Digital Marketing Strategies for SMEs in the Technology Sector in Malaysia

Nurlan Alina¹, Noraini Ahmad¹, Jugindar Singh¹, Najla Shafighi²

¹ School of Business Asia Pacific University of Technology & Innovation, Kuala Lumpur, Malaysia,
² School of International Technology Transfer Management, BBW Hochschule University of Applied Science, Berlin, Germany

tp053006@mail.apu.edu.my, noraini@apu.edu.my, jugindar.singh@apu.edu.my, najla.shafighi@bbw-hochschule.de
Tel:+60 18 215 1904

Abstract
This qualitative case study explores the efficacy of digital marketing (DM) techniques in Malaysian Small and Medium Enterprises (SMEs) within the technology sector. Employing semi-structured interviews with digital marketing specialists in Kuala Lumpur, the study, grounded in an interpretivist philosophy, aims to uncover challenges in DM implementation, assess its impact on product promotion, and identify tools enhancing effectiveness. Thematic analysis reveals trends, topics, and insights crucial for SMEs. Emphasizing data-driven decision-making and agility, the research underscores the significance of DM for SME success in Malaysia's evolving digital landscape. Recommendations address obstacles, fostering wise DM use and long-term competitiveness.

Keywords: Digital Marketing ; Malaysian SMEs ; Digital Marketing Strategies ; Digital Marketing Channels.

1.0 Introduction
The technological sector in Malaysia has a substantial presence of Small and Medium-Sized Enterprises (SMEs), playing a vital role in fostering economic growth and innovation within the country. Tong and Gong (2020) reported that a staggering 99% of the 920,634 establishments in Malaysia are categorized as small and medium enterprises. These SMEs constituted 66.2% of the nation's workforce in 2018, contributing 522.1 billion Malaysian ringgit, equivalent to 38.3% of Malaysia's GDP (Tong and Gong, 2020). As highlighted by Thaha et al. (2021), this underscores the resilience of Malaysian SMEs in sustaining business growth and facilitating job creation. In the contemporary digital era, it is imperative for SMEs to establish a robust online presence to effectively reach and engage their target audience. The aim of this research is to explore and understand the challenges faced by Small and Medium-sized Enterprises (SMEs) in the Technology Sector in Malaysia regarding the adoption and implementation of effective digital marketing strategies.

Using digital marketing involves promoting products and services online. Implementation of a range of digital channels, involves and delivers to customers at accurate time and through the customers favourable digital channels details (Kamal, 2016). Digital Marketing makes it easier to follow the modern trends in marketing and monitor needs and desires of customers. Additionally, digital marketing can reach potential customers worldwide, since it does not have time or geographical restriction (Thaha et al., 2021). Based on research of Kannan and Li (2016) digital marketing involves adaptive and technological processes by which SMEs collaborate with customers and partners to cooperatively create, communicate and deliver for customers and sustain value for stakeholders (Kannan and Li, 2016).
It is crucial for SMEs in the technological sector that adopting appropriate digital marketing tools and strategies can enhance brand identification and visibility and generate leads, keep customers in the loop of their products and services and increase sales (Frick & Matthies, 2020). A key factor that ultimately determines whether SMEs can move on to the next stage of development is their capacity for learning and knowledge acquisition (Thaha et al., 2021). Globally, the shape and character of SMEs' enterprises may alter because of the adoption of digital marketing. This study aims to understand how digital marketing strategies will help the technology sector in Malaysia to adopt, understand and make it more efficient.

SMEs in Malaysia rely on traditional marketing rather than digital marketing. Traditional marketing costs grew, notably in terms of promotional and advertising costs, according to Saleh (2020), when compared to current options. Based on the results of a Malaysian survey, 94% of respondents claimed that social media platforms are one of the tools they interpret, and 89% stated that the website is a wonderful tool for advertising services and products.

In Malaysia’s technology sector, small and medium enterprises (SMEs) grapple with the imperative of digitalization for business growth. Despite government initiatives, a study reveals that SMEs face a 9% annual growth in digital marketing adoption (Tong and Gong, 2020). Limited awareness, resistance to change, and time constraints hinder implementation (Lee et al., 2020). The COVID-19-induced push towards digitalization highlights a critical gap in skills and knowledge, hindering effective digital marketing strategies (Azahar, 2022). SMEs struggle to establish a robust online presence, impeding brand identity and competitiveness in the saturated market (Ratnasingam et al., 2021). Unique strategies are imperative for SMEs to navigate challenges and attain sustainable growth in this fiercely competitive digital landscape. However, many SMEs are having trouble with using websites, email marketing, social media tools and other digital platforms. Their potential to draw clients and achieve a competitive edge is limited by their lack of an online presence and brand recognition. Furthermore, the highly competitive Malaysian market in the technology sector makes it hard for SME to stand out from other businesses. Therefore, it is important for SME to develop unique digital marketing strategies, effectively target their audience and engage with the customers and achieve sustainable growth in a highly competitive digital era. The study aims to provide valuable insights that can empower SMEs to navigate the dynamic digital landscape successfully.

2.0 Literature review

2.1 Diffusion of Innovation Theory

The Diffusion of Innovation theory, as described by Helton (2023), explores the spread of technological advancements in society and individual adoption to new technologies. Farajnejzad et al. (2021) emphasize key characteristics influencing technology adoption. In the competitive technology sector, early adopters benefit from digital marketing strategies, necessitating businesses to pioneer content creation and technology exploration (Ayman & Kaya, 2020). Applied to Small and Medium-sized Enterprises (SMEs), the theory categorizes adopters, enabling tailored digital marketing strategies for targeted audience engagement. Emphasizing early adoption, strategic planning, and inclusivity, the theory guides SMEs to navigate digital challenges, overcome resistance, and continually innovate, offering a comprehensive framework for success in the digital economy.

2.2 Digital Marketing challenges at SMEs

Hutchins (2023) asserts that the digital marketing landscape has undergone a transformative shift, entering a robust era of online engagement and promotion. Recognized for its potential to introduce brands to new audiences, digital marketing has become a vital tool for organizations. In the Malaysian market, the digital economy is on the ascent, although some businesses lag due to a lack of technological skills and expertise (Hutchins, 2023). Despite its substantial benefits, digital marketing presents unique challenges owing to its dynamic nature.

A study emphasizes the necessity of an omnichannel marketing strategy for seamless customer engagement across diverse platforms and touchpoints (Leeffang et al., 2014). However, challenges arise in establishing a unified consumer profile and integrating data from various sources without proficient data analytical skills. Maintaining consistency in branding and messaging becomes complex across different communication and brand identity platforms. Effective digital marketing strategies hinge on adopt utilization of tools and technologies, yet experts face challenges in aligning marketing goals with the selection of suitable tools, particularly in merging data from online and offline sources (Leeffang et al., 2014).

Piñeiro-Otero and Martínez-Rolán (2016) highlight the impact of algorithm updates by search engines and social media platforms on website visibility, ranking, and organic traffic. Such changes can lead to a decline in conversions and potential customers. Businesses are urged to adapt their digital marketing strategies to mitigate negative effects and maintain a robust online presence when algorithm modifications result in diminished organic traffic (Piñeiro-Otero & Martínez-Rolán, 2016).

2.3 The impact of Digital Marketing on SMEs

On the internet and social media era, the impact of digital marketing on brand image and reputation has reached unprecedented levels. Digital marketing spans diverse channels, necessitating a profound understanding of each channel’s characteristics to effectively enhance brand visibility and achieve conversion goals (Melovč et al., 2020). A primary avenue through which digital marketing influences brand perception is through consistent and positive interactions, particularly on social media. Active and effective engagement with followers fosters a sense of community, trust, and loyalty, strengthening the brand-customer bond (EFFENDI et al., 2020). Content creation, a fundamental element of digital marketing, significantly shapes brand perception by providing high-quality, informative, and entertaining content that positions the brand as an authoritative and trustworthy industry source (Sonia & Leslie, 2014). Digital marketing has emerged as a central force in shaping brand perception, encompassing social media engagement, content creation, online
advertising, and customer interactions. Through active engagement, value delivery, and messaging consistency, digital marketing cultivates a positive brand image, fostering increased customer loyalty and trust—a pivotal factor in a brand's success and competitiveness in the digital age (Melović et al., 2020).

The substantial impact of social media marketing is one of the research's noteworthy findings (Al-Azzam & Al-Mizeed, 2021). Platforms such as Facebook, Twitter, Instagram, and LinkedIn have evolved into effective tools for marketers to directly communicate with customers. Given the participatory nature of social media, marketers may develop a more personal and dynamic relationship with their audience. Businesses may effectively communicate their value propositions by using appealing information, engaging images, and persuasive storytelling. Consumers are exposed to a plethora of products and services as they scroll through their social media feeds, prompting them to investigate deeper. Social media marketing has proven to be effective at raising brand awareness, generating interest, and eventually influencing purchase decisions (Al-Azzam & Al-Mizeed, 2021).

3.0 Methodology

Semi-structured interviews are the primary research technique used in this study, which employs qualitative research methodology. Participants in the study will include professionals with experience in digital marketing from Kuala Lumpur, Malaysia, as well as executives in sales and marketing from technology sector of Malaysia. The research will employ the intentional sampling technique to carefully pick participants who understand digital marketing channels and tactics. The data will be gathered and patterns and tactics that will be covered in the findings will be found via the use of thematic analysis. The information gathered from participants will offer an extensive understanding of digital marketing in Malaysian SMEs.

Guest et al. (2006) asserted that in studies with participants of similar characteristics, "a sample of six interviews may [be] adequate for meaningful theme development and useful interpretations" (p.78). Correspondingly, Creswell (2007) cites Dukes (1984) and suggests a purposive sampling range of 3 to 10 participants for phenomenological studies. Thus, the choice of six participants in this study is well-founded. The participants, exclusively from Small and Medium-sized Enterprises (SMEs) with shared traits, is in line with the research’s emphasis on homogeneity, ensuring sufficient depth for meaningful thematic exploration and interpretation. This approach strikes a balance between obtaining necessary data and addressing practical considerations, optimizing the research process without compromising its credibility.

4.0 Findings

Three research questions were used during the interviews, coupled with additional questions to facilitate the dialogues with the respondents. The total of 6 participants were chosen from the Sales and Digital Marketing experts in Kuala Lumpur, Malaysia. As part of the thematic analysis, the principal categories that developed are outlined in the preceding sections, together with their corresponding major themes and sub-themes.

4.1 Results

The thematic analysis underscores the intricate challenges faced by Malaysian SMEs in digital marketing, reflecting a complex scenario. A pivotal issue is the insufficient technological infrastructure, placing SMEs at a global disadvantage. Outdated systems hinder the seamless integration of digital tools, compounded by a reluctance to adopt new technologies, limiting innovative marketing approaches. Thus, according to Eggers et al. (2017), being hesitant or unable to embrace new technologies stifles the ability to explore creative marketing approaches, hampering growth and adaptability to what consumers want. Tight budgets intensify the struggle, necessitating strategic financial management for competitive positioning. Additionally, Manpower constraints add further complexity, requiring resource optimization and a re-evaluation of digital marketing's strategic value. Nevertheless, The Economic Times (2023) have highlighted the difference of traditional and digital marketing, where it focused on the cost effectiveness of digital marketing strategies, where it allows content creation based on the target audience. The evolving customer landscape demands adaptability, emphasizing dynamic content creation and strategic flexibility. Establishing effective digital marketing strategies proves difficult due to the rapidly changing environment, necessitating a delicate balance between defined objectives and flexibility. Addressing these challenges mandates a comprehensive approach, encompassing government support, technological investments, strategic financial management,
and initiatives to promote employee well-being. The cumulative impact underscores the critical need for SMEs to navigate these challenges strategically to thrive in the dynamic digital landscape.

### Table 2. Thematic Analysis for Research Question 1: What were the challenges SME faced when engaging in digital marketing?

<table>
<thead>
<tr>
<th>No.</th>
<th>Theme (Code)</th>
<th>Definition of theme</th>
<th>Subtheme (SubCode)</th>
<th>Participants Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Technological Challenges</td>
<td>Technological Challenges faced by SMEs while using Digital Marketing</td>
<td>Lack of Technological Advancements</td>
<td>Participant 1, Participant 2 and Participant 6 have pointed out the lack of technological advancements at the SMEs. The changing algorithms and new technologies bring challenges, it required continues learning and training in Digital Marketing.</td>
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<td></td>
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<td></td>
<td>Seamless Integration Issues</td>
<td>Participant 1 and Participant 3 emphasized on the challenges of seamless integration of the technologies at SMEs. To create a specific digital marketing strategies, the SMEs requires planning and execution, but integrating those technologies might effect on the current Digital Marketing Strategies.</td>
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<tr>
<td>2.</td>
<td>Limited Resources</td>
<td>SMEs often operate with constrained budgets and manpower.</td>
<td>Limited Budget</td>
<td>Participants 1 and Participant 6 pointed out the limited budget as one of the challenges of limited resources, where the budget should be allocated to digital marketing strategies to stay up to date with the latest trends.</td>
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<td></td>
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<td></td>
<td>Limited Manpower</td>
<td>Only Participant 6 have mentioned that SMEs have limited manpower compared to larger corporations, where in the cases of limited manpower SMEs focuses on resource optimization rather than digital marketing strategies.</td>
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<td>3.</td>
<td>Shifting Consumer Behavior</td>
<td>Rapid changes in consumer behavior require constant adaptation. SMEs may struggle to keep pace with evolving trends, impacting their ability to tailor digital marketing strategies effectively.</td>
<td>The third theme refers to shifting consumer behaviour, where consumer behaviour changes according to the latest trends in Digital Marketing Strategies. Participant 3 have emphasized on the shifting consumer behaviour and how it affects the company, where Participant 4, explained the shift from traditional marketing to digital marketing and how strategically use video content.</td>
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Moreover, SMEs perceive digital marketing as a strategic cornerstone for success. Connecting with the right audience, emphasized by Participants 2, 3, 4, 5, and 6, is pivotal for building relationships, trust, and brand awareness. Digital marketing’s personalized approach, highlighted by its ability to target specific interests (Participant 2) and maintain a continuous online presence (Participant 3), fosters genuine connections. Participants 1 and 5 underscore its critical role in enhancing customer experience, citing cost-effectiveness and personalized, data-driven strategies as key contributors. The measurable nature of digital marketing, as stressed by Participant 1, empowers SMEs to make informed decisions, optimize strategies, and drive business growth efficiently.

### Table 3. Thematic Analysis for Research Question 2: How do SMEs perceive the influence of Digital Marketing on the promotion of products and services to their customers?

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Connecting with right Audience</td>
<td>in the context of SMEs’ perception, this theme refers to the strategies employed by small and medium-sized enterprises to use digital marketing to establish meaningful connections with their target audience.</td>
<td>All participants (except Participant 1) pointed out, how the perception of SMEs changed towards digital marketing strategies. With the help and influence of right digital marketing strategies all the professionals emphasized on the ability to connect with the right audience. Moreover, participants highlighted that digital marketing strategies is great to build trust between customers and their respective company, where participants were able to promote their products or services with the help of digital marketing strategies.</td>
<td></td>
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<tr>
<td>2.</td>
<td>Measurable nature of digital marketing</td>
<td>Profit maximization and lower operational cost within the measurable nature of digital marketing implies a focus on achieving increased profitability and low operational cost through effective digital strategies.</td>
<td>Profit Maximization</td>
<td>Participant 1 highlighted how measurable nature of digital marketing leads to profit maximization. The perception of participant 1 is likely positive since participant stated digital marketing strategies offers high return of investment (ROI).</td>
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<td></td>
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<td></td>
<td>Lower Operational Cost</td>
<td>Participant 1, Participant 3, and Participant 5 highlighted how measurable nature of digital marketing leads to lower operational cost. The perception of participant 1, 3 and 5 is likely positive since participant stated digital marketing strategies helps to measure through data analytics and different tools to maximize the workflow and help to lower the operational cost.</td>
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</table>
3. **Better customer experience**

   Within the SMEs’ perspective on digital marketing, this theme focuses on how digital strategies contribute to enhancing the overall customer experience.

   According to Participant 1 and Participant 5 digital marketing have enhanced their customer’s experience. Participants (1 and 5) highlighted that tailoring messages to specific demographics and being able to change the strategies in real time based on the demographics demand. Also, the interactive nature of digital marketing helped to build communication between customer and the company. Moreover, according to participant 5 better customer experience helps to obtain potential loyal customers.

The participants highlighted key tools and technologies crucial for enhancing digital marketing effectiveness in SMEs, particularly in the technology sector. Social media platforms, highlighted by Participants 1, 3, 4, 5, and 6, are emphasized for their cost-effectiveness and broad audience reach, encompassing platforms like Instagram, Facebook, and TikTok. Data analysis tools, recognized by Participants 1, 2, and 6, play a pivotal role in understanding audience behavior and optimizing campaigns. Marketing automation platforms, endorsed by Participants 2, 5, and 6, streamline operations and enhance scalability, with tools like Salesforce and Marketo highlighted. Customer Relationship Management (CRM) software, as emphasized by Participant 6, proves essential for improved customer interactions and long-term relationships. Graphic design platforms, underscored by Participant 5, such as Canva and Adobe, play a crucial role in elevating brand visibility and engagement through visually appealing content. These tools collectively empower SMEs to navigate the digital landscape, ensuring efficiency, data-driven insights, and enhanced customer relationships.

**Table 4. Thematic Analysis for Research Question 3: What are the tools and technologies to make digital marketing at SMEs more effective?**

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Data Analysis</td>
<td>From the standpoint of SMEs, this issue focuses on the use of data analysis tools to improve the measurable character of their digital initiatives.</td>
<td>Participant 1, Participant 2, and Participant 6 all stress the importance of data analysis tools in digital marketing. Participant 1 emphasizes the importance of data analysis in understanding audience behavior and personalizing ads and products for specific target segments. Participant 2 highlights the importance of data analysis tools in determining what works and what doesn’t in campaign performance. Finally, Participant 6 mentions data analytics tools such as Google Analytics and SEO tools to gain campaign insights and improve search engine visibility.</td>
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<td>2.</td>
<td>Marketing automation Platform</td>
<td>This issue concentrates around the deployment of marketing automation tools to streamline and optimize various marketing tasks in the context of SMEs’ digital marketing.</td>
<td>Participant 2, Participant 5, and Participant 6 highlight the importance of marketing automation platforms in streamlining and optimizing various marketing tasks. Participant 2 emphasizes the benefits of marketing automation tools such as Salesforce and Monday in terms of efficiency and scalability. Participant 5 indirectly mentions automation by mentioning social media content scheduling, which is a fundamental aspect of marketing automation. Participant 6 specifically mentions marketing automation via platforms such as Marketo, with an emphasis on automating email marketing and personalized content delivery. Marketing automation platforms, according to these participants, play a critical role in simplifying marketing tasks, ensuring consistency in content delivery, and increasing efficiency in digital marketing efforts, which is especially important for SMEs looking to save time and resources while achieving consistent and targeted marketing results.</td>
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<tr>
<td>3.</td>
<td>Graphic Design Platform</td>
<td>This theme emphasizes the importance of graphic design platforms in developing visually appealing content that increases brand awareness and engagement in SMEs’ digital marketing activities.</td>
<td>Participants 5 emphasize the importance of graphic design platforms in their digital marketing efforts. They specifically mention Canva, Adobe, and VN as graphic design tools, emphasizing how these platforms help to improve brand visibility, engagement, and lead generation. Graphic design platforms are essential for producing visually appealing and professional content, which is critical for attracting and retaining the attention of the audience on social media and other digital channels. SMEs can use such tools to create eye-catching visuals that are consistent with their branding, effectively communicate their message, and ultimately drive better results in terms of brand recognition, customer engagement, and lead generation, all of which contribute to the overall success of their digital marketing campaigns.</td>
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5.0 **Discussion**

This study is dedicated to exploring the intricate challenges faced by SMEs in their digital marketing endeavors, investigating SMEs' perceptions regarding the impact of digital marketing on product and service promotion, and dissecting the arsenal of tools and technologies employed to enhance the efficacy of digital marketing for SMEs. The NVivo word cloud output underscores the pervasive importance of “digital marketing” in the discourse, echoing the respondents’ collective emphasis on its paramount significance in today’s business landscape. The research addresses obstacles encompassing data protection, compliance, evolving customer behavior, limited digital presence, and resource constraints. Significantly, SMEs recognize digital marketing as a pivotal instrument for augmenting consumer engagement and product promotion. The study culminates by underscoring the critical relevance of data analysis tools, marketing automation platforms, social media platforms, customer relationship management systems, and graphic design platforms in amplifying the overall effectiveness of digital marketing activities for Malaysian SMEs in the technology industry. This chapter
militantly engages in a profound discussion and synthesis of these findings, providing invaluable insights into the dynamic digital marketing landscape for Malaysian SMEs operating in the technology sector.

6.0 Conclusion & Recommendations
This research study investigated the efficiency of digital marketing tactics in Malaysian Small and Medium Enterprises (SMEs) in the technology sector. The study looked into the obstacles that SMEs encounter when implementing digital marketing, the view of digital marketing’s impact on product promotion, and the tools and technology that help it work better. The study, on the other hand, found that SMEs saw digital marketing as a powerful instrument for engaging with the right audience, developing trust, and growing brand recognition. It enhances client experiences, increases consumer engagement, and increases conversion rates. The quantifiable element of digital marketing was emphasised, allowing for data-driven decisions and cost-effective operations. Nevertheless, the study focuses on SMEs in Malaysia’s technology sector, which may limit the findings’ applicability to SMEs in other areas or industries.

The study has identified critical tools and technology that SMEs utilise to improve the success of their digital marketing. Social media sites including Instagram, Facebook, and TikTok were recognised for their low-cost reach and engagement capabilities. Data analysis tools such as Google Analytics and SEMrush have been identified as critical for data-driven decision-making. Marketing automation solutions like Salesforce and Monday help to automate tasks and increase productivity. Customer Relationship Management (CRM) software, such as Salesforce and HubSpot, automates interactions and fosters better customer relationships. Finally, graphic design platforms such as Canva, Adobe, and VN were identified as critical for increasing brand visibility and engagement. Recognizing the measurable nature of digital marketing, SMEs can make informed decisions, optimise strategies, and drive business growth efficiently. The identified tools and technologies collectively empower SMEs in the technology sector to navigate the digital landscape, ensuring efficiency, data-driven insights, and enhanced customer relationships. In conclusion, the study emphasises the transformative role of digital marketing for SMEs in Malaysia’s evolving digital landscape. By addressing challenges and leveraging key tools, SMEs can establish a robust online presence, enhance brand identity, and ensure long-term competitiveness in the dynamic digital age.

Paper Contribution to Related Field of Study
The study significantly contributes to the field by examining challenges faced by technology-focused Small and Medium-sized Enterprises (SMEs) in Malaysia’s digital marketing landscape. It provides insights into SMEs’ perceptions of digital marketing impact and identifies essential tools and technologies, offering practical knowledge to enhance effectiveness of DM strategies. The research enriches understanding and provides strategic recommendations for the dynamic digital marketing landscape within Malaysian SMEs in the technology sector.

References


