ORIGINAL ARTICLE



Ready, set, go Deploying the social listening stoplight activity to teach marketing analytics using qualitative techniques

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Revised: 1 September 2023 / Accepted: 22 January 2024 © The Author(s) 2024

Abstract

Analytical skills are in high demand across business sectors and various positions. Therefore, it is pivotal for marketing students to have exposure and practice leveraging analytical methods and tools before graduation and entering the job market. However, qualitative techniques to gather marketing analytics and insights are rarely taught as an approach. As a result, the authors created the Social Listening Stoplight Activity to teach students how to qualitatively gather marketing analytics insights for actionable recommendations that can be used to adjust social media strategies for increased engagement. By leveraging data from the Social Listening Stoplight Activity, the authors qualitatively analyze undergraduate and graduate student assignment submissions to assess the activity as a method to teach students qualitative social listening, a growing industry skill. This research finds that students exhibit more difficulty with qualitative versus quantitative strategic social media marketing analysis skills, further justifying the need for an activity like this in marketing analytics and social media courses. Students must not only be able to assess numerical data, but they also must be able to interpret and communicate recommendations to truly contribute to organizations.

 $\textbf{Keywords} \ \ \text{Marketing analytics} \cdot \text{Social listening} \cdot \text{Qualitative methods} \cdot \text{Student engagement} \cdot \text{Social media} \cdot \text{Marketing pedagogy}$

Introduction

According to Marketing Week, the demand for marketers with social media and data analytics skills is rising (Tesseras 2021). Students expect that in return for spending time,

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Published online: 30 March 2024

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money, and effort studying for a degree, the institution, faculty, and staff will equip them with skills to be competitive in the job market. As a result, to enhance a student's employability, higher education institutions must focus on developing skills and investing in activities that will enhance the student's future. However, many institutions struggle to find qualified individuals equipped to teach cutting-edge topics to enable students to shift toward new skills, growing in demand quickly. For example, WEForum predicts that by 2025, two of the top sought-after skills will be analytical thinking and content creation (Russo 2020). Meanwhile, the Information Technology & Innovation Foundation reported that one-third of Americans lack digital skills, and 18 percent are limited in digital abilities (Mello 2023). As the marketing industry continues to evolve, marketing faculty are responsible for preparing students for future roles in fields like content marketing, social media marketing, and data analytics.

It is imperative that marketing educators recognize the pivotal role of marketing analytics in modern marketing and how vital it is that students graduate with practical experience and skills in this arena (Gregorio et al. 2019). Due



to rapid technological advancements and an explosion of digital data, marketing has undergone a profound transformation. Many firms have embraced a marketing analytics approach using data analysis techniques to evaluate and optimize marketing efforts. This transition in how companies consider data has revolutionized the marketing profession by shifting from instinctive decision-making to evidence-based decision-making (Verhoef et al. 2021). Data-driven marketing approaches have replaced or enhanced traditional marketing strategies, leading to marketing analytics as a highly sought-after skill (Gregorio et al. 2019).

However, a gap exists between practice and pedagogy for marketing analytics training and application. Industry-facing qualitative research has substantial growth during the business-wide shift to big data, although academic audiences have not followed suit. As a result of academic marketing researchers adopting a positivist approach, quantitative research has dominated the marketing discipline (Reavey et al. 2021). While qualitative research is often criticized as skewed or biased, not generalizable, anecdotal, or lacking rigor, these are common misconceptions of a sound methodological approach. When conducted properly, qualitative research is rigorous, unbiased, reliable, and credible (Verhoef et al. 2021), making it a valid approach to understanding marketing consumer insights.

This study highlights the importance of helping students understand and practice qualitative techniques to gather marketing insights and make recommendations. Helping students understand the intersection of qualitative marketing analytics and social media listening is critical in a datadriven world. The Social Listening Stoplight Activity is a practical way for students to understand the importance of marketing analytics and provide an additional skill in their toolkit for their future careers. The purpose of this activity and the following research is to provide a guided introduction to qualitative marketing analytics for undergraduate and graduate marketing students. The manuscript's results highlight the importance of integrating marketing analytics into marketing curricula to facilitate the development of agile, competent, and forward-looking marketing professionals who can navigate the modern marketing environment.

Due to this growing industry demand, this paper discusses the need to transform marketing pedagogy to ensure student outcomes are consistent with industry expectations. The following sections provide an overview of the importance of analytics in marketing, discuss the growing need for analytical skilled workers, and highlight the vital role that qualitative research plays in marketing analytics. Following these sections, the Social Listening Stoplight Activity is introduced with detailed instructions for implementation, a rubric, and sample instructions for students. As a final point, the manuscript concludes with empirical research examining the impact of the Social Listening Stoplight Activity as an

experiential assignment aiding the development of qualitative skills among undergraduate and graduate marketing students.

The digital landscape: a growing need for marketing analytics

While using complex metrics to assess marketing efforts is not new, the emergence of marketing mechanization, relying heavily on artificial intelligence and machine learning (Plangger et al. 2022), coupled with the influx of data has changed not only consumer behavior broadly, but it has also resulted in a shift for marketing strategies and approaches. In fact, Plangger et al. (2022) found that using artificial intelligence has improved marketing managers' productivity and helped them narrow their focus to other tasks. By utilizing the wealth of data at their fingertips, marketers can harness the knowledge to develop successful marketing campaigns, provide personalized customer experiences, and deploy effective strategies to reach target audiences. As marketing continues this digital transformation, firms must rethink their marketing strategies by hiring skilled professionals and developing more diverse organizations (Gregorio et al. 2019).

Wymbs (2011) found that industry representatives strongly lobbied for integrating web analytics into the digital marketing curriculum. To address this shift, marketing educators can adjust their curricula by integrating data analysis into their marketing courses and developing new analytical skills-focused courses. By incorporating marketing analytics into marketing education, programs will better equip students with technical expertise and foster a criticalthinking mindset conducive to the current marketing profession (Allen 2020). Marketing educators should nurture problem-solving abilities and informed decision-making by encouraging students to analyze data, interpret findings, and develop data-driven marketing strategies. Combining a solid understanding of traditional marketing principles with these data analysis skills will empower the next generation of marketers to create innovative and successful marketing campaigns that resonate with target audiences.

Data analysis, critical interpretation, and effectual presentation of information form the basis of analytical skills. Consumers leave digital footprints across various platforms, making marketing analytics an essential tool for every marketing department looking to analyze these data and draw insights to inform their future marketing activities. Aspiring marketers are now expected to be capable of navigating complex datasets, interpreting trends, and drawing meaningful conclusions from them (Hair et al. 2020). Data-driven marketing, statistical knowledge, problem-solving, and the ability to synthesize information into meaningful and actionable



reports will continue to be in high demand among marketing practitioners (Gregorio et al. 2019). Marketing graduates are often exposed to analytics in courses like statistics, but the job market demands analytical skills beyond the basic, quantitative normative offering. To inform marketing decisions for the areas marketers currently focus on, it is essential to have a critical understanding of online interactions and customer engagements, data, figures, and statistics (Gregorio et al. 2019).

Social media, including text, audio, photos, and videos, has changed the flow of information between consumers and companies. Over time, one-to-many communication has been superseded by many-to-many communication (Kaiser et al. 2020). Social media has empowered consumers to share brand opinions and attitudes through interactions with brands and other consumers (Maslowska et al. 2016). The ability to analyze these interactions using social listening or social media monitoring can offer better consumer insights (Aral et al. 2013). Social listening is an active process of attending to, observing, interpreting, and responding to various stimuli through mediated, electronic, and social channels (Stewart et al., 2018; Stewart and Arnold 2018; Rappaport 2010). The process of social listening is also dynamic; the ever-changing nature of the digital communication landscape and the increasing use of mediated channels influence how people interact (Stewart and Arnold 2018). Recent data on the prevalence of smartphones and mobile use of social media platforms distinctively support the need to recognize social listening as a method of analysis (Pew Research Center 2022). However, observing and evaluating interactions on social media requires an open mind and training in qualitative analysis techniques (Zhang and Vos 2014).

The importance of qualitative techniques in marketing analytics

Widespread changes in technology and society have affected how marketing research is designed and implemented. However, marketing research textbooks and courses have not kept pace with the changes in practical applications over the past two decades (Reavey et al. 2021). The standardized format for marketing research education has focused on quantitative and positivistic methods, sometimes preceded by a few qualitative methods. This "blend" and avoidance of qualitative exploration is often based on the assumption that students need a more comprehensive understanding of quantitative methods for marketing analytics. Although quantitative and qualitative data analysis both accentuate the versatile character of marketing analytics and their capacity for dealing with multiple types of data (Iacobucci et al. 2019), quantitative analysis outnumbers qualitative analysis in a typical marketing research class seven to one (Freeman and Spanjaard 2012).

Following this typical format, discussions of qualitative research are minimal and, in essence, penalize students and their future employers by not providing them with a range of research capabilities (McLeod et al. 2017; Thyroff 2018; Reavey et al. 2021). The challenge is that although marketing analytics has advanced as a top skill set, the continued association with analytics is with quantitative methods, not qualitative ones. However, qualitative research methods, including, but not limited to, in-depth interviews and focus groups, can provide rich and detailed insights into consumer experiences and perceptions. Qualitative research methodologies applied to marketing analytics provide a deeper understanding of consumers and support theoretical development efforts (Lindgreen et al. 2021). Qualitative insights can be used to inform marketing strategy and product development and evaluate marketing campaigns' effectiveness. Additionally, qualitative methods can help marketers identify emerging trends and changes in consumer behavior, which can be a valuable competitive advantage.

Although the purpose of marketing analytics is to gather and analyze data to gain insights and make informed decisions that drive marketing strategy and improve business performance, tools leveraged have changed. Now, marketers collect customer data using technology-based interfaces in place of such instruments such as mail, telephone, or inperson surveys (Bridges 2020). Research indicates soft skills are growing in importantance, as AI threatens automation of quantitative tasks (Burning Glass Technologies 2019; LeClair 2018). Skills such as communication and problem-solving are critical and constitute a key skills gap alongside technical skills in analytics capability (McArthur et al. 2017; Di Gregorio et al. 2019; Rohm et al. 2021). Therefore, while the impact of soft skills training is often immeasurable, it provides gradual and long-term benefits for students, particularly within the marketing discipline (Riley and Nicewicz 2022).

The divide between what is taught in the curriculum and industry expectations has long been observed in the literature (Duffy and Ney 2015; McArthur et al. 2017). Although this divide is evident, in many instances, the gap between what industry employers seek in recent graduates and what information is conveyed as part of marketing curricula is not discussed or addressed. Some even call for a shift in highlighting practice and skill development over discussions of theoretical understandings (McNatt et al. 2010). Research supports experiential learning, or learning by doing, is more effective than traditional learning, that is, learning by listening (Cornell et al. 2013; Schaupp and Vitullo 2019; Ahmadi et al. 2020). As such, a paradigm shift is taking place where educators are encouraged to foster an active learning experience in their classrooms, as opposed to passive learning based on lectures (Thyroff 2018).



Applying qualitative techniques in experiential learning

Experiential learning emphasizes the importance of handson, practical experiences in the learning process (Camarero et al. 2010). Learning through action involves actively engaging learners in real-world situations, allowing them to apply their knowledge and skills in a meaningful context (Payne et al. 2011). As such, experiential learning is widely accepted as an effective way to bridge marketing theory with business practice to prepare students for the "real world" (Hamer 2000; Payne et al. 2011; Kurtzke and Setkute 2021). These learning techniques are classified as either semi- or loosely structured learning activities. Semi-structured experiential activities require more structured tasks that encourage students to use knowledge learned inside and outside the classroom and apply it in real-world scenarios for applied knowledge gained (Thyroff 2018). Whereas loosely structured experiential learning activities are longer in duration, broader in scope, and less controlled by the instructor (Hamer 2000). The intersection of experiential learning and qualitative techniques provides a robust opportunity for students to learn via hands-on activities they can apply after graduation (DeLyser et al. 2012; Mason 2002). Therefore, the forthcoming activity features an experiential learning exercise suited to teaching qualitative research for marketing analytics courses.

Social listening as a practical and strategic marketing tool

Social listening combines content creation knowledge, social media marketing research, and data analytics analysis (Panwar and Kahn 2022). As a result of social listening, brands strive to uncover details of social interactions among consumers to understand motivations and improve their customer relationship strategies. Businesses use social listening to strengthen connections with new and existing customers. A customer-centric social listening strategy can give businesses an edge over competitors (Dougherty 2015; Stewart and Arnold 2018; Panwar and Kahn 2022). However, the concept of social listening should not be confused with the concept of social monitoring. Instead of tracking only messages and mentions about the brand, social listening aims to build strategies to engage customers meaningfully and resolve existing customer issues within their brand experience (Panwar and Kahn 2022). Research has demonstrated that experiential learning can help students develop reallife skills they can later leverage for employment (Karns 1993, 2005; Ferns et al. 2019; Bacon and Stewart 2021). The Social Listening Stoplight Activity allows students to practice social listening in an experiential way to critically review real social media accounts and provide actionable feedback for improvement based on their analysis of previous activity and engagement.

Introducing the social listening stoplight activity

Social media provides a wealth of data to help organizations better understand and build relationships with the audience. This assignment requires students to create a social listening report with actionable recommendations for a social media account they choose. The Social Listening Stoplight Activity is an analytics tool used to evaluate the performance of a chosen social media account over the course of 14 days, past or present. Students assess the engagement effectiveness of real-world social media content for actual brand, professional, and entertainment accounts (See Fig. 1). As a visually engaging assignment, the colors of a stoplight (red, yellow, and green) signal to the student things that the account should stop (red), continue (yellow), or start (green) based on their performance and engagement with followers. The Stop, Start, Continue approach to assessment and feedback has been shown to be effective when soliciting qualitative student responses (Hoon et al. 2015).

In a traditional stoplight, red indicates an immediate need to stop. This application signals poor performance and activities the social media account should halt. These accounts may have little to no engagement with their followers (low comments, likes, or reposts) or engage in activities that do not align with their other content. A yellow light suggests one should proceed with caution at an intersection; conditions are dynamic and may warrant that you continue through, stop as a red light is imminent, or pause to evaluate conditions. This exercise indicates activities the account should continue doing but monitor as a change may be needed or more information is needed to determine the next steps. The activities may be excellent current representations of the artist, athlete, or brand (for example) or fit in with their existing persona on the platform. A "yellow" designation indicates engagement via comments, likes, reposts, or other favorable engagement metrics from their followers, subject to the chosen platform. If strong positive engagement remains consistent, this type of content can remain. However, if a sudden negative shift occurs (or continues), such content may become prime for discontinuation. Finally, a "green" designation on a recommendation indicates activities the social media account should start doing. This could include any activity the student may observe as missing from the brand's social media platform that could be helpful for their presence, increase followers, or increase engagement from existing followers. The student may also suggest activities from a competitor that could work well for the social media account they are monitoring.



Fig. 1 The social listening stoplight activity assignment

Social Listening Stoplight Activity (30 pts)

- 1. Choose one business/brand's social media account to monitor.
- Choose one (1) of the following social media platforms where you want to conduct your audit of the brand's content:
 - Facebook
 - X/Twitter
 - Instagram
 - LinkedIn
 - TikTok
- 3. Review at least fourteen (14) days' worth of posts on the platform.
 - a. [Hint: pick a day and count backward until you have 14 days of content to analyze, or choose a 14-day period around an event important to your chosen account.]
- 4. Analyze the activity by examining its content (caption, #hashtag, etc.), media (i.e., photos/video), engagement, and alignment with the brand.
 - a. Pay particular attention to engagement behavior on each post relative to the content of the post.

Note: Engagement may be measured in multiple ways, here are some suggestions:

- i. How many comments does the post with the greatest number of comments have? And what is the post about? (add a post description)
- ii. How many likes (or views) does the post with the greatest number of likes (or views) have? And what is the post about? (add a post description)
- iii. <u>If</u> your platform shows sharing counts, how many shares does the post with the greatest number of shares (retweets or reposts) have? (add a post description) If your platform does not show sharing counts, enter "N/A."
- b. Note the tone of the content; whether it is happy, sad, neutral, encouraging, or soliciting a particular action or feedback.
- c. Read the comments if there are any. Then assess if the comments generally appear positive, negative, or neutral.
- d. Assess if they are following the post's instructions, if any were given.
- e. You can also assess their competition's content to see if there are gaps in their approach.
- Use the content from your assessed time period to form your recommendations for things the profile should stop, continue, and start doing based on your observations and insights gathered as support.
- 6. Complete the **Stop Continue Start Report Template** to summarize your recommendations. You must include at least 2 examples of each (start, stop, continue), for a total of 6 recommendations.

The Social Listening Stoplight Activity can be used in undergraduate and graduate courses. It helps students gain hands-on experience using qualitative analysis to conduct social listening, develop evaluation and recommendation plans, and build analytics reports. The goal of the activity is to help students understand both the strategic role of social media analytics and how the functions of social media data aids organizations in achieving their goals, understand follower engagements, and leverage select metrics that accurately measure the success of their social media efforts. Additionally, the stoplight activity helps students develop and apply critical thinking, listening, and soft skills. The rubric used to grade the activity assesses four criteria with

five rating levels per criterion (See Table 1). The four assessment areas include the overview, stop, continue, and start assessments for a maximum of 30 points overall. The activity overview is worth 6 points, and the remaining three criteria are worth 8 points each.

Student instruction to complete the activity

Faculty should direct students to select a brand, company, or notable figure with a social media presence they are familiar with or otherwise interested in. Then, have them choose from one of five social media platforms where their subject is active to complete the exercise (X/Twitter, Instagram,



Total points: 30 pts

Table 1 The social listening stoplight activity rubric

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Criteria	Ratings					Pts
Overview General assessment of the quality of page 1 of the social listening template Does it cover all of the required components? Is it well written and on target? Are explanations clear and complete?	6 pts Excellent It is well written and covers ALL requirements outlined in the directions and template. Includes thorough descriptions for posts meeting the criteria. Includes screenshots of posts meeting the criteria. Exceptional quality	5.4 pts Very good It is well written and covers ALL requirements outlined in the directions and template. Includes thorough descriptions for posts meeting the criteria. Minor content or grammatical errors	4.8 pts Fair Covers MOST requirements outlined in the directions and template. Some content or grammatical errors	4.2 pts Poor Covers BARE MINIMUM outlined in the directions and template. Many content or grammatical errors. Missing explanations or details for posts meeting criteria	0 pts Missing/does not meet requirements	9
Stop assessment Complete the template for actions to stop based on the assessment of social media content	8 pts Excellent It is well written and covers ALL requirements outlined in the directions. Exceptional quality	7.2 pts Very Good It is well written and covers ALL requirements outlined in the directions. Minor content or grammatical errors	6.4 pts Fair Covers MOST requirements outlined in directions. Recommendations are very short/brief and/or have little rationale explanation	5.6 pts Poor Covers BARE MINIMUM outlined in directions. Recommendations are short/ brief and/or less than 2 recommendations and/or no rationale explanations	0 pts Missing/does not meet requirements	∞
Continue assessment Complete the template for actions to stop based on the assessment of social media content	8 pts Excellent It is well written and covers ALL requirements outlined in the directions. Excep- tional quality	7.2 pts Very Good It is well written and covers ALL requirements outlined in directions. Minor content or grammatical errors	6.4 pts Fair Covers MOST requirements outlined in the directions. Recommendations are very short/brief and/or have little rationale explanation	5.6 pts Poor Covers BARE MINIMUM outlined in directions. Recommendations are short/ brief and/or less than two recommendations and/or no rationale explanations	0 pts Missing/does not meet requirements	∞
Start assessment Complete the template for actions to stop based on the assessment of social media content	8 pts Excellent It is well written and covers ALL requirements outlined in the directions. Excep- tional quality	7.2 pts Very Good It is well written and covers ALL requirements outlined in the directions. Minor content or grammatical errors	6.4 pts Fair Covers MOST requirements outlined in the directions. Recommendations are very short/brief and/or have little rationale explanation	5.6 pts Poor Covers BARE MINIMUM outlined in directions. Recommendations are short/ brief and/or less than two recommendations and/or no rationale explanations	0 pts Missing/does not meet requirements	∞



Facebook, LinkedIn, and TikTok). Direct the students to review their social media content for a span of at least 14 days. As they complete their review, they should pay keen attention to the importance of engagement behavior on each post relative to the content of the post. Emphasize that differences in content include, but are not limited to, the presence of pictures vs text (or both), hashtags (included or not), and video (included or not). Students could even note the duration of the video if present. To complete the assignment successfully, students must observe all aspects of the content, including the tone of the content and comments. Is it happy, sad, neutral, encouraging, soliciting feedback, or a particular action? Do these comments generally appear positive, negative, or neutral? They can also assess the profile's competition to gather insights from their activities, as applicable. With these considerations in mind, students are tasked to make recommendations for the profile's future activity.

The recommendations must not only be sectioned into the stop, continue, and start categories, but they should also align with the overall brand of the subject profile. Based on their observations and content gathered, students complete the activity by generating a report similar to one that would be presented to management (see Fig. 2).

Assessing student experiences with the activity

The Social Listening Stoplight assignment was used in undergraduate and graduate marketing courses with more than 200 students across multiple semesters at a mid-sized, private Northeastern University. The associated rubric (see Table 1) was implemented after several semesters for grading standardization. The dataset for this analysis consists of

Fig. 2 Stop continue start report template

[What brand and platform did you choose?]

[What dates did you include in your observation?]

[How many followers do they have on the platform at present?]



STOP Recommendation(s): <u>activities you</u> recommend the account should **stop** doing.

They may have little to no engagement with their followers (low comments, likes, or reposts/shares), or the content doesn't fit with their other content.

CONTINUE Recommendation(s): <u>activities you</u> recommend the account should **continue** doing.

They may be good representations of the company, artist, or brand or fit well in their existing persona on the platform. These should have a good showing of engagement indicators from their followers. However, something about the content causes caution and you are unsure if they should continue as a result.

START Recommendation(s): <u>activities you</u> recommend the account should **start** doing.

These are things you may observe are missing from their social media platforms that could be helpful for their brand and increase followers or engagement from existing followers. You may also suggest things you've seen by a competitor that could work well for your brand.

https://icon-library.com/icon/stop-light-icon-3.html.html>Stop Light Icon # 432967

Photo credit

You must include at least two examples of each (start, stop, continue)

74 students (25 undergraduate and 49 graduate) with assessments graded using the rubric. Since students choose among the five major social media platforms to complete the exercise (X/Twitter, Instagram, Facebook, LinkedIn, and Tik-Tok) (See Table 2), some themes emerged for the platforms chosen. Instagram was the most commonly used platform, representing nearly 72% of all assignments, followed by X/ Twitter at 9.5% and TikTok at 6.8%. LinkedIn and Facebook accounted for 5.4% and 4.1% of submissions, respectively, and were utilized exclusively by graduate students. Several undergraduates failed to disclose a social media platform, representing 2.8% of submissions. The mean total score for all observed students is 27.69 out of 30, with a standard deviation of 5.60. On average, graduate students scored higher than undergraduate students, with mean scores of 28.21 and 26.66, respectively. There was also less observed variability in graduate student performance, as evidenced by their standard deviation of 3.69 compared to undergraduates at 8.14.

Descriptive statistics (See Table 3) show that, on an aggregate basis, students were more likely to encounter difficulty in the qualitative analysis portion of the assignment. The "Stop" section of the assignment had the most points deducted on average (7.26/8.0) and the highest standard deviation (1.70) of all sections of the assignment. Graduate students still fared worse on the qualitative versus quantitative components when broken down by standing. They were most likely to lose points on the Stop section (7.44/8.0),

Table 3 The social listening stoplight activity rubric score descriptive statistics

Mean (std dev)	Combined submissions $n = 74$	Graduate submissions $n = 49$	Undergraduate submissions $n = 24$
Overview	5.51 (0.99)	5.58 (0.35)	5.38 (1.65)
Stop assessment	7.266 (1.70)	7.44 (1.34)	6.91 (2.24)
Continue assess- ment	7.42 (1.63)	7.56 (1.27)	7.14 (2.19)
Start assessment	7.49 (1.64)	7.62 (1.26)	7.23 (2.21)
Total score	27.69 (5.60)	28.21 (3.69)	26.66 (8.14)

though they demonstrated less variability in scores with a standard deviation of 1.34. Undergraduates also followed the trend of losing more points on the qualitative assessment. These students encountered more difficulty than their graduate counterparts, especially on the "Stop" portion, where the mean score was 6.91/8.0 with a 2.24 standard deviation. Select examples of exemplary (excellent, very good) graded student submissions are available in Table 4.

Student submissions in the dataset were also assessed for themes. A content analysis of submissions yields additional information about student engagement with the stoplight assignment (See Table 5). Social media accounts for individuals and brands each represented 40% of assignments. Within individuals, celebrities (43%) and influencers (40%) were the most commonly

Table 2 Student social media platforms used

Social media platform	Description	Count		Percentage of total submissions (%)
Facebook	Assignment completed using the Facebook account of the chosen brand, entity,	Undergraduate	0	4.10
		Graduate	3	
		Total	3	
Instagram	Assignment completed using the Instagram account of the chosen brand, entity, or person. Primarily image and short video content with an emphasis on hashtags	Undergraduate	18	71.60
		Graduate	35	
		Total	53	
LinkedIn	Assignment completed using the LinkedIn account of the chosen brand, entity, or person. Emphasis on professional and business-to-business social networking content	Undergraduate	0	5.40
		Graduate	4	
		Total	4	
TikTok	Assignment completed using the TikTok account of the chosen brand, entity,	Undergraduate	3	6.80
	or person. Primarily short video content w/an emphasis on hashtags	Graduate	2	
		Total	5	
X/Twitter	Assignment completed using the X/Twitter account of the chosen brand, entity, or person. <i>Primarily text and meme-based content</i>	Undergraduate	5	9.50
		Graduate	2	
		Total	7	
Unknown	Assignment did not specify a social media platform in the submission	Undergraduate	2	2.70
		Graduate	0	
		Total	2	



 Table 4
 Assignment student exemplary examples

Rubric rating

Student example

Overview

Excellent (6 pts)



→ How many likes (or views) does the post with the greatest number of likes (or views) have? Describe the post that meets this criteria.

The post with the highest number of **likes**, totaling **307**, features a professionally crafted and visually appealing video commemorating the 100th birthday celebration of Henry M. Rowan. The social media post highlights the significance of Mr. Rowan's life, particularly noting that he was born just a few months after the school, later named after him, opened its doors in 1923. The content reflects on Mr. Rowan's extraordinary life and the profound impact he had on the university, emphasizing the transformative changes he inspired and supported. The post is part of the celebration of the university's first century, using the hashtag **#Rowan100** to connect the commemoration to the institution's history and legacy.

Very good (5.4 pts)

- → How many comments does the post with the greatest number of comments have? Describe the post that meets this criteria.
 - The post with the greatest number of comments had 20,242 comments. The title of the post was "FSU was stunned after finding out they missed the College Football Playoff". The post was a video reaction of the players and coaches, visibly upset, after hearing the bad news. This post generated nearly double the number of comments compared to the post with the second most comments. My assumption is that this post generated a large number of comments since it highlighted the negative effects of a controversial process that many believe needs to be reformed.

STOP

Excellent (8 pts)

STOP:

- 1. Stop excluding hashtags from captions. Not including captions limits how searchable a post is. Using captions will help Tiktok's algorithm show videos to Baggu's target audience.
- Stop uploading mixed styles of TikToks (image carousel, product in use). The image
 carousels closely resemble Instagram posts and do come off less personable and relatable
 than the TikToks of the products being used in real life. Image carousel interrupt the rest of
 Baggu's TikTok feed since it does not match their other videos.

Very good (7.2 pts)

STOP:

- 1. Posting videos in which a lesser-known guitarist is taking the audience backstage historically do not perform well for the account and do not emphasize the brand.
- The brand should stop posting videos with music that doesn't fit within the rock genre, as they have the lowest engagement on the account and do not fit with the brand.

CONTINUE

Excellent (8 pts)

CONTINUE:

- Collaborating with other companies and licensing the use of famous designs or characters to feature on Baggu products. These collaborations will introduce Baggu to other designers' or animators' audiences and vice versa.
- 2. Uploading TikToks that show models using Baggu products. This will enable potential customers to visualize how they may use Baggu products in their own lives and showcase features of the products that may be hard to gleam in an online product description.

Very good (7.2 pts)

CONTINUE:

- The content directed for children receives more comments and engagement. I
 recommend continuing posting about the color changing toothpaste and the use of
 color/bubblegum taste is both attention grabbing and fun.
- Continue using Reels as a way to post and promote products. They tend to get more traffic than the static posts

observed account types, followed by athletes (17%). Brands followed by students for the assignment offered much more variety. Within brands, 20% were for food, and 13% each were for apparel, TV/entertainment, and

sports companies. The remaining brands focused on the beauty, fitness, medical, and technology sectors. Franchises (16%) represented the final category of accounts utilized for the assignment, split evenly between restaurants and sports teams.



Table 4	(4 · · · - 1 \	
Table 4	(continued)	

Rubric rating	Student example
START	
Excellent (8 pts)	 Airbnb should start posting videos and reels in their instagram account with creative hashtags. Videos touring houses and showing some of the experiences Airbnb offers through their platform would be a great addition. I believe this would be a great strategy for the company because when observing Airbnb's competitor: Vrbo, I noticed that they include many reels and videos on their feed. Said videos have very positive comments, great amount of likes and views. These videos and reels should include hashtags that evoke positive emotions in their target audience. I recommend that Airbnb starts responding to the comments they receive on the comment section of their instagram posts. Especially the comments concerning issues with the platform, emergencies related to the service, and privacy and safety concerns. I think this is very important because alarming comments with no response from Airbnb could create a lot of concern on existing and potential customers, damaging the company's reputation and image. This can result on Airbnb's retention rate and revenue dropping. If instead, Airbnb responds to the comments showing proactivity on solving these issues, customers will likely feel safer and more confident about using the platform.
Very good (7.2 pts)	START:
	 Fender should start posting more still images of older models of guitars, as they on average perform much better than any of their other posts in terms of likes and comments.
	 Fender should feature more brand-oriented posts, as they seem to perform well. Fender should emphasize their products in their reels instead of primarily focusing on the artist playing them

 Table 5
 Themes and categories of followed accounts

Category theme	Sub-category	Brief description	Count	Percentage of category theme (%)	Percentage of total submissions (%)
Brands			30		40.5
Companies, firms, or organiza-	Apparel	Fashion, clothing, apparel	4	13.0	
tions	Beauty	Beauty and/or makeup	2	6.7	
	Food	Food items and retail except restaurants	6	20.0	
	Health/fitness	Health and wellness with fitness	2	6.7	
	Health/medical	Health and wellness with medical	2	6.7	
	Sports	Sports goods, services, experiences except individual athletes and franchised teams	4	13.0	
	Technology	Technology devices or services	2	6.7	
	TV film/entertainment	Network, broadcast, cable, or streaming television and film	4	13.0	
	Other	1 each for music, higher education, and executive search/recruiting	3	10.0	
Franchises			12		16.2
Service and experience oriented franchises	Restaurants	Dine-in or take-out retail franchise locations	6	50.0	
	Sports	Professional league franchised teams in any sport	6	50.0	
Individuals			30		40.5
People including actors, singers, rappers, musicians, individual athletes, and social media influencers	Athletes	Individual athletes in any sport	5	16.7	
	Celebrities	Individual music, TV, film, theater, athlete performers	13	43.3	
	Influencers	Social media influencer personalities	12	40.0	

n=72; Two students did not identify the account followed



Implications

The "Overview" portion of the stoplight exercise assesses students' ability to correctly interpret quantitative social media metrics of reach and magnitude of engagement. Within and across each academic classification, students performed better on the quantitative section of the assignment. This suggests students can better demonstrate a mastery of basic quantitative versus qualitative analysis skills. Conversely, the remainder of the assignment examines students' ability to analyze content curation, a highly qualitative social media function.

More specifically, the assignment reviews how well students evaluate content and make well-supported actionable recommendations for their chosen account's social media content strategy. Of the three types of recommendations in the assignment, advice for activities to stop is more abstract and requires more critical thinking skills. The student performance analysis shows that undergraduate and graduate students exhibit the most difficulty with this portion of the qualitative analysis, thereby supporting the argument for integrating more qualitative analysis instruction in marketing analytics instruction.

Concluding thoughts

Students with a degree in Digital Marketing need to be capable of analyzing the rapidly growing quantity of data generated by digital technologies. Educational institutions can cultivate seamless transitions for graduates entering the competitive job market by immersing students in real-world scenarios involving data-driven marketing challenges. Exposing students to marketing analytics tools and methodologies as part of their academic journey enhances employability and ensures they are prepared to contribute effectively to their organizations from the outset. According to Iacobucci et al. (2019), higher education should develop flexible pedagogical plans so that graduate and undergraduate students can experience marketing analytics in multiple aspects.

There is an increasing consensus that marketing practitioners are important stakeholders in marketing education. A major role for universities is to equip graduates with the right knowledge and skills for employment (Ye et al. 2017; Rhew et al. 2019). Educators are responsible for providing students with the tools, vocabulary, and expertise to undertake this journey. Consequently, there has never been a more important time to improve the marketing research and analytics curricula because the demand for marketing researchers and business analysts is at an all-time high

and is predicted to increase by 19% within the next decade (Chen et al. 2012; Bureau of Labor Statistics 2021).

Marketing analytics in higher education pedagogy must be examined for their potential impact on student engagement and marketing program success. This research addresses a gap between the marketing analytics industry and marketing curricula and a need for qualitative marketing analytics skills for marketing graduates. Higher education institutions continuously seek innovative strategies to enhance student engagement and achieve academic excellence in a dynamic landscape. As a result of the proliferation of digital technologies and the enormous amount of data generated, various sectors have been transformed. Education is no exception. Analytics bridges the gap between higher education pedagogy and industry (Agnihotri et al. 2016). Therefore, qualitative analytics recommendation abilities will elevate a student's offering to companies.

Funding This research received no specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Declarations

Competing interests There are no conflicts to disclose.

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Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

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