysis also focused on the tone of the captions, and strategic use of hashtags to determine the primary content of posts, whether they were generally informative, persuasive, or humorous. Any presence of safety messaging, like the frequency of posts that mentioned helmets, traffic laws, or responsible riding, was noted. This will provide the exact measure of prevalence of safety content in the texts, therefore determining whether e-scooter companies actively and actually promoted responsible riding or whether safety was downplayed in favor of convenience and lifestyle messaging.

Frequency analysis of the content was also done to outline measurable trends. The number of posts for each identified theme was recorded to compare the three companies. The engagement metrics of likes, comments, and shares of the different types of content were analyzed to gauge which type of content best resonated with the audience. These quantitative findings would give

empirical evidence to marketing patterns that complement the qualitative insights drawn from discourse analysis.

Qualitative analysis followed a thematic coding process informed by principles of media discourse analysis. This current study identifies the pattern in the use of language and imagery that would indicate how companies construct narratives about e-scooter use. Finally, a comparative analysis between the approaches by Tier, Dott, and Lime is considered. These combined analytical tools are a robust foundation to draw upon to elicit insights into how e-scooter companies make use of Instagram in shaping consumer perceptions.

3.4 DATA SHEET

Category	Details
Study focused	Analysis of Instagram marketing by Tier, Dott, and Lime to assess how e-scooter companies communicate safety, sustainability, and brand identity.
Companies analysed	Tier, Dott, Lime
Platforms studied	Instagram
Study period	Late September 2023 – Late October 2024
Methodology	Content analysis of Instagram posts (photos, reels, captions) using variables like tone, character use, safety references, and promotional themes.
Variables used	- **Tone/Support**: Reel/Photo, Informative/Persuasive, Focus on Advantages, Language - **Characters**: Number of people, Age, Presence of children - **Safety**: Helmet use, Visibility aids, Safety messaging
Themes observed	- Urban lifestyle and ease of transport - Sustainability and environmental consciousness - Trendy, fun, and social image - Lack of safety emphasis
Brand positioning	- **Tier**: Green, efficient, evolving brand identity, professional tone - **Dott**: Tech-focused, sustainability-driven, community engagement - **Lime**: Youth appeal, storytelling, lifestyle branding
Safety messaging	Minimal across all brands, rare helmet use depicted, no traffic safety education, safety concerns seen as potential marketing barrier
Audience targeted	Predominantly urban youth and young professionals aged 25–35
Visual style	- **Lime**: Reels, dynamic visuals, seasonal content - **Dott**: Bright colours, influencers, trend-driven - **Tier**: Photo-based, consistent eco-message
Strategic insight	Marketing promotes a care-free lifestyle and urban modernity while deliberately avoiding safety themes to preserve brand appeal.
Social commentary	Rise of “kidults” and underage riders using private scooters, cultural trend normalises risk-free micromobility, ethical concerns over lack of safety education
Policy implications	Need for clear, consistent regulation, investment in infrastructure (e.g. scooter lanes) reduces accidents, educational and onboarding initiatives lacking.
Recommendations	Incorporate safety into promotional materials, partner with public institutions for safety campaigns, encourage helmet use and responsible riding
Conclusions	E-scooter marketing builds aspirational branding but ignores safety, leading to potential risks. Responsible integration into cities requires cooperation between companies and governments, updated infrastructure, and ethical marketing.

3.2 RESULTS

The results look at how Tier, Dott, and Lime utilize Instagram as a medium to create an impression of the safety of using e-scooters. In relation to the topic at hand, the approach involves comprehensive content analysis on Instagram, including key themes, variations in tone, ways of ensuring engagement, and gaps within the safety messaging. From this, it would seem that these companies employ marketing to implicitly reassure users of their safety and do little concrete on their part to encourage the responsible riding of the scooters.

Dimension 1: Support and Tone

Sustainability varies across the three brands. While Lime, in particular, wraps environmental benefits into a wider lifestyle story, it is often using storytelling techniques to present e-scooters as part of the eco-conscious modern city life. Meanwhile, Tier and Dott make promotional appeals more directly for reduced carbon footprints and less traffic congestion. All that rhetoric of ease and environmental consciousness subtly positions the e-scooters as just what the world needs, entrenching this view that it is a by-definition safe-and-good thing not only for those riding but for the cities they operate in, too.

From another point of view, critical attention needs to be given to how younger audiences are targeted, the 25-to-35 age group, especially with casual and familiar language but also through brighter and more exciting visuals, displaying e-scooters as easy fun transportation. Tier keeps its tone professional, yet friendly; it often highlights the functional advantages of using their service. Dott takes it to a whole new level: it is very persuasive and works on building community-oriented imagery that fits well into social trends. Lime is quite good at merging persuasive techniques with storytelling, presenting personal anecdotes or lifestyle portrayals that allow a connection with readers on a more personal level. This tonal difference is important in forming a consumer perception through the soft reinforcing message that e-scooters represent risk-free, everyday mobility.

Looking at the trends in the format of the content, it can be seen that Lime likes to use reels, using dynamic visuals and storytelling elements to hold viewers' attention. Dott strikes a balance between reels and photos, embracing interactive captions and user-generated content to increase relatability. Tier uses more photos, focusing on clarity and direct messaging. On seasonal adaptability, where Lime shows much more seasonal variation in content to match holidays and weather, Tier is consistent in its environmental focus throughout the year.

The deliberate exclusion of safety messaging is not a passive oversight but is an active marketing decision. In this way, these brands are promoting the social and environmental benefits of e-scooters while downplaying the potential risks, thus creating an illusion of inherent safety. This strategic positioning keeps the users continuously engaged and encourages the adoption of such vehicles without leading to discussions that may bring in hesitation or regulatory scrutiny. A lack of safety partnerships, furthermore with city authorities, transport regulators, or health organizations, points to further reluctance to enter discourses which may

contest carefree imagery as created through social media content.

Dimension 2: Characters and Situations

Among the main focuses of its Instagram marketing campaign, Tier has been presenting e-scooters as a "cool" transport method. The photos, showing young, stylish riders moving with ease through the city streets, depict images of urban sophistication and modernity. Lime, for example, positions e-scooters as part of an active social lifestyle. Posts often feature images of young professionals or influencers posing with scooters in front of scenic urban backdrops, further embedding the idea that riding an e-scooter is not just practical but an aesthetic and cultural choice.

Figure 1, Tier Instagram

Dott uses trend-based marketing, with bright colors, fast-paced camera movements, and collaborations with social network influencers. Many of their Instagram posts seem to mimic some kind of fashion or lifestyle ad and very naturally tie the brand with youth culture and the quest for a fashionable, fast-paced city life. Tier is a bit more subdued, but still grounds its marketing in imagery that associates e-scooter riding with a cosmopolitan, easeful way of navigating the city.

Dimension 3.1: Visible in the Image

A pattern immediately emerges: very rarely is safety explicitly discussed, while the imagery and caption reinforce a care-free, convenient, and enjoyable experience for the user. Thus, on June 5, 2024, an Instagram posting by Tier features the "freedom to ride anywhere" without a word on traffic safety measures or protective gear. Similarly, a Dott post from September 12, 2023, invites users to "explore your city like never before," with no mention of the dangers that come with negotiating an urban environment on an e-scooter.

Despite the rapid urban proliferation of e-scooter riding, safety messaging is conspicuously absent. Helmet use is depicted only in passing, with no real ongoing efforts to promote the need for it. A reel via Lime, from August 3, 2024, follows several young riders through city traffic, no helmets, as they reinforce an image of carefree and free-chained mobility.

Dimension 3.2: In the Text

Also, on all three brands there was a remarkable avoidance of posts educating users on traffic regulations, proper riding behavior or emergency preparedness. This raises concerns about the broader societal impact of these omissions, as riders may be unaware of potential risks due to the misleadingly positive portrayal of e-scooter use.

The deliberate exclusion of safety messaging is not a passive oversight but is an active marketing decision. In this way, these brands are promoting the social and environmental benefits of e-scooters while downplaying the potential risks, thus creating an illusion of inherent safety. This strategic positioning keeps the users continuously engaged and encourages the adoption of such vehicles without leading to discussions that may bring in hesitation or

regulatory scrutiny. A lack of safety partnerships, furthermore with city authorities, transport regulators, or health organizations, points to further reluctance to enter discourses which may contest carefree imagery as created through social media content.

Chapter IV: Conclusions

4.1 CONCLUSIONS OF ANALYSIS

This research accomplished the objectives set out in the first chapter by critically analyzing Tier, Dott, and Lime's Instagram marketing techniques - especially how they communicated brand identity through their safety and sustainability messaging. In providing a systematic and direct-content analysis of how leading e-scooter companies build branding narratives on social media, the research fills the literature concern regarding safety messaging and ethical marketing approaches, and builds on the literature on micromobility marketing. The findings of this research are useful for policymakers, public health advocates, urban policy planners, and marketers, who are looking to better understand the broader societal implications of e-scooter marketing and foster better communication practices in the micromobility space.

This paper aimed to look into how three of the top e-scooter companies, Tier, Dott, and Lime, are using Instagram to build public perception by visual and textual branding, particularly in how they represent safety, sustainability, and urban lifestyle values. The research aimed to assess how safety is communicated (or omitted), how environmental narratives are framed, what kinds of user identities are shown, and what emotions or events are associated with e-scooter use. Through a combination of a literature review and a manual content analysis of over a year's worth of Instagram posts (September 2023 to October 2024), the research successfully met its objectives.

The research results suggested that branding places lifestyle and enjoyment over safety messaging, and safety messaging actually is often minimized or entirely omitted. Of the posts, very few even mentioned safety practices such as helmet use or responsible riding because the same is consistent with (Dormanesh, Majmundar, & Allem, 2020), who pointed out that only 9.1 percent of the e-scooter posts they studied featured any safety content. Rather, the posts emphasized emotional and aesthetic appeal and imagery of young, carefree riders engaging in spontaneous, fun activities reflecting a general behavioral trend of "kidult" marketing (Bernardini, 2014; (Useche et al., 2022).

In addition, sustainability narratives were regularly employed to present e-scooters as an eco-friendly alternative to the car. These were typically couched in general or aspirational language, with little mention of the real-world environmental performance or trade-offs of micromobility deployment (Cohen, 2020; Shaheen, 2016). Importantly, Instagram was revealed to be a site of powerful lifestyle branding, where companies craft aspirational urban identities more than they provide consumer guidance or education.

The dual methodology, literature review and social media content analysis, proved effective in connecting theoretical concerns about micromobility and public safety with actual marketing practice, fulfilling the study's aim of bridging academic and applied perspectives.

4.2 RECOMMENDATIONS

4.2.1 For E-Scooter Companies:

Safety should be a visible and ongoing component of e-scooter branding, not an afterthought. Helmet wearing, obeying traffic regulations, and defensive riding should be promoted as the norm through compelling, visually engaging content. As in your content analysis, numerous posts entirely excluded safety mentions, even when depicting users driving in traffic.

To prevent infantilising urban mobility, social media posts that frame e-scooters as toys or invite a reckless, spontaneous mindset towards riding, especially through bright colours, humour, or whimsical graphics, must be reframed to emphasise responsibility and adult decision-making. This is particularly important in light of evidenced risk for underage or inexperienced riders (Morgan et al., 2022; Useche et al., 2022).

Influencers should be used to promote a responsible riding culture. They should not only support the brand image but also model safe and respectful riding behaviours. Embedding these messages within influencer partnerships can be employed to impact user norms, especially among young adults.

Businesses can also create ethical value through transparency. Companies that demonstrate care for the safety of users and the health of the community can foster consumer trust. This is an opportunity to adhere to ethical marketing practice and demonstrate corporate social responsibility, especially since regulators are beginning to more closely examine micromobility businesses.

4.2.2 For Policymakers and Regulators:

Cities can implement safety messaging in internet marketing by including a requirement in the operating permits for providers to publish safety-focused online advertisements. These should include seasonal campaigns addressing specific risks, such as riding at night or in wet conditions, to ensure that safety remains top of mind throughout the year.

There is also a need to standardise visual safety guidelines in marketing. Similar to the restrictions applied to tobacco or alcohol advertising, regulations should prohibit the exclusion of safety equipment or the depiction of unsafe behaviour in e-scooter ads. This would help prevent the normalisation of risky riding practices and reinforce a culture of safety in public messaging.

To further strengthen safety education, city councils should be encouraged to form public-private partnerships with e-scooter operators. Together, they can create and distribute online safety content that is simple, accessible, and engaging. Content should be tailored to different age groups and user profiles to ensure it resonates broadly and effectively promotes responsible riding habits.

4.3 LIMITATIONS

While this research adequately achieved its claimed aims, some limitations need to be recognized to place its results in context and guide useful subsequent research.

First, the research was limited to a small sample of Instagram posts from only three major brands, Tier, Dott, and Lime, collected over the period between September 2023 and October 2024. While these companies are dominant players in the global micromobility market, the limited sample restricts generalisation to the wider industry. Besides, the scrutiny was only in Instagram, instead of Twitter (X), TikTok, or YouTube, upon which messaging behavior may vary. As stated by Dormanesh et al. (2020), e-scooter companies take different content per platform, and safety messaging can vary accordingly.

Second, a manual classification, based on the tone, characterization, and safety markers of posts, was used to carry out content analysis, characterized by a varying degree of rich and interpretative analysis but with the possibility of human error and subjectivity. The manual analysis was much less scalable and less reproducible than the computational methods. (Pourfalatoun et al., 2023) also note that computerized content analysis, such as image recognition-based or natural language processing-based approaches, allows for consistent coding schemes that can further be employed to look at much larger datasets.

Third, the study analyzed branded content without considering user interpretation or reception of content. This is a vital limitation since audience perception is fundamental in influencing the behavior of messages. Past studies suggest that safety-diminishing branding can elicit riskier behavior among users, particularly for youth, who are most impacted by e-scooter use and are actively engaged on Instagram (Fyhri et al., 2023; Useche et al., 2022). The effective tone in brand communications could influence the users' understanding of the risks involved underlined by the absence of safety considerations.

4.4 FUTURE RESEARCH

One of the most interesting findings for myself in this research was just how much of a focus my examined posts were on fun, freedom, and enjoyment, and avoided altogether even speaking explicitly about safety. Working through the spreadsheet data and categorizing each post manually, I was surprised how rarely helmets, road safety, or even advice on riding ever came up. This supported what Dormanesh et al., (2020) found- that just 9.1% of social media posts by major e-scooter companies included any safety mention whatsoever.

Most interesting to me was how companies used emotion and storytelling in marketing e-scooters as lifestyle items, rather than mobility devices. This aligns with Gibson et al. (2020) argument that this type of branding risks making safety appear irrelevant

And, as Useche et al. (2022) and Bernardini (2014) observe, this is part of broader cultural trends in which adult consumers are encouraged to embody playful or nonconformist

identities—something directly apparent in the manner in which these companies market "kidult" urban consumers

Based on that, I would maintain that there are broad potentials in future research towards the following.

1. The influence of emotional branding on perceived risk, particularly among young or novice riders (Fyhri et al., 2023; Davis, 2023).
2. There is also potential in a study done on gender reaction towards e-scooter advertising, given that previous research proves women are affected most by absence of a safety context (Useche et al., 2022).
3. The interpretation of visual narrative, and whether the consumers miss such or internalize the ´carefree´ message.

Automated tools like machine learning or image recognition could be valuable to study branding in much larger sizes (Pourfalatoun et al., 2023). The final thing that catches my curiosity is how brand messaging is going to evolve after an event like Tier's 2024 merger with Dott. Would they be triggered into changing their messaging or marketing strategy by either public pressure or regulatory changes?

This research has reminded me how powerful visual marketing is and how, subtly but deeply, it can shape behaviors and public opinion. I hope future research will find more on this triangle of branding, safety, and urban responsibility.

Declaración de Uso de Herramientas de Inteligencia Artificial Generativa en Trabajos Fin de Grado

ADVERTENCIA: Desde la Universidad consideramos que ChatGPT u otras herramientas similares son herramientas muy útiles en la vida académica, aunque su uso queda siempre bajo la responsabilidad del alumno, puesto que las respuestas que proporciona pueden no ser veraces. En este sentido, NO está permitido su uso en la elaboración del Trabajo fin de Grado para generar código porque estas herramientas no son fiables en esa tarea. Aunque el código funcione, no hay garantías de que metodológicamente sea correcto, y es altamente probable que no lo sea.

Por la presente, yo, [Nombre completo del estudiante], estudiante de [nombre del título] de la Universidad Pontificia Comillas al presentar mi Trabajo Fin de Grado titulado "[Título del trabajo]", declaro que he utilizado la herramienta de Inteligencia Artificial Generativa ChatGPT u otras similares de IAG de código sólo en el contexto de las actividades descritas a continuación [el alumno debe mantener solo aquellas en las que se ha usado ChatGPT o similares y borrar el resto. Si no se ha usado ninguna, borrar todas y escribir "no he usado ninguna"]:

1. **Brainstorming de ideas de investigación:** Utilizado para idear y esbozar posibles áreas de investigación.
2. **Crítico:** Para encontrar contra-argumentos a una tesis específica que pretendo defender.
3. **Referencias:** Usado conjuntamente con otras herramientas, como Science, para identificar referencias preliminares que luego he contrastado y validado.
4. **Metodólogo:** Para descubrir métodos aplicables a problemas específicos de investigación.
5. **Interpretador de código:** Para realizar análisis de datos preliminares.
6. **Estudios multidisciplinares:** Para comprender perspectivas de otras comunidades sobre temas de naturaleza multidisciplinar.
7. **Constructor de plantillas:** Para diseñar formatos específicos para secciones del trabajo.
8. **Corrector de estilo literario y de lenguaje:** Para mejorar la calidad lingüística y estilística del texto.
9. **Generador previo de diagramas de flujo y contenido:** Para esbozar diagramas iniciales.
10. **Sintetizador y divulgador de libros complicados:** Para resumir y comprender literatura compleja.
11. **Generador de datos sintéticos de prueba:** Para la creación de conjuntos de datos ficticios.
12. **Generador de problemas de ejemplo:** Para ilustrar conceptos y técnicas.
13. **Revisor:** Para recibir sugerencias sobre cómo mejorar y perfeccionar el trabajo con diferentes niveles de exigencia.

14. **Generador de encuestas:** Para diseñar cuestionarios preliminares.
15. **Traductor:** Para traducir textos de un lenguaje a otro.

Afirmo que toda la información y contenido presentados en este trabajo son producto de mi investigación y esfuerzo individual, excepto donde se ha indicado lo contrario y se han dado los créditos correspondientes (he incluido las referencias adecuadas en el TFG y he explicitado para que se ha usado ChatGPT u otras herramientas similares). Soy consciente de las implicaciones académicas y éticas de presentar un trabajo no original y acepto las consecuencias de cualquier violación a esta declaración.

Fecha: 13/5/2025

Firma: Evelyn Keane

Bibliography

Bernardini, J. (2014). The infantilization of the postmodern adult and the figure of Kidult.

Postmodern Openings, 5(2), 39–55. https://doi.org/10.18662/po/2014.0502.03

Chalmers University of Technology. (2025, March 25). E-scooter crashes mainly caused by reckless driving. *ScienceDaily*. https://www.sciencedaily.com/releases/2025/03/250325115839.htm

Cohen, T. (2020). Tools for addressing transport inequality: A novel variant of accessibility measurement. *Journal of Transport Geography, 85*, 102698. https://doi.org/10.1016/j.jtrangeo.2020.102698

Davis, L. (2023). E-scooter regulation in public spaces. In D. Hopkins & J. Higham (Eds.), *Low carbon mobility transitions* (pp. 123–135). Goodfellow Publishers.

Dormanesh, A., Majmundar, A., & Allem, J. P. (2020). Follow-up investigation on the promotional practices of electric scooter companies: Content analysis of posts on Instagram and Twitter. *JMIR Public Health Surveillance, 6*(3), e17583. https://doi.org/10.2196/17583

Easton, D. (2024). *California electric scooter accident statistics [2025 updated]*. Easton & Easton, LLP.

Electric scooters market size & share, forecasts report 2032. (2024). Global Market Insights Inc. https://www.gminsights.com

Fernandez, E. (2025). *Electric scooter and bike accidents are soaring across the U.S.* UC San Francisco.

Fyhri, A., Johnsson, M., Bjørnskau, T., & Phillips, R. (2023). Evaluation of an influencer campaign on social media targeting young e-scooter users. *Findings*. https://doi.org/10.32866/001c.07937

Gibson, H., Curl, A., & Thompson, L. (2020). Blurred boundaries: E-scooter riders' and pedestrians' experiences of sharing space. *Mobilities, 15*(3), 409–423. https://doi.org/10.1080/17450101.2020.1713196

Hardt, K. (2019). Usage of e-scooters in urban environments. *Transportation Research Procedia, 37*, 155–162. https://doi.org/10.1016/j.trpro.2018.12.174

Hollingsworth, J. (2019). Are e-scooters polluters? The environmental impacts of shared dockless electric scooters. *Environmental Research Letters, 14*(8), 084031. https://doi.org/10.1088/1748-9326/ab2da8

Isin-Wheel. (2024). *What are the limitations of electric scooters in urban areas?* https://www.isin-wheel.com

Kantar. (2020). *Public attitudes to the use of e-scooters in the UK: Report*. Department for Transport.

Kim, M., Puczkowskyj, N. M., MacArthur, J., & Dill, J. (2023). Perspectives on e-scooters use: A multi-year cross-sectional approach. *Transportation Research Part A: Policy and*

Practice, 171, 103731. https://doi.org/10.1016/j.tra.2023.103731

Krusade Scooters. (2024). *Sustainable urban transportation with electric scooters.*

Litman, T. (2021). *New mobilities: Smart planning for emerging transportation technologies*. Victoria Transport Policy Institute.

McRae, J., & Shaw, S. (2024). Leading micromobility trends for 2024. *Planetizen Features*.

Morgan, C., Morgan, R., Dela Cruz, N. J. M. V., Ng Man Sun, S., & Sarraf, K. M. (2022). Pediatric electric scooter injuries in the UK: Case series and review of literature. *Traffic Injury Prevention, 23*(6), 369–371. https://doi.org/10.1080/15389588.2022.2078429

Osgood, D. (2024). Go-to-market strategy for electric scooters. *Ignition*. https://www.haveignition.com/industry-guides/go-to-market-strategy-for-electric-scooters

Pourfalatoun, S., Ahmed, J., & Miller, E. E. (2023). Shared electric scooter users and non-users: Perceptions on safety. *Sustainability, 15*(6), 4993. https://doi.org/10.3390/su15064993

Schneeweiss, C., Hassan-Ali, Z., & Kam, A. (2021). Safety and risk factors associated with electric scooter use globally. *McMaster University Medical Journal, 18*(1), 22–29.

Selby, J. (2024). Reducing risk for e-scooter operators. *Urban Mobility Insights*. https://www.urbanmobilityinsights.com/reducing-risk-e-scooter-operators

Shaheen, S., & Chan, N. (2016). Mobility and the sharing economy. *Built Environment, 42*(4), 473–479. https://doi.org/10.2148/benv.42.4.473

Sievert, K., Roen, M., Craig, C. M., & Morris, N. L. (2023). A survey of electric-scooter riders' route choice, safety perception, and helmet use. *Sustainability, 15*(2), 1556. https://doi.org/10.3390/su15021556

Straits Research. (2025). *E-scooter sharing market size, share & growth report by 2033.*

Sumedha Gosavi, C. M. R. (2024). Electric scooters market will grow at a CAGR of 8.6% from 2023 to 2030! *Cognitive Market Research*.

Two99 LinkedIn. (2025). The impact of emerging technologies on digital marketing strategies.

Urry, J. (2012). Social networks, mobile lives and social inequalities. *Journal of Transport Geography, 21*, 24–30. https://doi.org/10.1016/j.jtrangeo.2011.07.010

Useche, S. A., Gonzalez-Marin, A., & Alonso, F. (2022). Environmentally friendly, but behaviorally complex? A systematic review. *International Journal of Environmental Research and Public Health, 19*(15), 9409. https://doi.org/10.3390/ijerph19159409

Valtinsu.com. (2025). *Popular trends in electric scooters: The future of urban mobility*. https://www.valtinsu.com

Appendices

Link to Excel Sheet