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Customer Experience and its Implication for Value Creation within the Night-Time Economy

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by

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Kundupplevelse och dess innebörd för värdeskapande inom nattlivet

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Examensarbete TRITA-ITM-EX 2021:545

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Abstract

The consumer behaviour is adapting within industries due to new technologies such as smart phones. As consumer behaviour changes so do companies by adapting their way of engaging and interacting with their customers. This provides potential to innovate new service offerings. Successfully launching new services which provide value for the customer is faced with risk of failure. To mitigate risks associated with failure, a clear understanding of the customer can aid with understanding what value a service offering should provide to be successfully adopted by the market. Due to customer experience being unique for each individual, personalization is a technique which could be used within software to improve the customer experience. Challenges could arise in terms of scarcity of data which can impact the performance negatively of a data driven algorithm. However, veracity is another aspect of data known to be associated with the potential to improve performance. Based on these two issues, this study conducted a sequential mixed methods study consisting of a netnographic study on Instagram to better understand the customer experience within nightlife. Furthermore, the netnographic study enabled the construction of a gold standard, which were used while conducting a GSDMM topic modelling experiment with the purpose to evaluate what topics required further pre-processing due to high ambiguity of the text content. Findings from the netnographic study and its implication for customer experience was discussed from the point of view of a software service offering. This study suggests software offerings within nightlife to improve customer experience during the pre-purchasing phase by considering aspects related to age, interests in atmosphere, type of activity, preferred music genres, spending time with friends or facilitating escapism. The discussed service has negligible control during the post-purchasing stage suggesting that the firm could innovate controlled touchpoints, such experiences can be related to anticipation, joy, celebration, social adventures, memory of previous nights out (stories), current music preferences or new desires occurring spontaneously. Upon adopting a service dominant logic, this study suggests that software services can facilitate the customer experience within nightlife through co-creation, since with the proper usage of data, network effects could occur between the customer and an organizer or venue within nightlife, but also between customer to customer. A future study is proposed to investigate how the coordination could be conducted through crowd-sourced based interactions where the software functions as an overseer of a multi-actor setting to provide further insights regarding how such coordination impacts the co-creation of value.

Key-words

Customer Experience, Service Dominant Logic, Night-time Economy, Nightlife, Topic Modelling

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Sammanfattning

Konsumentbeteende förändras inom industrier mot bakgrund av att nya teknologier introduceras, till exempel smarttelefoner. Då konsumentbeteendet förändras, gör även företagen förändringar i hur de involverar och interagerar med kunder. Dessa förändringar ger möjligheter för att utveckla eller ta fram nya tjänster. Samtidigt finns utmaningar vid lansering av nya tjänster. För att minska riskerna vid lansering av nya tjänster kan en god förståelse av konsumenten tydliggöra vilket värde en tjänst bör erbjuda för att bemötas positivt av marknaden. Då kundupplevelse är unikt för varje person, kan individualiseringstekniker inom mjukvara tillämpas för att förbättra kundupplevelsen. Det kan däremot uppstå problem när det är bristfälligt med data som algoritmen kan använda sig av. Kvalité och valt fokus på data kan dock förbättra algoritmens prestationer.
Mot bakgrund av de två redogjorda problemen, genomfördes en sekventiellt blandad metodstudie bestående av en nätnografisk studie på Instragram för att utöka förståelsen av kundupplevelsen inom nattlivet. Resultatet från nätnografistudien har därefter använts för att konstruera en guldstandard vilket tillämpades på en ämnesklassificerare vid namn GSDMM. Syftet med ämnesklassifikationsexperimenten var att förstå vilka ämnen som skrivs med en hög grad av tvetydighet och därför komma att kräva en mer gedigen förbehandling av den textbaserade informationen. För att tillägga, har insikter från nätnografistudien diskuterats och dess betydelse för kundupplevelsen utifrån en mjukvarutjänsts perspektiv. Studien tyder på att mjukvarutjänster inom nattlivet kan förbättra kundupplevelsen i förköpsstadiet genom att beakta aspekter relaterat till ålder, föredragen stämning, typ av aktivitet, föredragna musikgenrer, att vara med vänner eller framhävning av eskapism. Den diskuterade tjänsten har försumbar kontroll av kundupplevelsen i efterköpsstadiet, därför föreslås införandet av kontrollerbara interaktioner med tjänsten. Sådana upplevelser bör fokusera på att spänna förväntningar, glädje, firande, sociala äventyr, minnen från tidigare utgångar (berättelser), föredragen musik i stunden eller nya önskemål som uppstår spontant under utgången. Vid tillämpning av tjänstedominantlogik indikerar studien att mjukvarutjänster kan förbättra kundupplevelsen genom samskapande, eftersom vid korrekt användning av data, kan nätverkseffekter förekomma mellan dels kund och organisatör eller lokal inom nattlivet, men även mellan kund och kund. Fortsatta studier föreslås forska om hur samverkan kan koordineras genom crowdsource-baserade interaktioner där en mjukvarutjänst fungerar som kontrollant/moderator av en multi-aktörkonstellation. En sådan studie kan ge förståelse om hur koordinationen påverkar värdeskapandet under samverkan.

Nyckelord

Kundupplevelse, tjänstedominantlogik, nattliv, topic modelling

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Glossary

Outgoer – a person visiting venues during evening and night-time

Value chain – the concept of how the value of a product or service is increased for each activity conducted to deliver it to a final consumer

Digital transformation – The leverage of digital technologies in order to change an organisations strategy and operations to achieve further organisational efficiencies such as innovation or cost savings.

Co-occurrence – two occurring words are related to each other and both aids in describing a certain topic or subject

Topic proportion – The proportion of words in a text that belongs to a certain topic or subject

1 Introduction

This chapter begins with the background, followed by the problem formulation. These subsections will explain why this thesis focuses on customer experience and a big data application in order to provide implications toward product advantages. Next, the purpose, research question, delimitations and contributions toward academia and the sustainable development goals (SDG) are presented.

1.1 Background

The digital era and its new digital technologies have been explored in almost all industries to leverage new technologies benefits towards business offerings (Matt, et al., 2015). Within nightlife, digital services have emerged during recent years to provide guest list management and improved availability towards events and venues for end users (nightli, 2021) (Tablelist, 2021). Furthermore, the consumer behaviour is adapting within industries due to new technologies such as smart phones. Fuentes et al. (2017) findings indicated that the activities of shopping were reorganized due to smart phones. It also had implications for the experience and the relationship between consumers and retailers. Accenture (2020) states that 77% of the studied companies will adapt their way of engagement and interaction with customers. Therefore, an understanding of a firm's customers is of utmost importance.
To adopt these insights towards a firm and innovate service offerings, customer experience can be used to conduct innovation practices (De Keyser, et al., 2020). The customer experience field within marketing has during latest decades received increased levels of attention (Schmitt & Rogers, 2008), emerging from the marketing field, customer experience has broadened to considering the entire customer journey and not only focusing on the controlled brand itself (Lemon & Verhoef, 2016). Studies show that both good and bad customer impressions can occur within every contact between the customer and the brand (Berry, et al., 2002). Another consideration is that companies are more frequently creating value as they design and develop products and services by utilizing consumers and their experiences, thereby co-creating value (Prahalad & Ramaswamy, 2004).

An adopted technique within software is to provide personalized content. The benefit of personalized content is that with the right given data, it can present content in line with a customer experience tailor-made towards an individual rather than one designed experience in a standardize manner. To achieve the personalization, relevant data must be first and foremost gathered, then properly analysed. In terms of analysis, big data applications have provided entirely new ways of understanding consumer behaviour (Erevelles, et al., 2015). In addition, Stephens-Davidowitz (2018) provided multiple examples on how a better understanding of end users from a behavioural point of view can ease the process of successfully making use of data. Heinonen & Medberg (2018) clarified how opinions, experiences and behaviours of customers can be obtained by observing information online using netnographic studies and how its insights can aid service innovation, advertising and environmental scanning.

1.2 Problem formulation

Launching new services or products always has the potential of success while at the same time the risk of failure. One successful factor for product (or service) innovation is the product advantage. This advantage is obtained when service or product provides unique features for the customer or perceived as having higher quality than other offerings. To obtain such success factor, it is important during the product development stage to consider:

customers' needs, wants, and preferences (Cooper & Kleinschmidt, 1987). Therefore, it is of importance to obtain understanding of consumers within nightlife. As of today, there are no known studies that have studied customer experience in nightlife. However, there are two studies which were conducted from a management perspective related to experiential marketing. The first looked at brand experience (Beckman, et al., 2013) and the second study investigated consumer motivations in a nightclub setting (Taheri, et al., 2017). On the contrary none of the studies have been conducted within Swedish nightlife. Therefore, there is a need for domain-specific interpretations of opinions, experiences and behaviours of customers within nightlife.

Furthermore, start-ups are challenged due to a scarcity of data compared to established companies in order to conduct big data applications, however Ghasemaghaei & Calic (2019) findings indicate that data velocity, data variety and data veracity play a higher role in big data solutions compared to the volume of data (Ghasemaghaei & Calic, 2019). To cope with data in terms of veracity, netnography could be of use since understanding the context of the data can aid in dealing with uncertainty about the data (Schroeck, et al., 2012). Saboia et al. (2018) illustrated that Instagram posts were used to further understand how healthy lifestyles were expressed in Instagram posts. Such insights can be used to form a gold standard to evaluate the performance of a big data application (Manning, et al., 2008, p. 356), thereby being able to judge if the performance is acceptable for operational settings.

Based on these two challenges, this study will investigate Instagram posts in regards to nightlife activity. To understand how insights about domain-specific interpretations of opinions, experiences and behaviours of customers using a netnographic approach can firstly, provide insights towards customer experience within nightlife and how it can be leveraged for innovation. Secondly, evaluate and provide insights toward the operational usability of unsupervised machine learning applications within nightlife to provide personalization towards users.

1.3 Purpose and Research Question

The purpose is to gain an understanding of the customer experience within nightlife to understand its implications for a software company in terms of value creation. Therefore, the first research question is:

How can software improve the customer experience for outgoers within the night-time economy through co-creation?

Furthermore, this study will evaluate the application of an unsupervised machine learning technique therefore the second research question follows as:

What identified topics within nightlife would benefit from a further refined pre-processing to be applicable toward a topic modelling algorithm?

1.4 Delimitations

Due to the given time frame and in order to maintain research quality this study has chosen to only discuss implications based on a Swedish demographic. This is argued to be valid since the insights from this study seeks to primarily aid the digital transformation within nightlife of Sweden.

Additionally, this study did only investigate the individual and social dimension of nightlife from the perspective of an outgoer. Since the customer journey is occurring through multiple actors, these organizations can impact the customer experience. Due to the given time frame this study has not included such actors in the study.

1.5 Contribution

This study seeks to contribute insights to a Swedish start-up about opinions, experiences and behaviours of outgoers within nightlife and how such insights can aid service innovation, advertising and further environmental scanning. Furthermore, two academic contributions are made. One revolves around value creation and the other about empirical knowledge of Swedish nightlife. Finally, insights from this study's insights can aid the progress of the sustainable development goals (SDG) related to sustainable tourism and mitigation of inequalities regarding social or economic aspects.

1.5.1 Literature

The study provides knowledge towards the understanding of value creation. Prioritized reasearch within value creation seeks answers to questions related to co-creation of value such as "Who should oversee the coordination in these multi-actor, network settings? How should coordination take place? How does the nature of the coordination impact the co-created value?". This study contributes mostly towards the first question while discussing the other two. Regarding service experience this study provides understanding of the implications of the increasing autonomy of customers in creating their own experience (Ostrom, et al., 2015). Furthermore, this study contributes with empirical knowledge towards nightlife in a Swedish context.

1.5.2 Sustainable development goals

The SDG target 8 mentions a goal which strives to by 2030, *promote sustainable tourism that creates jobs and promotes local culture and products*. And regarding 12, it is stated to obtain sustainable consumption and production patterns (United Nations, 2021). This study contributes to the SDG target 8 and 12 by improving society's understanding for how to provide activities and experience at individuals local area which could potentially substitute offshore tourism traveling.

Furthermore, this study also enabled insights towards a more democratized nightlife, which could mitigate inequalities regarding social or economic aspects. Therefore, this study contributes to goal 10.2: *Promote Universal Social, Economic and Political Inclusion* (United Nations, 2021b). As its insights can aid in making nightlife more available to a broader demographic in society, aid event hosts to easier reach a broad target to develop such opportunities in a sustainable manner.

Figure 1: United Nations 17 sustainable development goals (SDG) (United Nations, 2021a). This study contributes to sustainable development goal 8, 10.2 and 12.

2 Literature review and Theory

The chapter presents the chosen theories related to value creation and customer experience. Afterwards, previous work within nightlife is presented focusing on the knowledge of opinions, experiences and behaviours observed within nightlife.

2.1 Service dominant logic

To explain value creation, institutional logics are of interests for the marketing field. Vargo & Lusch (2004) explained two different institutional logics: goods-dominant (G-D) logic and service-dominant (S-D) logic. It was explained that S-D logic made it easier to understand what the source of value is. The source of value in S-D logic was clarified to be understood in terms of activities derived from (1) specialized knowledge and abilities conducted by themselves and others. (2) The activities they want done for them. In contrast, the G-D logic emphasizes the exchange of goods as the source of value. In short, marketing activity (and economic activity in general) is better understood by service-to-service exchange, instead of goods for goods or goods for money exchanges. It was also clarified that in S-D logic value is co-created, while the G-D logic emphasize one actor creating value and another actor is the receiver of value.
S-D logic extended the background and theoretical foundation of the resource-based view (RBV) as it examined resource-based studies and discusses resources as central towards its logic. To briefly contrast the theories, RBV concentrates on the firm on most occasions, while more recently also considered networks and systems. S-D logic explains how value is created for a beneficiary hence being customer-focused while RBV being firm-focused (Mele & Della Corte, 2013).

The service dominant logic has adapted since its introduction and been summarized in five axioms (Table 1). The first axiom clarifies that service is the fundamental type of exchange (Vargo & Lusch, 2016). A service can defined as a set of different activities in a business which together constitute a process between different entities with the aim of supporting the customer in his or her everyday practice (Grönroos, 2008). Axiom 2 clarifies that value is created by multiple actors and that there must be a beneficiary of such value creation. By beneficiary it is clarified to be the antecedent of value cocreation and the recipient of the service.

Axiom 3 clarifies that resource integrators can be considered on either the micro, meso and macro levels. Furthermore, resources are viewed to be not only natural resources that humans utilize for assistance as described by (Malthus, 1798). But also including resources as intangible and dynamic functions regarding creativity and assessments made by human beings. Hence resources are not static, everything is considered to be neutral (if not resisting) until humankind have understood how to put a resource into use (Zimmermann, 1951). In terms of resource integration, S-D logic implies that market actors are not providers of input neither the buyer of output. Actors do transform specialized competences (such as knowledge) and other internal and acquired resources into service provisioning (Lusch, et al., 2008).

Axiom 4 refers to shifts the mind-set of pre-defined roles of producers, consumers and customers towards generic actors interacting with each other. Furthermore, value depends on its context (value in context) therefore it is the beneficiary who phenomenologically determines the value (Vargo & Lusch, 2016). To elaborate on context, networks enable resources in a form of shared information or knowledge which can be influenced by multiple

actors (Rindfleisch & and Moorman, 2001). Actors has the option to build upon one another's knowledge in either a collaborative or competitive fashion (Johnson, et al., 2004). Chandler & Vargo (2011) clarifies these examples of resources not being owned by a single actor, therefore the judgement of a resources value is in fact being a resource is determined based on its context. In addition, a resource for an individual actor can be an inhibitor for another actor (Emirbayer & Mische, 1998). Therefore, resources can be of lower or higher value depending upon which context it is put into practice on and in terms of which actor that is considered. Therefore S-D logics 'customer-focused' view states that it is the beneficiary who determines its value.

Vargo & Lusch (2016) did establish a fifth Axiom. This axiom revolves around streamlining or enabling the cooperation and coordination of activities between actors. It is further explained how institutions play an instrumental role in enabling such resource-integration and service-exchange activities. Institutions are emphasized to be routinized rubric that provides a shortcut to cognition, communication, and judgment such as formal codified laws, informal social norms, conceptual and symbolic meanings (conventions). North (1990) clarifies that institutions are considered "the rules of the game" while organizations are the players of the game.
Institutions can cause network effects as they facilitate actors to conduct service exchange and value cocreation under time and cognitive constraints. This coordination benefit can reach higher potential the more actors share the institution and therefore institutions are a key component in value cocreation and service exchange (Vargo & Lusch, 2016).

Axiom	Description
Axiom 1	Service is the fundamental basis of exchange
Axiom 2	Value is cocreated by multiple actors, always including the beneficiary
Axiom 3	All social and economic actors are resource integrators
Axiom 4	Value is always uniquely and phenomenologically determined by the beneficiary
Axiom 5	Value cocreation is coordinated through actor-generated institutions and institutional arrangements

Table 1: The five axioms of S-D logic (Vargo & Lusch, 2016).

2.2 The experience economy

The experience economy as described by Pine & Gilmore (1998) have made an impact on how businesses value customer experience as part of their value proposition as the article states: *the concept of selling experiences is spreading beyond theatres and theme parks*. However, in later stages of experience economy the involvement of a consumer has been emphasized. That is, the producer has shifted from influencing the customer journey to instead let the consumer co-create their own experience with the producer (Boswijk, et al., 2007). It is evident that understanding what experiences consumers are susceptible to within a given domain can have multiple applications such as targeted marketing and development of new offerings. Accenture (2020) emphasizes the need to organize the whole business around the delivery of exceptional experiences to reignite growth for companies. A great example is social media where consumers can communicate and share their own version of an experience which was initially generated by a firm (Gensler, et al., 2013). This has not gone unnoticed within tourism and hospitality research as one of today areas with ongoing research is about the customer experience. Studies within this field is fragmented regarding what focus of the consumer experience is emphasized. In terms of nightlife no paper today has analysed the night-time economy from an individual's customer experience point of view, there are however ethnographic studies providing insights regarding the customer journey (Roberts, 2015), motivations (Christmas & Seymour, 2014) and projecting wanted or unwanted experience when going out in the night-time economy in terms of flirting (Jensen, et al., 2019). Furthermore, there are studies focused on women, specifically on their rituals, friendship, intoxication (Bancroft, et al., 2014), motivations and negative experiences (Gunby, et al., 2020).

2.2.1 Customer experience

Based on Pine & Gilmore (1998) concept of the experience economy, customer experience emerged as a means to create new value for customers and companies (Schmitt, 1999b; LaSalle & Britton, 2003). Consumption could be viewed as a holistic experience focused on a person as a whole, rather than a customer. The experience is considered through every interaction between the company's offer and the person (LaSalle & Britton, 2003). In an S-D logic manner, Prahalad & Ramaswamy (2004) considered consumer experience being a co-creation of their own unique experience with the company. The meaning of customer experience adopts a firm centric point of view while it is closely related to consumption experience and experience marketing as they all revolve around experience. To illustrate, LaSalle & Britton (2003) states that consumption is considered a holistic experience, while the customer experience according to Shaw & Ivens (2002) "is a blend of a company's physical performance and the emotions evoked, intuitively measured against customer expectations across all moments of contact". Based on literature within experience marketing, customer experience was defined by Gentile, et al., (2007) as "a set of interactions between a customer and a product, a company, or part of its organization, which provoke a reaction (LaSalle & Britton, 2003; Shaw & Ivens, 2005)". This experience is strictly personal and implies the customer's involvement at different levels: rational, emotional, sensorial, physical and spiritual (Schmitts, 1999b; LaSalle & Britton, 2003). Its evaluation is dependent on the comparison between the customer's expectations and the stimuli coming from the interaction with the company and its offering in correspondence of the different moments of contact or touchpoints. There are deviating perspectives on customer experience (Lemon & Verhoef, 2016). Customer experience is described to be context dependent, occurring directly (e.g.

consuming products) or indirectly (e.g. exposed to advertisement) and is distinguished between product experience - when a consumer interacts with a product, shopping and service experience – occurring as the customer interacts with a store physical environment, consumption experience – experience when consuming or using a product (Brakus, et al., 2009). Another perspective is defined by recent business practice as a phenomenon considering every part of a company's offering (advertising, packaging, product and service features, ease of use, reliability and the quality of customer care) and its customers responses to it in any direct or indirect form (Lemon & Verhoef, 2016). It was explained that some agreement can be identified regarding customer experience, in a sense that it refers to customer's multidimensional responses to direct or indirect interaction with stimuli created by the firm (Waqas, et al., 2021). However, customer experience has been emphasized to involve the customers own influence (Boswijk, et al., 2007; Gensler, et al., 2013), suggesting that a firm centric definition might miss an important aspect in terms of customer journey while at same time going beyond brand experience. In addition, Lemon & Verhoef (2016) state that a key area that research should consider is the spill over into other domains, contexts, situations and industries in terms of customer experience. Lemon & Verhoef (2016) define customer experience as: "a multidimensional construct focusing on a customer's cognitive, emotional, behavioural, sensorial, and social responses to a firm's offerings during the customer's entire purchase journey". The purchase journey is described to be the process a customer goes through, across all stages and touch points (brand-owned, partner-owned, customer-owned, and social/external).

2.2.2 Customer Experience management

To utilize the experience concept in business practices, frameworks, tools and methodologies have been developed and are referred to as customer experience management (Schmitt, 2011). One such tool is the three building blocks of the customer experience that have been proposed within the field in recent years: touchpoints, context and qualities (TCQ). Each component consists of sub-topics to make customer experience discussed, assessed and managed in a standardised manner. The first component touchpoints (T) are about the contacts a customer has between the brand/firm. Touchpoints are characterized by the stage of the customer journey, control and nature. Control explains who is in charge of the contact point. It can be either controlled by the firm (Verhoef, et al., 2009), or non-controlled touchpoints that are controlled by customers, influencers or other brands/firms (Kranzbühler, et al., 2019). Nature describes how the firm is represented. This can be digital (e.g., a website), human, physical or a combination. Furthermore, touchpoints are divided into three stages, emphasizing the entire purchase journey as was mentioned by Lemon & Verhoef (2016). The first stage is the pre-purchase stage, normally being about consumer decision process, need recognition and information search (Puccinelli, et al., 2009). The second stage is the purchase stage which involves consumer choice, ordering, paying, pickup and delivery (Lemon & Verhoef, 2016). The inductive analysis by Keyser, et al. (2020) explains the post-purchase stage with the actual usage and consumption moments of the service or product.

The second component is about context, which is divided in the following aspects: individual, social, market, environmental context. This study will only focus on the individual and social context. The individual context entails that each human being is shaped by their own subjectivity and logic, which implies that the human being is not only shaped through the interactions of a firm. Emotional state is one aspect of the individual context. Emotional state

refers to situational feelings of joy, happiness and sadness. In addition, the customer experience can be affected by cognitive factors. Cognitive factors are previous experiences, memories, imaginary or future experiences. In the individual context, the human being is also impacted by internalized institutions, rules, thinking styles, processing strategies and judgements. Other aspects concern the physical (e.g. fatigue) and economic (e.g. desired budget) factors. Broadening the context, a customer is influenced by social relationships such as friends, but this also applies to groups. In any constellation, these social structures have their own goals, needs, behavioural expectations, morale and the different roles taken by individuals (De Keyser, et al., 2020).

Five qualities construct the third component of the TCQ nomenclature. Quality 1 refers to the degree of participation. Some experiences require a great deal of involvement while other experiences can be achieved with little to no involvement with the firm. Another aspect is the dimensionality of experience (quality 2), which considers a combination of cognitive and emotional responses. Each response ranges from a weak to strong activation. These could for example be sense and feel as was described by (Schmitt, 1999a). De Keyser et al. (2020) explain how many variants of such scales have been developed within the field. Timeflow (quality 3) is about how long or short duration the customer perceived the experience. Quality 4 considers whether the responses were negative, neutral or positive, while interacting with the firm. Depending on the situation, each kind of valence could be of value towards the customer (quality 3). Quality 5 revolves around the ordinariness of an experience which is about how common the response is towards a firm's interaction (De Keyser, et al., 2020).

The TCQ nomenclature can also be used to for identification of opportunities for differentiation and excellence for customer experience, design or innovation practices. For innovation practices there is no specific order of how the components should be assessed because it serves as a purpose to identify dependencies between the components (De Keyser, et al., 2020).

2.2.3 Urban nightlife

In this sub section nightlife will be defined and its different dimensions clarified. Then, experiences related to nightlife will be described.

This study considers urban nightlife to be defined based on Anderson (2009) clarification of what urban nightlife is. Urban nightlife consists of bars, parties, restaurants and nightclubs. Urban nightlife has a mixture of cultural components, such as ethos, organization, identity markers, norms, behaviours and activities. Urban nightlife and nightlife will refer to the same phenomenon in this study. As of today, there are no known studies that have studied customer experience in nightlife. However, there are two studies conducted from a management perspective related to experiential marketing. The first was about brand experience conducted by Beckman, et al. (2013) and the second study investigated consumer motivations in a nightclub setting (Taheri, et al., 2017). There are studies in other research fields that have investigated nightlife, normally in terms of one or a few dimensions taken from one geographic location. Some of the dimensions are: drugs (Jackson, 2004) (Malbon, 1999) (Sjö, 2004), violence (Crawford & Flint, 2009), regulation (Crim, 2008) (Johansson, 2016), sexual harassment, excessive alcohol consumption (Grazian, 2009), discrimination (Schwanen, et al., 2012), norms and rituals (Christmas & Seymour, 2014). Considering some of the perspectives described, one could conclude similarly to Grazian (2009) that urban nightlife is not a

democratized and social-capital-enriching "third space" of social life. Instead, one can view urban nightlife as a phenomenon about race and class division, gender inequities and exclusive to a certain demographic in society. Anderson (2009) clarifies that the best way to make sense of urban nightlife is to look at a bar, party, restaurant or nightclub having a continuum based on cultural components (such as ethos, organization, identity markers, norms, and behaviours/activities). It was illustrated that venues, highly homogenized around a particular cultural form, can project such interpretations claimed by Grazian (2009) while cities such as Philadelphia and Ibiza provide a diversified set of events and venues which can both constitute positive and negative aspects of nightlife. Finally, cultural components impact if the venue is about alcohol consumption and hook-up (with an increased risk of sexual harassment occurring) or if it is about other topics such as music appreciation, dancing, socializing with friends or experiencing something different. Certainly, sexual courtship could still occur in such spaces, but is not a priority for people. It is further elaborated that parties and clubs can cope with sexual harassment by resisting sexist ideas and actions by embracing liberated and equitable relations between people (Anderson, 2009).

2.2.3.1 Escapism

Escapism, a mental and emotional escape from everyday life experiences that can be considered unpleasant to a less real state of mind. The escapism from reality can leave one in a better mood (Longeway, 1990). Such experience can also be perceived as exciting and enjoyable (Pine & Gilmore, 1999). In nightlife, this escapist experience within a special social context, enables the outgoer to experience a different identity characterised by doing things one would not normally do as nightlife provides a more permissive social arena (Christmas & Seymour, 2014). The nightclub setting is illustrated to represent a space in which everyday structures can be dissolved for a period of time, enabling experimentation with one's social identity and violation of moral or social boundaries. Furthermore, the venue staff shapes the codes and social behaviour, controlling to which extent order and discipline are maintained (Jackson, 2004). Furthermore, this space enables the outgoer to reveal the alternative social form of oneself and challenge the spatial control of body movements. Furthermore, clubbing provides an opportunity to "*occupy an uncivilized body for a night: to grin like a fool; to laugh too loud; to sweat it out on the dance floor"* (Jackson, 2004, p. 123). The sense of limitless behaviour and breaking of everyday norms were exemplified by Pini (2001) upon interviewing female ravers and argues that clubs are one of the few cultural spaces in society where women can behave disorderly and breaking norms. It is further clarified as breaking free from constraints and regulations of being an employee, a child, a mother, a woman, and a rational subject, all of which are related to everyday life. In a more general setting, Roberts (2015) described how outgoers moved in a spontaneous manner between different venues within nightlife. Furthermore, Taheri et al. (2017) findings indicated that nightclubs provide a space which facilitates demarcations from the everyday life causing the individual to entitle leisure time and become motivated to escape from everyday life.

2.2.3.2 Social context

Escapism shapes social context and the norms individuals are within. Therefore, certain behaviours occur in nightlife such as social adventure, forming of social groups among friends, expectations on clothing and attitude towards alcohol consumption. Furthermore, it impacts the individual's identity and perceived emotions during a night out. This will be further elaborated in this subsection.

Due to the dissolved norms and structures of everyday life, there are opportunities for more intense and extreme social interactions with strangers. Such adventures can range from simple conversations to sexual encounters and even fighting (Christmas & Seymour, 2014). This could for example be to flirt outrageously or conduct well-meaning conversations with strangers (Jackson, 2004, p. 123). The lack of clearly established behavioural boundaries might cause interactions to proceed further than wanted if even wanted at all. Lack of clear boundaries can escalate the interactions to cross the line (e.g. sexual harassment/molestation), as the word 'no' does not often stop the unwanted interaction from happening. The instance of 'no' not being effective was most applicable to women, which is why having other people around can help as they can intervene, if necessary, before a line is crossed too far. Explanations towards such unwanted encounters are: the perpetrator him/herself, lack of clear boundaries and alcohol (Christmas & Seymour, 2014).

The night out is normally conducted in a group of friends (social groups). Christmas & Seymour (2014) describe a night out as gendered activities. There are however similarities in behaviour between men and women. The structuring role of social norms and rituals, done by a group of friends, play a central role in mitigating some of the risks associated with a drunken night out. There also occurs bonding within such groups by forming a collective identity while conforming to one another's identities. Furthermore, it enables bantering as well as synchronised behaviour through dancing. The groups are often single-gendered and partners tend to socialise with separate groups. Being part of a group can encourage one to do silly things. Moreover, dancing, which can be viewed as a ritual (but not with certainty) can further strengthen bonding as individuals can find pleasure in doing same things as one another. Roberts (2015) and Hollands (1995) findings also highlight this group based social aspect, explaining how a night out is an opportunity to celebrate and reinforce friendships. Christmas & Seymour (2014) findings further explain the social dimension of a night out. To illustrate, one can banter, or have arguments and clash, yet remain friends the day after. Two critical factors: similar group and an established routine (e.g. timing). However, challenges with time-management can occur when one has responsibilities (e.g. job). Hence, groups can disband as they are often solely based on the activity of going out together. Moreover, single gendered groups tend to be formed during a night out. Furthermore, the group tends to require common norms and rituals. As a result, alignment and a common purpose are important for the group. Women in particular, seem to go out in order to bond with a single group and not necessarily with other people around them.
The social groups also impacted which venues to attend based on which bar or club was deemed as good or bad according to the members of the group. Important aspects assessed were 1) outgoers expectations of what a preferred demographic of other outgoers is, 2) a cheerful atmosphere and 3) a suitable degree of crowdedness (Roberts, 2015).
In terms of age, it was found that 18-19 year olds disliked places with older aged people attending and preferred being around people having the same age. Yet, people aged 22–24 years preferred similar age but were open for places with older people attending, however, the importance was to avoid people which behaved in a crude manner. Regarding older ages, Jackson (2004) illustrated how there are nightclubs targeted towards older aged groups in society.

Moreover, dress codes are applied, especially by women (Christmas & Seymour, 2014). Some venues have strict dress code policies to enter the venue (Schwanen, et al., 2012). By not following the dress code, the outgoer can experience negative responses if not conforming.

Such negative experience could be the sense of standing out or not feeling comfortable. It was explained that positive benefits were the experience of doing something together as well as a clearer distinction from everyday life (Christmas & Seymour, 2014).

Another aspect of nightlife is intoxication. It is described to elevate the night out (Roberts, 2015). There is a norm to consume alcohol and ensure to be as drunk as everyone else. Being sober in the night-time economy is perceived as irregular and uncomfortable. However, this kind of participation declines as the age increases because the activity itself becomes boring as the social context for the individual changes, often leading to bonding and belonging becoming stronger reasons for participation (Christmas & Seymour, 2014). Other reasons to go out other than just the intoxication is also supported by Anderson (2009) and Sjö (2004). Yet, based on a study in Denmark it was found that alcohol use and alcohol intoxication are integrated parts of going out for almost everyone (Jensen, et al., 2019)s. On the other hand, Hollands (1995) discusses that there have been obvious changes in nightlife culture and traditional symbols like alcohol obscuring other aspects of nightlife such as the confirmation of cultural identity and socialising with friends.

Another ritual conducted on a group level are the stories told the day after a night out, these stories can be shared to further bond the group. For some, collective story-telling the day after is a part of the ritual of a day of being hangover after a night out. The stories can also transform the perceived experiences. For example, some of the uncomfortable, distressing, or painful experiences can turn into positive and entertaining stories. Furthermore, embarrassing stories aid the group to shape a drunken night out identity. However, sharing these stories to other groups not playing by the same rules can turn the embarrassing stories into shame. Regardless of the negative consequences such as hangover, possible memory loss regarding last, high levels of money spent and embarrassing pictures posted online, people still go out as it is seen as part of the experience (Christmas & Seymour, 2014).

2.2.3.3 Individual context

From the individual's point of view, escapism within nightlife is associated with relaxation, switching from day-to-day rules and norms as well as switching one's mind off. Moreover, individual can experience excitement due to not knowing what is going to happen. Based on the dissolved structures related to norms, an outgoer can come out of the box and play with different identities or personalities. It is important to note that these experiences are not the cause of alcohol intoxication itself, but rather the norms and rituals that structure each context in terms of social expectations, opportunities and permissions. In addition, embarrassing stories are seen as part of the fun of a night out as they help the outgoer to shape one's night out identity, for instance, The outgoer can be perceived as a fun person with amusing stories to share and tell. The 'night out' identity can enhance escapism as it creates distance from one's everyday identity. Hence, one can shape one's identity to an extent. The "night out" identity is shared towards similar people - people who also enjoy going out as it is not as fun or pleasurable to share that identity or stories with individuals who do not (Christmas & Seymour, 2014).

It is further emphasized that people value the effects of alcohol which they see as a fuel to provide confidence and reduced self-consciousness, enabling them to do things they normally would not do (Christmas & Seymour, 2014). Roberts (2015) findings expands the understanding of alcohol intoxication within nightlife by discussing whether the experience of a night out could be substituted by drinking coffee in cafe-bars instead of alcohol. It was

described that the loosening of inhibitions is a clearly significant contributor towards the experience of a night out. However, it was also stated that the sole aim of a night out is not to get drunk by all the participants, although alcohol was explained to make it easier to behave silly or unserious, joke around and dance. The importance for some participants was instead meeting friends and having a fun time.

Other aspects for the individual in a nightclub was described by feeling attractive, carnal and exhilarated (Jackson, 2004, p. 123). Furthermore, in Roberts (2015) study, a good pub was explained by a respondent to be playing good music and that people at the venue were having a good time. In addition, in a nightclub setting, a positive experience was described by one interviewee as the atmosphere, laughter, none of the group had been kicked out of club, no one had thrown up, music been good and a sense of the club being packed with people (Roberts, 2015). In regards of getting dressed up, the ritual itself can be perceived by the individual as a way to separate a regular weekday from leisure time. It was explained to create a build-up of excitement (Roberts, 2015). This state of escapism by adopting dress codes was also explained by Christmas & Seymour (2014) as it could facilitate a clearer distinction from everyday life.

3 Topic modelling

This chapter will explain the used topic modelling method, particularly the clustering algorithm GSDMM is used in this study. Thereafter, the used measures to evaluate the performance of the model are presented.

Topic modelling algorithms were initially used for longer texts occurring on social media or other micro blogging pages. However, algorithms have been developed to cope with topic modelling on shorter texts, such as BTM (Cheng, et al., 2014). This study focused on short topic modelling algorithms, specifically GSDMM.

There are four characteristics of short texts which can provide insights towards the challenges for a short text topic model to perform well. It can be exemplified by looking at news headlines regarding the same topic. First challenge is the insufficient word co-occurrence due to the short length of the text. Secondly, since there are few words constructing the short text, typically only one topic is covered within the short text. Thirdly, when statistically analysing multiple short texts, the challenge lies in identify semantically related words which rarely co-occur. To illustrate, there could be a semantic relation between the word *car* and *car shop*, however it is mentioned together with the subject *internet of things* in the first case and the shortened *IoT* in the latter case. Finally, the probability of the text not containing a single topic is not inevitable since the text can contain multiple identifiable topics in the short text (Qiang, et al., 2020).

3.1 DMM

Dirichlet Multinomial Mixture model is a clustering algorithm which assumes each short text can only be assigned toward one topic. One important improvement in order to adopt statistical models to a short text setting was to weaken the restrictive assumption of a one-to-one correspondence between mixture components and classes. This was done by introducing a many-to-one correspondence. This in turn caused the classification procedure to become a matter of probabilistically, assigning words within text toward mixture components and then calculating the sum of the mixture component probabilities in order to yield class probabilites (Nigam, et al., 2000). This implication does address characteristic (1) and (2) of short texts (Qiang, et al., 2020).

3.2 GSDMM

GSDMM is the short naming for collapsed Gibbs sampling algorithm for Dirichlet Multinomial Mixture model (Yin & Wang, 2014). The algorithm was constructed to address challenges related to short text clustering. Four of Berkhin (2006) challenges were mentioned. 1) Setting the number of clusters; 2) the ability to work with high-dimensional data, 3) interpretability of results and 4) scalability to large datasets. Furthermore, the challenge of sparsity was brought up (Naveed, et al., 2011). Yin & Wang (2014) implemented GSDMM which can automatically infer the number of clusters while also converging faster. It also copes with the sparse and high-dimensional problems of short text.

In order to introduce the GSDMM model. Yin & Wang (2014) derived a proposed conditional classifier from the DMM model by Nigam et al. (2000). The algorithm will be demonstrated below (Algorithm 1), followed by the used conditional distribution (Equation 1) for the classification of texts (Yin & Wang, 2014). While most assignments are described in Algorithm 1, we do also define V as the number of words occurring in the vocabulary and

$\alpha \geq 0$ and $\beta \geq 0$ are related to the Dirichlet distribution and the beta distribution. The proposed distribution does however also support $\alpha = 0$ and $\beta = 0$. However, in this study $\alpha = 0.1$ *and* $\beta = 0.01$.

Algorithm 1: GSDMM (Yin & Wang, 2014).

Inputs:
$I \leftarrow$ number of iterations of the sampling algorithm
$T \leftarrow$ number of posts in the corpus
$\vec{t} \leftarrow$ the posts
$\mathrm{N}_t \leftarrow$ number of words in post t
$N_c^w \leftarrow$ number of occurences of word w in post t
Output:
$\vec{y}$ the cluster labels of each post
Algorithm
for $c \in C$ ***do***
    $m_c \leftarrow$ set number of posts in the cluster to zero
    $n_c \leftarrow$ set number of words in cluster to zero
    $n_c^w \leftarrow$ set number of occurences of word w in cluster to zero
for each post $t \in [1, T]$ ***do***
    // Sample a cluster for p
    $y_p \leftarrow y \sim Multinomial(1/|C|)$
    // Increment post count in cluster and the number of words in cluster
    $m_c \leftarrow m_c + 1$ and $n_c \leftarrow n_c + \mathrm{N}_t$
    for each word $w \in t$ ***do***
        $n_c^w \leftarrow n_c^w + N_c^w$
for i $\in [1, I]$ ***do***
    for each post $t \in [1, T]$ ***do***
        // Remove post t from the its assigned cluster
        $y' = y_t$
        $m_c \leftarrow m_c - 1$ and $n_c \leftarrow n_c - \mathrm{N}_t$
        for each word $w \in t$ ***do***
            $n_c^w \leftarrow n_c^w - N_c^w$
        // sample a cluster for p using the conditional distribution
        $y_t \leftarrow y \sim CondDistribution(y_t = y \,|\vec{y}_{\neg t}, \vec{t})$
        $m_c \leftarrow m_c + 1$ and $n_c \leftarrow n_c + \mathrm{N}_t$
        for each word $w \in t$ ***do***
            $n_c^w \leftarrow n_c^w + N_c^w$

Below $CondDistribution(y_t = y \,|\vec{y}_{\neg t}, \vec{t})$ (Equation 1) with $\alpha = 0.1$ *and* $\beta = 0.01$ is defined as:

$$CondDistribution(y_t = y \,|\vec{y}_{\neg t}, \vec{t}) \propto \frac{m_{c,\neg t} + \alpha}{T - 1 + |C|\alpha} \frac{\prod_{w \in t}(n_{c,\neg t}^w + \beta)}{\prod_{i=1}^{\mathrm{N}_t}(n_{c,\neg t} + V\beta + i - 1)} \quad (1)$$

3.3 Evaluation

This subsection presents techniques and measures used to evaluate the performance of the topic modelling algorithm. To begin with, the importance of splitting data between training, validation and test data is explained. Then accuracy will be defined. Followed by declaring the gold standard. Lastly, cosine similarity will be defined.

A common goal when evaluating algorithms is to achieve a generalized performance. Therefore, data is typically portioned into training data and testing data. The training data is assumed to be used to construct the model. While the latter, which is the testing data is only used when evaluating how well the algorithm has managed to understand a task such as classifying text into different categories (Aggarwal, 2018).

3.3.1 Cross validation

Cross validation is a technique used to generalize a statistical model by rotating the training and validation data exposed to the model. The data is divided into *k* equally sized segments, then *k – 1* segments are selected as training data and 1 segment as the validation data. The validation data functions in a similar manner as testing data, though it is being used during training to evaluate the current performance of the training. This is then iterated *k* times. This procedure is normally repeated multiple times to further increase the robustness of the model given the provided data (Aggarwal, 2018).

3.3.2 Accuracy

In order to measure the performance of a trained classification model, accuracy can be used as a measure. Accuracy aims to evaluate how well a classifier manages to classify correctly. There is a different approach to calculating accuracy, but one approach is called precision. Precision can be explained as the amount of correctly classified tasks compared to the total amount of tasks. Therefore, we give the following definition of precision. $precision = \frac{TP}{TP+FN}$, where TP is the true positives (the correctly classified tasks). FN is the false negatives- the tasks which were not correctly classified (Chandramouli, et al., 2018).

3.3.3 Gold standard

While there are internal criterions to evaluate clustering, such evaluations can translate to poor performance in a specific application of the clustering algorithm. Therefore, a gold standard can be used to directly evaluate the cluster algorithm in a particular application. Based on such gold standard, an external criterion can be used to evaluate how well the clustering manages to classify texts (Instagram posts) in comparison to an identical classification conducted by hand (Manning, et al., 2008, p. 356).

3.3.4 Cosine similarity

When processing text based information, the challenge is to achieve relevance determination. To illustrate, a word occurring too frequently will indicate similarity toward a significant portion of the data. As a result, an algorithm cannot separate the words relevance toward different topics since the word is within all the topics at hand. Inverse document frequency does assign a weight $tfidf_{t,d}$ to a word t in a document d, Where $tfidf_{t,d}$ is the highest when t occurs frequently in a lower fraction of the total documents. The weight is lowered if it occurs few times in a document or occurs frequently within multiple documents of the total.

And the score will be at its lowest if it occurs in all the documents. $tfidf_{t,d} = tf_{t,d} * idf_t$ where $tf_{t,d}$ is the number of occurrences of the word t in document d and where the other factor $idf_t = log \frac{N}{df_t}$ where N is the total number of documents, df_t is the number of documents containing the word t.

Note that $tfidf_{t,d}$ could be considered as a dimension t for a document vector d. To find similarities between documents, one can calculate the cosine similarity between two normalized document vectors A and B the following way: $\cos\theta = \frac{tfidf_A \cdot tfidf_B}{\|tfidf_A\| \, \|tfidf_B\|}$. To interpret cosine similarity, a higher value indicates a higher similarity in the occurrence of relevant words (Manning, et al., 2008).

4 Method

In this section the research design is initially described, followed by explaining how the sequential mixed methods study was conducted. Then, the quality of this will be assessed and lastly, the ethical aspect of conducting a study dependent on publicly available data on the internet.

4.1 Research design

This study followed mostly an inductive approach, emphasizing that the empirical data decides what theory will be chosen to deepen understandings about the data (Blomkvist & Hallin, 2015). This approach was chosen due to the lack of managerial studies conducted within nightlife focusing on customer experience. Therefore, the deductive aspect of this thesis focused on firstly, the customer experience from a software service point of view and secondly, the empirical context chosen to be nightlife. However, an inductive approach was applied for different theories of customer experience. Hence, this study focuses on customer experience.

A sequential mixed methods was chosen as the most suitable approach to answer the research questions proposed in this study. The study consists of two phases: A and B (Creswell, 2009).

In phase A, a qualitative exploratory case study of customer experience in nightlife was conducted, by collecting posts from Instagram containing one specific hashtag. The choice of qualitative study for phase A was due to not knowing what aspects were of interest to be examined in terms of customer experience within nightlife (Morse, 1991). This case study was conducted in an explorative manner as it emphasized induction in its design and did not expect a certain generalizable outcome of its study (Yin, 2003). Furthermore, netnography was considered a valid approach due to its ability to reveal multidimensional inner realities of social interaction. Since customer experience considers cognitive factors such as imaginary experiences, these multidimensional inner realities can be identified by applying a netnographic approach. In addition, netnography can be used to capture expressed qualities which can indicate the importance or unimportance of customer experiences (De Keyser, et al., 2020). Therefore, netnography can capture aspects of individuals which would not be able to be identified during physical interactions due to the individual's inability or unwillingness to express it (Kozinets, 2018). As a result, netnography can project honesty towards unique customer experiences which other methods would enable to do.
Kozinets (2018) mention the importance of finding the right digital location to obtain valuable empirical data towards the research scope while conducting netnographic studies. Instagram was chosen as the digital location due to it being one of the biggest social media platforms. Other netnographic studies have been conducted in terms of lifestyle and leisure time activities (Saboia, et al., 2018) (Conti & Lexhagen, 2020).Within customer experience it has also been explained that social media can reveal context-related information of relevance in the forms of likes, shares, posts, and comments which can be of relevance towards customer experience (De Keyser, et al., 2020).

Phase B used the findings from phase A and followed a quantitative approach. To construct a corpus (a set of Instagram posts), the topics to categorize each post were based on the findings from Phase A. In addition, a gold standard of which category an Instagram post belonged to was also conducted based on insights from phase A, hence the research design of this thesis being a mixed methods study (Creswell, 2009). To evaluate the applicability of the topic

modelling algorithm towards a specific application, a gold standard was chosen, and algorithms performance was evaluated based on accuracy (Manning, et al., 2008).

4.2 Data collection and analysis

The following sub sections describe how Phase A and Phase B were conducted. Note that insights and the data gathered from phase A were used in phase B.

4.2.1 Phase A: Netnographic study of Instagram

A vital stage of netnography is the search as it is important to match the research interests to an appropriate online location, therefore the initial step was to establish appropriate search words on Instagram called hashtags. It was found that one search word (hashtag) offered not too narrow, yet not too broad content in relation to the case study. Posts were gathered during two iterations. The first iteration gathered posts from the end of 2020 up until the beginning of 2018. After discussing the findings, a second iteration was conducted, gathering posts between January 2018 to February 2017. Each post's relevance was assessed towards the data collection out of which 500 posts were established as relevant towards the study. In order for the posts to be classified as relevant, they had to be related to a night out. The choice to terminate data collection in February 2017 was determined due to saturation, as no new insights were gained upon comparing 2018 to 2017 (Kozinets, 2018). Upon analysis of the posts, codes where constructed based on the information learned from the posts (see Table 2), adopting a Grounded theory (Saunders, et al., 2016, p. 193). Based on the codes, themes were established by comparing the codes to the literature. At a later stage, it was decided to consolidate code words related to each other which shaped the structure of the empirical findings (Creswell, 2009). Furthermore, four themes were incorporated based on the literature in the empirical findings section. The themes incorporated form the literature were: social adventure, feeling limitless, exhaustion and memory.

Code word	Description
Pub	The poster was located or mentioned bar or pub
Concert	The poster expressed going to a concert in the post
Restaurant	Poster were located at a restaurant
House party	Picture taken from a household
Club	Poster were located at a club or mentioned going to a club
Memory	Poster wrote about yesterday's night out
Love	Expressing multiple compliments and declarations of love to another person
Excitement	The poster expressed being excited
Anticipation	The poster was looking forward towards something
Longing	Poster wishing a non-present friend was there
Tiredness	Expressions of physical fatigue
Relaxation	Poster expressed to feel relief from duties and could take it easy
Kinship	Expressed tribute of friendship towards friends
Bonding	Friends conducting activities together
Intoxication	Images on beverages or red eyes on the poster
Feel beautiful	Poster admired their own appearance
Feel confidence	Expressed confidence towards their outfit
Feel younger	Poster expressed to be looking more like they used to in younger days
Joy	Expressed having fun
Girls' night	A group of women spending time together
Out as a group	A mixed gendered group
Spontaneous	Mentioned being spontaneous
Listening to music	Poster mentioned music or mentioned music tracks
Celebration	Poster congratulated or posted about celebrating someone or something during a night out

Table 2: Established code words while conducting the netnographic study

4.2.2 Phase B: Topic modelling

Phase B consists of two classification experiments and a cosine similarity matrix plotted of the category *kinship*. Firstly, the classification experiments are explained, followed by the explanation of the cosine similarity plotting.

Two classification experiments were conducted: B1 and B2. B1 will be described below and B2 is carried out in a similar manner by consolidating a few categories all into one similar category. A dataset of 500 posts were selected and categorised by a gold standard. The gold standard was constructed based on the insights from the netnographic study as where the 500 posts. Pre-processing entailed not double counting a word if it occurred multiple times in a post. Moreover, all emojis were stripped from the texts and NLTKs *word_tokenize* function was used to tokenize the text (Kite, 2021). Then stop words were removed using NLTKs list of English stop words (NLTK, 2021). Furthermore, all tokens which had a length shorter than 2 characters were removed and lastly, words occurring either too frequently or too seldom

were also removed. Furthermore, two variants of excluded words were used to further illustrate findings (see Empirical findings 5.2). The evaluation then ran for 5 iterations. For each iteration, the data was randomly split into a training and test set. The training data spanned 60% of the data within each category. And the test data spanned 40% of the data within each category. Furthermore, skewness was mitigated in the training dataset by duplicating data in smaller sample sized categories. On one hand, this does imply double counting of evidence (Pavlov, et al., 2004). On the other hand, it provided more robustness during training and lower deviance of accuracy when inferring topics using the test dataset. This study conducted the unsupervised machine learning experiments by using the source code referred to in Qiang et al. (2020) study. Latent topics were then inferred. Parameters used for the GS-DMM were 20 topics randomly being assigned before iterating Gibbs sampling on the corpus (posts). α was set to 0.1 and β being set to 0.01. Lastly, the parameter TTopcis was assigned to integer 20. The number of iterations for the Gibbs sampling algorithm for the Dirichlet Multinomial Mixture model was set to 8000. After the iterations, topics were inferred on the training dataset and the accuracy were stored. This procedure was repeated 10 times from which the average accuracy was calculated. Furthermore, the average accuracy was then calculated for the 5 iterations. The calculation of the accuracy was in this study calculated identically to Qiang et al. (2020). To elaborate a Support vector machine (SVM) classifier was used infer topics on the posts. The SVM classified short texts based on the topic proportions being assigned to the short texts. To add, LIBLINEARs SVM classifier with the default parameters was used (LIBLINEAR, 2021) and while training the model the cross-validation technique was adopted with a split of 80% training data and 20% validation data (Qiang, et al., 2020).

For experiment B2, the topics kinship, memory, excitement, joy and anticipation were all consolidated into one topic. To further evaluate the B2 experiment one of the topics being consolidated was excluded to further indicate how accuracy was impacted. This was done for each topic (kinship, memory, excitement, joy and anticipation).

Finally, the cosine similarity was plotted of the category *kinship* toward the other categories within the dataset. To clarify, similar pre-processing was used as in B1 and B2, except for not removing any words occurring too seldom or too often. The posts where grouped based on their category and then, the posts belonging to one category were concatenated into one line of text. The inverse document frequency score was calculated and finally the cosine similarity between the line of texts was plotted into a table (Manning, et al., 2008).

4.3 Quality

In this subsection the quality of the thesis will be assessed by first explaining what criteria were conducted on sources and literature used in the research process. Secondly, the thesis is evaluated in terms of credibility, transferability and dependability related to Phase A. Finally, the quality of Phase B will be assessed.

To maintain an academic quality, peer reviewed journals from Sage journals were used when searching for literature within service dominant logic, customer experience and nightlife. Relevant papers were screened and from the screened articles further relevant papers outside of Sage journals databases were selected by following citations initially found from papers published on Sage journals. While investigating nightlife, non-scientific books were included such as Jackson (2004). In addition, a report outside of the academic context was used -

Christmas & Seymour (2014). These sources were considered of relevance due to their studied actors being representative for the research aim of this thesis. Furthermore, the sources contained first-hand information such as observations and citations of outgoers. Additionally, the findings do not contradict but rather align with the insights provided from peer reviewed papers (Blomkvist & Hallin, 2015, pp. 124-127).
The literature on computer science papers required to have at least 30 citations or to be published on peer reviewed journals such as *IEEE transactions on knowledge and data engineering* (IEEE, 2021).

To further assess the credibility of this study, the limitations of this study's empirical findings were evaluated. This was carried out by discussing the findings in relation to other studies empirics within nightlife to validate the findings of this study. Secondly, reliability of the findings was further reinforced by a second iteration of data gathering of posts (ranging in the dates of 2018 to February 2017) to ensure saturation had occurred (Saunders, et al., 2016).

In terms of transferability, this research has followed an inductive research design. As a result, the theories and frameworks were chosen to align with the context of the findings. Furthermore, the layout of the empirics and discussion aims to clarify the context of the findings and interpretations. This choice of layout was made to aid the reader to judge the generalizability of the findings (Saunders, et al., 2016).

To evaluate the dependability, adaptations of this study will be presented. Despite the research having an inductive design, the focus was not altered. However, two following exceptions were made:

1) At first, the implications of brand ambassadors were discussed in relation to customer experience, however once the empirical findings and its implications for customer experience were reiterated. The topic was switched to service dominant logic and its implication for value creation as it was considered better fitting the empirical context.
2) The second exception related to an inductive research design was about the focus on customer experience since the subject initiated the whole research idea (Saunders, et al., 2016).

4.3.1 Phase B

Regarding phase B, data qualities were assessed in order to cope with incorrect sample set selection. Not all data were chosen upon searching on the hashtag on Instagram, but rather clearly scoped posts were selected. The sample set selection was further ensured while conducting the gold standard. Furthermore, outliers were removed by identifying topics which had less than 10 posts or if the post within a particular category contained too few words after dimensionality reduction. The data were also pre-processed to reduce the dimensionality of the data (Manning, et al., 2008; Chandramouli, et al., 2018). As explained in 4.2.2, the pre-processing consisted of not double counting a word if occurring multiple times in a post, all emojis were stripped from the texts, NLTKs word_tokenize function was used (Kite, 2021). And from there on stop words were removed using NLTKs list of English stop words (NLTK, 2021), lastly all tokens which had a length shorter than 2 were removed.

In addition, it was experimented with removing words occurring too frequently respectively too infrequently. After testing, words occurring less than 3 times were excluded. Furthermore, too frequent words were excluded as they impacted the representation of the categories given

the text domain (Aggarwal, 2018). To further illustrate, the similarity of words within the categories *kinship, memory, excitement, joy* and *anticipation* in the experiment B2 (see 4.2.2) excluded the words which were intersected from the bag of words in the consolidated categories. These were the following words: *today*, *good*, *night*, *nightout*, *nice*, *day*, *weekend*, *evening* and *friends*.

To mitigate skewness in the data, all categories were provided with the same sample size. This implied duplication of the categories which had fewer data points than the included category with the biggest sample size. This raised the issue of double counted evidence (Pavlov, et al., 2004). This study used a sample of external validation data to provide reliable evaluation of accuracy. During training it was found that the model had lower variance in its accuracy when duplicating the data points.

The reason for using accuracy as an evaluation metric was to understand the performance of the model in a practical setting. Therefore, the metric was used for identifying potential improvements of the classifier (Chandramouli, et al., 2018).

One weakness of this study was the small sample size, which is why the findings were triangulated (Creswell, 2009). Triangulation was carried out by calculating the cosine similarity between categories to further illustrate how more refined pre-processing methods are needed to enable a classifier to assign the categories correctly (Manning, et al., 2008).

4.4 Ethics

Due to the choice in this study to only gather publicly available data, the ethical question raised towards the study is in regard to when social media content is consider public or private. Due to netnography being used on rapidly changing technologies, ethics are of big concern. Morals and legal system might not catch up to address unethical issues towards individuals, culture, and society or even toward what netnographers themselves might observe. This research only gathered public social media content. It was ensured that only observations were conducted, hence no participation were done due its ethical issues implied without obtaining consent (Swedish Research Council, 2017). Since hashtags are not mandatory to write in post descriptions (making them searchable on Instagram), and users can make their profiles private, posters are able to choose whether participation in netnographic studies is possible. Indeed, some profiles during this study had set their profile to private, which resulted in this study being unable to access any other content from the poster. However, it can be argued that a profile is public due to the profile owner's unawareness. As a result, information perceived by the owner to be private, is in fact accessible publicly since the poster has not set the profile to private due to unawareness. To respect this ethical concern, all posts had to contain the searched hashtag. Therefore, no private content was used in this study since this study only observed posts and profiles publicly accessible when using the search function on Instagram. On the contrary, observations were done on a few profiles with the aim of establishing an approximate age of the poster and what type of posts were made on the profile, careful considerations were taken towards how these observations were to be conducted. And in line with BPS Code of Human Research Ethics (2021) which states: "Unless those observed give their consent to being observed, observational research is only acceptable in public situations where those observed would expect to be observed by strangers. Additionally, particular account should be taken of local cultural values and of the possibility of intruding upon the privacy of individuals who, even while in a normally public

space, may believe they are unobserved". In this thesis it is argued that public profiles on Instagram are expected to be observed by strangers. In order to not intrude on the posters privacy when conducting the observations on the profile, only broad observations were presented in this thesis which cannot be bound towards the poster's identity. The observed age however was tied to the poster; however, it was used to estimate the age of the post publicly available on the hashtag. Furthermore, since the posts are not dated in this thesis it provides a further obfuscation for the poster.

Furthermore, only the relevant 500 posts were stored and used during this study, to further respect the integrity of the posters. The only information stored were a link to the post and the description of the post. All data were deleted once the thesis reached its final version. To cope with the remains of the data, that is, parts of posts used within this thesis, caution was taken to anonymize the data to cope with privacy issues and to comply with copyright issues (Instagram, 2021). Firstly, the hashtag used was not documented in this study. Secondly, posts were translated to English. Thirdly, hashtags were stripped in most cases or if not stripped, written to something else. For the fourth, irrelevant parts of posts were removed such as emojis, sensitive information or parts considered not contributing to the theme in discussion (Kozinets, 2018). Finally, findings were structured around themes, causing a stronger blend between the posters and enabled further parts of the posts to be stripped.

Furthermore, the eight guidelines for ethical and good research were followed while conducting this study (Swedish Research Council, 2017):

1. You shall speak the truth about your research
2. You should consciously review and report the starting points for your studies.
3. You must openly report on used methods and results.
4. You must openly report on possible commercial interests and other obligations.
5. You shall not steal research results from others.
6. You shall maintain good order in your research, including thorough documentation and archiving.
7. You shall strive to conduct your research without harming people, animals or the environment.
8. You shall be fair in your assessment of other people's research.

Previously in this chapter guideline 7 have been discussed further. The author would also add regarding the 4th guideline that this thesis was conducted at software company which the author was working for, thereby impacting the research design as was stated in 4.1.

5 Empirical findings

Below are empirics from the netnographic study of (1) observations made while conducting the netnographic study and findings from the Instagram posts based on the thematic analysis. Next (2), the accuracy from topic modelling experiments is presented.

5.1 Observations

While most observations are presented related to a category, there were two general observations related to the Instagram posts. The first observation was that most posts were made before the night out started. In some cases, it appeared to be occurring during downtime related to waiting for friends or while traveling toward the town. The second general observation was that some profiles had posters at an age of 25 years or older. The same posters also had posts dating back to when the poster was around younger for example 20, which indicates that 'older aged' posters might re-experience or explain emotions and activities in a similar way as they did at a younger age.

5.1.1 Spontaneity

The first category observed was the spontaneity of a night out. A male poster described with excitement yesterday's bar visit as a "spontaneous walk … with other nice people".
A spontaneous night out can also be a way of freeing one's mind of complications as a women posted "Saturday is saved" as she was about to go out with friends. Another women told how an evening at home spontaneously turned into a visit to the bar. Similarly, a woman in mid 20s wrote "Spontaneous evening at the pub… …Was like 100 years since the last time". A woman appearing to be around 30 posted "Spontaneous night out yesterday" and stated that it was "the first" night out within six months. Additionally, 8 posters mentioned that they had a spontaneous night out.

5.1.2 Anticipation

Another category identified was related to anticipation. To illustrate, a woman posted a picture of beverages and described how she was "waiting for her chicks". Another post was made by two female friends doing their make-up while having a drink stating: "Preparation and bracing". Furthermore, tagging a friend occurred while anticipating the night out. To illustrate, two men took a selfie with a drink in their hands, "galvanized for mischief with <friend>". An additional example was a female that had uploaded a post with a description which anticipated that a night out "with this beautiful chick <was> in coming". To add, a woman expressed longing for a friend's party, "I am longing for … party this <weekend> <friend> #laughter #goodfriends".
Furthermore, anticipation related to being with friends was expressed in other ways than tagging a friend in the post. Such expression can be exemplified by a female poster taking a selfie with her friend before going out explaining that they were "galvanized". Another woman took a selfie holding a glass in her hand explaining to "getting herself ready" for a girl's night. In another case, a woman expressed how a spontaneous invite galvanized her night, expressing a bored feeling of just "sitting at home … when the saviour in distress comes and ask if I would like to join for night … with the best <name>". Another poster expressed the anticipation with a post describing that "the night out approaches". In a similar way, a female poster expressed that "tonight is treated with a night out". Being "ready for all in" was an additional way to express anticipation in a post regarding celebration about to occur.

Others expressed it toward “the Saturday and a night out”. A male poster described the anticipation towards a night out by posting that “it is going to be off the hook”. Lastly, a female expressed her anticipation for the night to not think about being ill, “I think the night out with … will get me back on track”.

5.1.3 Celebration

Another common topic was to have a night out to celebrate something. The most frequent theme was birthdays: “Ready for 25-year party for my finest <friend>”. Another poster explained that her twenty second birthday was up and coming and therefore it will be “celebrated today”. Another poster wished her 18-year-old friend happy birthday and it was going to be celebrated with a night out. Furthermore, the night out can be perceived as a gift: “It was one of the best nights for a long time yesterday! Thank you … #birthdaypresent”. Another poster around age of 30 celebrated her friend’s bachelorette party “with the girls at the bachelorette party”. Holidays also appeared as reasons to celebrate. One poster explained that to have a perfect Walpurgis eve during a night out all that was needed were good company. One poster amplified the festivity by establishing a reason to celebrate: "It is finally December! We celebrated that with… “. Furthermore, it could be to celebrate achievements: “I do unfortunately celebrate my weight loss with some calories”. Another achievement posted was to get a new job: “Lets go out and celebrate, just a little #newjob”. A woman around the age of 30 expressed a celebration towards vacation “Tonight I am going out with … to celebrate the start of vacation”.

5.1.4 Dance

A night out could provide an opportunity to dance, this study found multiple posts mentioning dancing. One female poster shared how she looked like in the early morning after: “a night out + afterparty! … My make-up proved having extraordinary durability … got myself a great deal of exercise after all the dancing … to some Spanish music … #despacito”. It was further observed how a popular dance music song was used as a hashtag in this post. To dance was a topic expressed with multiple facets. One aspect was in terms of its health benefits as the previous poster explained how she got herself some exercise. In addition, a poster stated: “ …It will probably be a few hours on the dancefloor. Last time it ended up about 20 000 steps…”.

As was stated earlier in one of the posts, music appeared to play importance to the experience as one of the previous posters mentioned “Spanish music” another poster pinpoints dancing to European popular music genre schlager as the best one making the dancing the most joyful: “She is never as happy as … and dance to schlager”. Another poster clarified it with the following in the description: “Amazing music contributed to an amazing evening with many hours on the dance floor... ”. Another poster expressed dancing as a way of having fun: “Unprepared images are the best … as it causes one’s personality to shine. A night when I love to dance and have fun… ”. It was also a way to show off, one poster illustrates this with the following description: “Conquering the dance floor!” But it could also be a way to relief from stress as a female posted: “…gonna dance the stress away”.

5.1.5 Excitement

A frequent type of post was to express an excitement for the night out. For example, one poster took an image of a table with drinks and stated that “we do now kickoff this night”.

Two women took a selfie together while being on their way into town expressing their excitement in post by writing: “Woop woop”.

To state being ready or to upload a post right before leaving to town was another identified characteristic of posts related to excitement. One woman took a selfie of herself and wrote: “ready for an outrageos night”. Another poster did also state to be ready but for “a night out with the girls”. A male posted a selfie right before leaving home: Heading “to town”. Another man did post similarly: “ready to execute my night”.

Another clear motive observed was to take a selfie once one had dressed up, doing all the preparations to become ready for the night out. Upon further investigation on the posters profile, it was common to take selfies and write a description regarding their day. This indicates that this part of the night out is compatible with Instagram posts outside of the nightlife context. To illustrate such posts, a women uploaded a selfie explaining that it was “time to depart” and explained to be reusing a previously used dress. Another women described to be “ready to go” with a hasthtag stating that she has fixed a festive look. Another woman expressed with excitement her “friday feeling” by posting: “woop woop lets go”. The Friday was further described as being awesome and with the sense of looking good.

The excitement could also be linked toward leisure time. One poster posted in the description that it was “finally Friday” and that it is was a “free weekend” where both nights she would have a night out. In a similar manner another posts description was: “Friday, how amazing!”.

5.1.6 Exhaustion

Posters also expressed the sense of exhaustion after a night out. A female poster at the age of 24 described in a post to have been sleeping for half a day after a night out and explained to be tired. A male poster at the age of 22 posted that yesterday’s evening was great. But that following day he felt like he was an “old man”. A female poster at the age of 19 described feeling “down and out” the day after a night out.

A 30-year-old poster stated to have fun with one of her friends the previous day. But the upcoming day she expressed to feel as one deserves, yet it had been worth it. Another poster expressed being too old for a night out with the hashtag stating: “being too old for this stuff”. With similarity, another poster clearly expressed how going to nightclubs no longer appeared of interest: “going to a nightclub was probably a thing <a couple of> years ago… ”. Furthermore, a poster took a photo of her festive outfit and explained “being too old for a night out”. Two posters also highlighted the exhaustion of a night out due to age. The first is a selfie of a woman making a tired facial expression explaining to become easier tired after a night out due to her age. Another poster explained how the night out, even though it was considered “calm”, still caused him to stay in the bed. He further states that he is not at the “age of 20 anymore” and that “it is not easy to become older”. Lastly a poster also clarifies how the night out have shortened in time span expressed by the question: “who are out an entire night now a days?”.

5.1.7 Feeling limitless

A few posts occurred regarding being free from norms and social roles. The first post is by a man about to go out with a group of his male friends. He highlights the sense of limitless experience by going out of control and contrasting it toward being calm: “<alcohol> and a night out with … I guess it will be the latter <go out of control>”. Another post is by a woman

who expresses that together with her female friend they create the limitless experience with a sense of humour. It was posted that she was not sure of "who has a bad influence on whom". Another poster expressed similarly how "the blind leads the blind. … But it was <anyhow> fun". Another poster expressed in a post related to a night out that they will "go bananas". A student expressed her escapism towards studies and expresses a limitless logic which is to "stay at the pub so you don't need to study…". Another poster took a break from her diet during the weekend and had a night out: "I have not counted calories … much laughter fun and love so I don't care…". It can also be to break away from age-related expectations: "we dress up … where we let loose and dance! And don't care about being <25-30>!" Lastly, one female poster had uploaded an image while doing a cartwheel (movement within gymnastics) out on the street.

5.1.8 The festive look

Both men and women expressed how their look strengthened their experience either as feeling beautiful or raising confidence. While posters deviated in age. Older posters appeared to focus more on looking younger. While younger posters expressed confidence or feeling beautiful in a more general manner. A female poster wearing a festive dress seems to be looking for another outfit, indicating that the clothing matters. Her chosen hashtags indicate that she perceives herself as looking attractive. In a similar post description, a 24-year-old female poster wrote that she was together with two other attractively looking friends. Additionally, another female posted being satisfied with a pair of shorts that was bought for the night. Another male appearing to be above the age of 24 posted a selfie showing a newly barbed beard and clarified how he had newly cleaned up and that he was about to have a night out. Another male poster expressed with satisfaction his new haircut while expressing the thought of a night out the upcoming weekend. For younger posters hashtags used for posts related to the festive look was related to being an attractive woman, make-up, hair and looking good. The choice of hashtags further illustrate the expressions used by younger posters. While observing posters with public profiles, it was found that similar type of posts outside of a nightlife context were being published on the Instagram profiles, indicating that posting "ones look" is a type of Instagram post which is applicable to the nightlife context.

5.1.9 Confidence

A few posters did express confidence related to the night out. One post emphasized authority, in the description it was exhorted to not care about what others think and that the reader "deserves the best". Two posts linked the feeling of confidence with their look. The first post was from a female poster stating that one "sometimes have to love oneself". She did further indicate to be happy about the way her lips looked and used a hashtag to clarify that she was boosting her confidence. Furthermore, a post with two men approximately at the age of 20 described that they "felt incredibly important" by wearing shirts during a night out.

5.1.10 Re-experience youth

For some posters it appeared that a night out could awaken old memories or make you feel younger. To illustrate, one poster used a hashtag explain how the poster "felt like 25 again". In addition, a male poster expressed how his new look made him feel 10 years younger.

5.1.11 Social adventure

To meet new people or expose oneself for new social encounters was expressed in three different ways. One female poster expressed it as a fun experience to "new weird people",

followed by a laughing emoji when she had a night out with a friend. Another posted to be going out sober and unsure of how to behave as posted ended by stating: “help, how do I behave?”. Another poster expressed in a general manner to be enjoying networking and getting to know new people, the picture contained the poster and a newly met companion.

5.1.12 Memory

Looking back at the night out was expressed in several ways. It could be described as a “simply nice evening yesterday” or being *“a really fun night”*. A 24-year-old poster highlighted to be out with “wonderful friends” yesterday. A 23-year-old woman posted the difference between before and after her night out the first picture, before she went out, was a selfie of her wearing a festive dress with a caption edited into the image with the text “ready” while the second picture she posted a tired facial expression on the image while being at home. Furthermore, a woman estimated to be at age of 40, posted a picture consisting of drinks at home and being at a jazz bar with the “finest and funniest friends imaginable”. She described to feel like 25 years old while being out the day before. However, at the moment of posting, she stated to feel at least 98 years old.

Moving on, a female poster around age of 20 summarised her memory of a night out as waking up with “bumps and bruises” while not remembering anything about yesterday. A male poster at age 21 posted a picture of him wearing what appears to be, according to the comments, a jacket of someone else suggesting it was switched up by accident earlier during the night therefore the poster explained an attempt to “understand what happened yesterday”. On a final note, for posters around the age of 30 it appeared common to thank everyone for the evening.

5.1.13 Activity with co-workers

Six posts were identified to be conducting a night out with a group of co-workers. A woman estimated to be around the age of 30 posted to be having “a great night” with co-workers. Another poster at the age of 29 stated that it was soon afterwork with her co-workers working at the same store. “Having the best co-workers in the world” was expressed in a post by a 24-year-old poster working as a personal trainer. A poster at the age of 27 expressed compliments to her co-workers while being out in town. Furthermore, a night out was done with former co-workers explained in the Instagram post by a 21-year-old poster. Another 21-year-old poster explained how her team could also clean up their look from work uniform to a more festive clothing while having a night out.

5.1.14 Kinship

A common topic among female posters in any age were to express a strong friendship toward another female friend. Such friend could be called *my love*, *beloved friend*, *best friend*, *darling*, *babe* and *chick*. A poster clarified how a night out couldn’t be better and how she always have a fun time with her friend. Another poster illustrated the strong friendship by posing a selfie with her female friend.

Furthermore, it could be together with “the girls” or as a “girls night”. One female poster took a selfie with her two friends with the description: “Shhhhh.... <nightclub> with my ladies”. Another poster used a hashtag indicating that she went out as a group of girls. It was also common to tag friends in the post: “…with my girls @<friend1> @<friend2> #<nightclub>”. A female poster at the age of 19 illustrates how the people at a nightclub also aids to improve the night out and not only her friends: “…the best people… …and all of this with the best girls in the world”.

5.1.15 Joy

To experience joy related to a night out could identified in many posts. For example, a 24-year-old female poster described being part of a “fun night out!”. Another common subject related to joy was to mention laughing. One post explained it the following way: “…a friend that make you laugh so hard that you get a stomach ache”, the post was made by a 27-year-old woman. Similarly, a post contained: “Hard not to laugh with… …@<friend>”. The picture was a selfie taken by a 20-year-old girl with 3 other friends. Another female poster wrote that it is “always fun to laugh a little”. A male poster above the age of 25 posted having “too much fun” and that it “happens seldom now a days”. Furthermore, a woman around age of 20 explained in a post to have had a “fun evening with the girls”. Another aspect related to expressing joy was to get invited or asked to go out by a friend as was clarified by one poster to “sense nothing but joy”. Moving on, a poster at the age of 25 explained the night out to be “very weird” but despite such associations the night out was still considered fun. A hashtag related to joy was used together with a Swedish phrase typically used to express to enjoy oneself.

5.1.16 Couples

A reoccurring topic was posts made by couples, where the posters appeared to be 30 years or older. Most posts emphasized a good time out with friends. “A great night out with my wife … Also accompanied with <friends> a little later”. Another poster was made by a woman with the description: “A night out with him and good friends”. However, it could also be a so called “date night” done with one’s significant other one poster expressed it the following way: “Date night with the love of my life”. While another poster put it the following way: “My <heart emoji> date”.

5.1.17 Activities

When observing images of posts, the following activities were observed: play pool or shuffleboards, go to a pub or bar to socialize while other posters indicated going to a nightclub together with friends. In some cases, going to a concert or attending a restaurant was part of the night out. Furthermore, a combination of activities was observed to be combined during a night out.

5.1.18 Other topics

It was evident that to experience a night out leisure time is required, hence a couple of posts exclaimed “Friday”, “I love Fridays” or “Saturday”. One poster stated it the following way during a Wednesday: “A day off for tomorrow means party with…”.

Another popular topic was to raise a toast in the post description or wish the reader a nice weekend. In most cases these posts were made by dedicated micro bloggers as a direct communication toward their audience.

Lastly, 17 posts could be identified toward being posted by mothers. A woman at the age of 34 described in a post how seldom “this mom” was exposed to entertainment as she was excited for the night out the upcoming Friday despite it was only in the middle of the week. To add, a 25-year-old poster described to start at a restaurant, followed by a drink bar and finally ending up at a pub the poster stated to enjoy “not only being a mother”. The poster further described to enjoy getting spruced up and go to out and enjoy oneself. Finally, a 30-

year-old poster stating to be a mother explained that she would go out and dance with a couple of friends during her night out.

5.2 Topic modeling experiements

Below the accuracy plots are presented for the trained GSDMM. The first plot is based on the regular pre-processing with 31% accuracy shown for 13 out of 22 categories (separate categories). The next staple shows the categories *kinship, memory, excitement, joy* and *anticipation* have been consolidated into one category (consolidated categories) which had 63% accuracy with 9 out of 21 topics. Followed by staples which consolidates categories while keeping one of the category *kinship, memory, excitement, joy* and *anticipation* on its own.

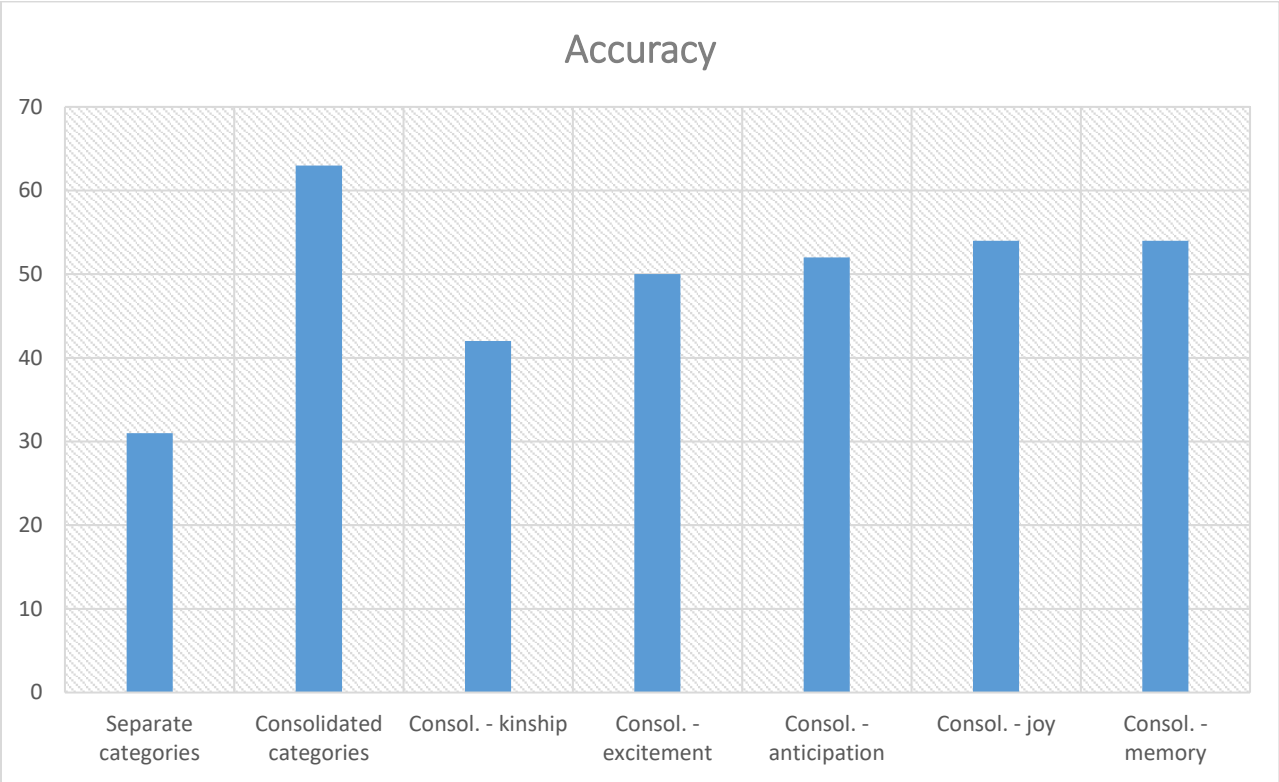

Figure 2: The achieved accuracy when having intersecting words between the consolidated categories

The next staple diagram illustrates the accuracy presented for the trained GSDMM model based on the pre-processing which excludes the intersecting words in the categories: *kinship, memory, excitement, joy* and *anticipation*. Separate categories refer to the accuracy obtained for the GSDMM model with 13 out of 22 categories (separate categories), followed by consolidated categories which consists of 9 out of 21 topics. In the latter, the categories *kinship, memory, excitement, joy* and *anticipation* have been consolidated into one category. A minor decrease of the consolidated accuracy can be observered from 63% to 62%. While the separate categories slightly improved obtained an improved accuracy, 31% to 38%. The followed staples 3-7, are consolidates categories while keeping one of the category *kinship, memory, excitement, joy* and *anticipation* on its own.

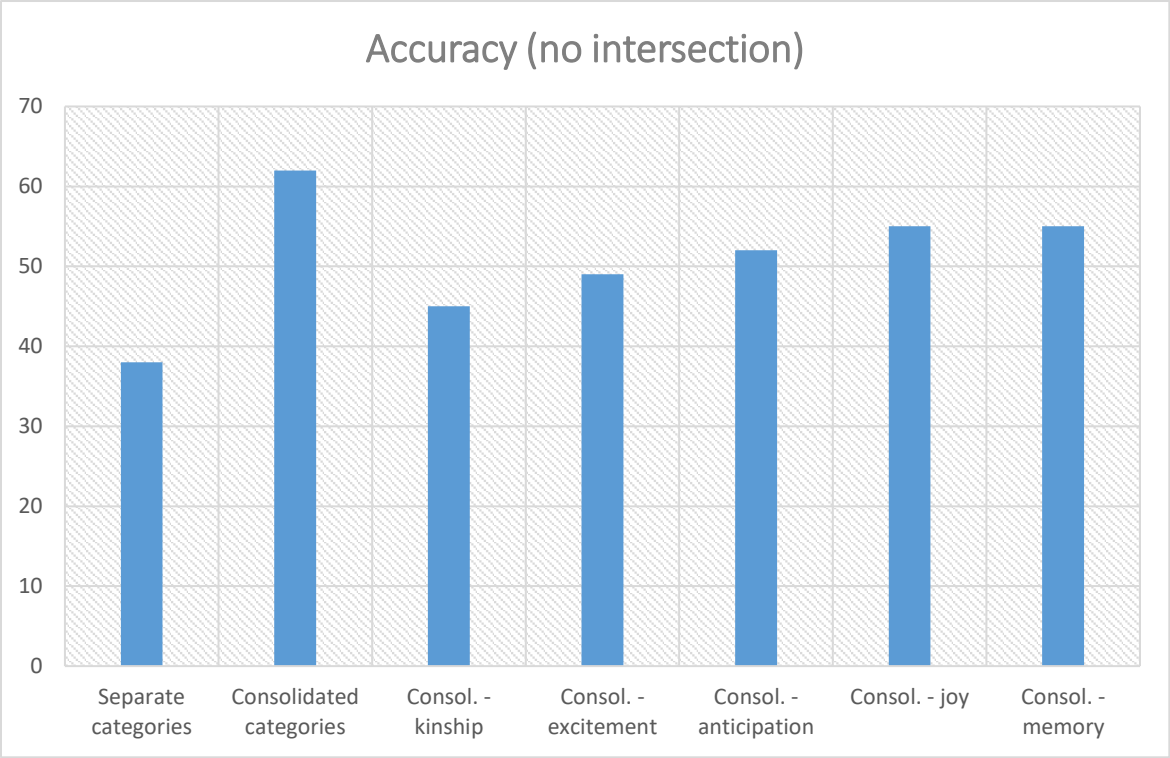

Figure 3: The achieved accuracy when not having intersecting words between the consolidated categories

Finally, the cosine similarity is shown for the kinship category based on posts being grouped together with other posts in the same category and then concatenated into one line of text for each category.

relax	excitement	kinship	memory	anticipation	Social adventure
0,04	0,40	1,00	0,33	0,37	0,07
limitless	celebration	dance	feel beautiful	Joy	Work
0,10	0,30	0,23	0,21	0,37	0,16
Spontaneous	Mother	Drink	Music	Couple	Confidence
0,19	0,23	0,16	0,08	0,25	0,02
bless someone	exhausted	Food	Leisure time		
0,17	0,27	0,16	0,17		

Table 3: cosine similarity between kinship and other categories. The posts are consolidated post within each category to represent one line of text for each category. The green marked cells indicate the category that was consolidated during the experiments.

6 Discussion

To begin with, the findings will be discussed in relation to previous studies. Then, the observations and experiences will be discussed from a software service point of view, by adopting the CX TCQ nomenclature. In order to answer the first research question, the customer experience implication on value creation will be discussed with the aim to answer the research question: How can software improve the customer experience for outgoers within the night-time economy through co-creation? Lastly, the topic modelling experiments will be discussed to answer the second research question.

6.1 Empirical comparison and insights

Findings identified several aspects found by previous studies. However, some nuances occurred, and new findings related to perceived experiences during a night out were identified.

Regarding escapism, it was firstly found that posters projected anticipation towards the night out, which is in line with Christmas & Seymour (2014) findings. This could be a coping mechanism to switch one's mind off, expressing excitement of not knowing what is going to happen during the night out. It could also be considered part of a ritual or routine towards going out. Secondly, excitement towards the weekend is another identified topic connected to escapism. Thirdly, limitless expressions were also identified suggesting the process of loosening up day-to-day rules and norms stated by Christmas & Seymour (2014), Pini (2001), Jackson (2004) and Roberts (2015). Lastly, spontaneity was identified (Roberts, 2015).

Finally, Christmas & Seymour (2014) expressed dress codes as making people feel accepted and comfortable by conforming to a norm within nightlife, which was expressed by posters as an experience of feeling beautiful. This can also explain why respondents had a negative experience was experienced by respondents in Christmas & Seymour (2014) findings when not following the expected dress code. In addition, to feel beautiful is arguably a valid part of a positive experience as it was found that similar type of posts outside of a nightlife context were being published on the Instagram profiles. This experience could also be amplified due to intoxication, as some posters also expressed confidence which was a characteristic explained by Christmas & Seymour (2014).

Next, four aspects were found related to bonding and the bonding ritual associated to dancing which indicated intrinsic motivators. The first aspect was celebration, being used as a ritual by outgoers, which was also identified by Roberts (2015). Furthermore, dancing was also identified, yet the findings deviate regarding the motivators behind it compared to Christmas & Seymour (2014). While being evident that dancing was a ritual done together with friends and perceived as a reasonably fun experience. A few posters indicated an intrinsic motivation towards dancing such as a relief from stress, aligning with the respondents on Taheri et al. (2017) study regarding escapism. Another motivator was health benefits which could be the cause of fitness being a popular type of content on Instagram. Nevertheless, it is a valid motivator which happened to align with the Instagram norm. To conclude, regarding intrinsic motivators, the experience could be amplified by matching it with the right kind of music. The type of music being part of a good experience was also identified by Roberts (2015). The third aspect related to bonding was ~~regarding~~ the variety of activities conducted by different posters during a night out, aligning with Christmas & Seymour (2014) findings of a standardized routine occurring within groups. A specific reason for conducting activities in nightlife was

found to be celebration (Roberts, 2015). Such celebrations could be bachelor/bachelorette parties, birthdays or accomplishments. The fourth aspect was that the posts categorized as limitless also indicated that the friend had an impact on the posters decision to do “silly things”. According to Roberts (2015) this can also be amplified due to intoxication.

On the personal level, the sense of joy and laughter were positive experiences pinpointed by some posters which Roberts (2015) findings also showed.
Furthermore, Social adventure was identified in three posts, confirming Christmas & Seymour (2014) and Jackson (2004) findings. Findings about memory/stories are similar with Christmas & Seymour (2014) results as the posts contained a substantial amount about reliving the positive experience from yesterday. Two fun stories also occurred. The first story entailed an exchanged jacket and the second story was about a poster writing a parable of 'out of ordered night by falling' towards its readers.

One challenge in this study was to identify the age of posters. Upon further investigation by studying posters profiles, it was found to be a broad mix of ages. Regarding topics such as kinship and anticipation, an age distinction could not be made. However, Christmas & Seymour (2014) stated that the emphasis on kinship becomes stronger as one is getting older as it was a common subject in the posts. This might indicate older aged posters being observed in the study. On the other hand, younger female posters also expressed a strong relationship towards kinship, normally towards one specific friend. Christmas & Seymour (2014) findings clarify that females in particular described their nights out in terms of bonding within the group, with limited interest in others. One uncertainty in this thesis findings is whether the older posters can teach insights about the younger posters. To illustrate, some profiles had posts dating back to their first days of being an adult and some of the posts were related to a night out, suggesting that these posters are experienced in the concept of a night out. This might indicate that the poster is re-experiencing emotions and activities as they had done at a younger age, hence the description of the post might indicate how younger outgoers also experience the night out. Another explanation could be that older posters imitate young posters behaviour to experience youth. On the contrary, the findings indicate that certain topics clearly could be associated to older age such as exhaustion or going out as a couple.

6.1.1 New insights

As this study focused on identifying experiences of outgoers, the age criteria were not constrained in the sampling. Hence the findings provided new insights on how aging outgoers’ experience the changes in behaviour during a night out. In the posts about exhaustion, posters express a physical exhaustion as a reason to discard the rituals done by typical younger age outgoers, and often give the reason of being too old to change their behaviour. On the contrary, the implication of exhaustion as one gets older could enhance the experience of the night out for young adults as its part of an identity only achievable by younger outgoers. Older posters also expressed difficulties with time as was also highlighted by Christmas & Seymour (2014). Hence, the older aged outgoers planned days ahead to make the night out happen. Another dimension was to experience youth (feeling young again) and perhaps re-experience parts of previous rituals conducted at a younger age. In terms of feeling beautiful, female posters mentioned looking younger, which in contrast to younger posters was rather about looking attractive or feel confident. In terms of clothing styles, they were different depending on demographics, however not regarding age. These results are interesting as they can give three interpretations: dress codes are a way to hide an age gap

between attendances out in the night. Or it is as found by Christmas & Seymour (2014) the comformity of dress codes in order to obtain the positive benefits of a night out. And lastly, the current fashion during a night out within different clothing styles such as streetwear or rock can influence the dress codes. Furthermore, a night out was an activity conducted together with co-workers, also implied by Christmas & Seymour (2014) findings on the necessity of homogeneity in a group to form a collective identity. Hence the workplace appears to provide an opportunity to find a group to go out with. Another constellation was to go out as a couple. This could be a way to overwrite old moments or relive a dream/goal when one went out as being young. In addition, posters identified as mothers expressed escapism as strong dimension of the positive experience when going out.

Other new insights from the findings include dressing up as a way of feeling beautiful, confident and making oneself look younger if desired.
The concluding insight was about dancing, as it was found to be a way to relieve stress but could also be a rewarding activity in terms of maintaining one's identity of having a healthy lifestyle while being out.
Another insight is towards the experience of being included within a group or towards a friend. As one poster expressed joyfulness of being invited to join by a friend.
To conclude, findings from other studies, which were covered in section 6.1, are also applicable on the Swedish demographic.

6.2 TCQ nomenclature linking and its implications for value

The phenomenon of nightlife will now be discussed from a customer experience point of view. It will be assumed to be studied from a software service that offers marketing and sales of entrance tickets.

6.2.1 The pre-purchasing stage

During the pre-purchasing stage, controlled touchpoints could aid consumer decision towards what activity to conduct or what venue to attend to in nightlife based on the following characteristics: age, interests in atmosphere, type of activity, dress codes, clothing styles, and in case of dancing, the music genres will play a greater significance. The music can also have a positive effect in pub settings. Adopting a service dominant logic, the data that an outgoer can provide to the system can aid the consumer decision, therefore enabling cocreation since the customer experience will be in line with the outgoers expectations. Non-controlled touchpoints concerning consumer decisions could come from word of mouth, as Roberts (2015) stated as the decisions are influenced by interests of friends. Furthermore, in some settings, there are promoters who work towards certain venue brands to impact consumer decision (Carah & Dobson, 2016). It is also possible to assume direct customer relationships with venue brands that can impact the decision making.

Contexts to consider during the pre-purchasing are cognitive factors, social context and physical factors. The three identified aspects of the context will be described below.
Regarding cognitive factors, it was stressed how future and imaginary experiences can impact the journey along the touchpoints. In addition, recalled previous experiences can also be an influencing factor. A more targeted experience could improve the cognitive factor. As venues appear to homogenize or occur in clusters (Roberts, 2015), a broader diversion of experiences during the night out could be enabled by a community of customers requesting a one-time occurring event. Based on their requests or inspired by a specific demographic, the night-time activity is partially created by crowd-sourcing. This could impact the ordinariness of an experience, making its level of commonness lower by providing new variations. This could also mitigate Christmas & Seymour (2014) findings on how the night out can be viewed as boring upon aging. Arguably one reason could be that the night out has shifted from an extraordinary to common experience. Therefore, enabling a lower level of commonness, driving the experience further away from a routine or regular experience, resulting in experiencing escapism.
The implication of the social context is to either adapt the software to guide the outgoer in a personalized manner to the offerings of night-time activities, which appear the most appealing to the outgoer based on the characteristics described in the beginning of this sub section. Another approach is to make the software influence the outgoer through personalized marketing. This approach is used to get the outgoer more interested towards the closest as possible to the desired experience that is available to the systems knowledge. Given the crowd-sourced events, it could for example, in the early stages of its conduction, be marketed or influenced towards other outgoers within a proximate demographic.

Furthermore, an important implication is to understand how the aging of an outgoer impacts the expectations. 18 – 20-year-olds prefer to stay within such ages, whereas 22 – 24 are more open towards older ages (Roberts, 2015). Based on the findings of this study, as one gets older, there are expectations to not stay up the whole night. Older aged people might not be expected to behave in the same manner that younger aged people do, indicating that a

customer can quite drastically change his previous interests due to aging. Another implication towards the consumer decision is physical factors. To illustrate, older aged outgoers might not consider too late night alternatives. Another example indicated from the findings was that a night out can cause fatigue, therefore being likely that the consumer is not interested in doing nightlife activities for multiple days in a row.

Upon considering qualities (Q) in the TCQ nomenclature, Roberts (2015) explained how a group of friends planned and assessed which venues were of interest to go to, which indicates an openess towards participation during the pre-purchasing phase. For the software service to provide personalization, data must be gathered. Therefore, participation is required during the pre-purchasing stage, which could be achieved by the outgoer engaging in a community. Another way to achieve this would be the usage of a software service to indicate what appears interesting to the outgoer. Regarding dimensionality, insights from this study suggest that experience will be emphasized on anticipation towards the night out, for instance, spending time with friends or facilitating escapism. These experiences could be brought upon the customers mind when engaging with the system, for example during the cocreation of a crowd-sourced event. Looking at customer touchpoints from the software service point of view, it could also be concluded that the software is reliant on the nightlife venues to deliver most of the customer experience since most of the customer experience occurs in the post-purchase stage.

To summarise the insights during the pre-purchasing stage, the discussion implies that broader provision of offerings could improve the opportunity of providing a good customer experience for an outgoer. This also aids the software firms' brands, as brand endorsement can be achieved when a venue, that a customer already has an established relationship with, is on the service platform. Furthermore, to provide such service, the institution must be able to provide the alternatives and relevant, available information by 1) either involving stakeholders within pubs, bars and nightclubs, 2) letting the community itself create the information, or 3) letting the software company gather it by themself.
To improve customer experience during the pre-purchasing phase, aspects related to age, interests in atmosphere, type of activity, preferred music genres, spending time with friends or facilitating escapism should be considered.
A new point of sales was suggested, given that sufficient homogenized groups can be identified within the software's user base. Consumer decision can also be better personalized by constructing an understanding of the group of friends and their impact on each other. Adopting a service-dominant logic, the cocreation can occur if the institution (the software service) manages to gather the correct kind of data from users. In order to gather real-time or maintain accuracy of important data that could aid the customer's decision, services should focus on engaging the community with each other in the post-purchase stage. How such services could emphasize its value offering related to social adventures, memory or new desires occurring spontaneously will be further discussed in 6.2.3.

6.2.2 The purchase stage

The purchase stage for the software service is when a customer decides to visit a place until it has reached the venue. Most of the value of the customer experience is post-purchase, hence the purchase stage is a necessity to provide the post-purchase customer experience. However, there is a beneficial aspect in terms of value for the customer experience during this phase which is to involve the venues to the highest possible degree, which would enable value to be

obtained through co-creation. Such involvement enables communication between the venue and the customer. It could also aid in purchasing tickets or other necessities to attend with a positive experience. In addition, such involvement minimizes the risk of not being able to attend due to lack of space, pre-bookings etc., and could support venues brands by lowering the risks of disappointment if outgoers move between venues and cannot participate. The disappointment impacts the cognitive factors in a negative way.

In terms of marketing, it is suggested that the software could emphasize the emotional state of the outgoer by encouraging them to behave spontaneously, as this can enhance the sense of escapism but also mitigate doubts or concerns.

6.2.3 The post-purchase stage

From the software's service point of view, most of the customer experience associated with a night out occurs post-purchase. As a result, one challenge arises in terms of providing a coherent experience. Hence this touchpoint is non-controllable as the experience occurs at a venue or out in society through interaction with other outgoers. And if the experience is negative at the venue, it might impact the brand of the software. These aspects could be mitigated by putting the venues brand into focus instead of the software systems. Additionally, better understanding of the venues and the customer can improve matching the customer needs and hence provide a positive experience for the customer.

There is also potential to innovate controllable touch points. Such offerings are, based on the findings, about the following topics: anticipation, joy, celebration, social adventures, memory of the previous nights out (stories), current music preferences or new desires occurring spontaneously such as knowing beforehand if the place is too crowded. Important aspect for the software company is to gather and leverage data from these interactions to further strengthen their institutional function to enable co-creation of value throughout the customer journey. One challenge in terms of inhibiting the experience is the software product itself since it could as Taheri et al. (2017) discussed disconnect the outgoer with the escapism from everyday behaviours provided from the physical world.

One example of how the software could facilitate spontaneity is to provide real-time information on the availability of seats or crowdedness, as it enables the customers to understand more easily which venue is accessible to attend. And in the case of nightclubs, such software enables a smoother entrance experience while proceeding the night out in a spontaneous fashion. Roberts (2015) also discussed the negative impact that crowdedness can have on the customer experience.

6.3 Creation of value

In terms of customer experience, it was found that the software service could potentially impact the customer experience through co-creation between software, organizers and venues and the outgoer themselves in two ways. First, value achieved of such co-creation was to make night-time activities more available towards the outgoer enabling the outgoer to achieve the most desirable customer experience. Secondly, software service can increase the variety of customer experience through co-creation of events (see 6.2.1).

In terms of the co-creation of events, this discussion assumes that the outgoer is the beneficiary, its implication for co-creation of value cannot with certainty be addressed since other actors have not been involved in this study. Based on that the value creation of one actor could be an inhibitor for another actor's value creation (Emirbayer & Mische, 1998). There are uncertainties towards whether co-creation can occur. To illustrate, this discussion has not considered to what degree niched groups can be reached without reaching negative effects of customer experience such as "a dead party" (Roberts, 2015), uncertainty toward what degree customers would like to participate in a crowd-sourced based fashion or the economic viability for organizers is another concern. Finally, it must be established how the dialogue and interactions could be done in practice using a software service.

Furthermore, co-creation could improve the customer experience by enabling interactions between the outgoer and the software, but also between one outgoer and another outgoer through the software as an institution. Such offerings are suggested to provide customer experiences during the post-purchase stage related to anticipation, joy, celebration, social adventures, memory of the previous nights out (stories), current music preferences or new desires occurring spontaneously.

To further discuss the customer experience implication to co-creation of value between the software service offering and the outgoer. It is important to understand that the most negative experiences regarding a night out from this thesis findings were related to aging. The findings indicate that social rules, norms and physical limitations were a suggested cause of such negativity. If the software systems brand should maintain relevance for the younger customer groups as they are aging, it is of utmost importance to guide and aid the customer during the transition of social rules, norms and physical limitations. This further emphasizes the point of having as many venues as possible provided on the platform as these leverages of data could aid the customer to, in this case, not to enter venues supposed for younger aged customers or not in line with the customers normative factors. Simultaneously, this could improve the cognitive factor as fewer negative experiences are associated with a night out. This could influence attitudes towards age and the night out, hence suggesting a higher acceptance towards a night out even in older ages.

One challenge for enabling co-creation of value between the software service offering and the outgoer concerns the participation level required to gather the needed data to enable co-creation of value and how much value is obtained when considering the effort of actors to make the data available to each other. As was observed from this study, most posts appeared to occur before or after the night out, suggesting that participation level is to higher degree acceptable during those periods. This is in line with Taheri, et al. (2017) regarding how usage of perpetual connectivity (such as using a smart-phone) could inhibit feelings of escapism and entitlement to time away from work. Therefore, perpetual connectivity could function as an

inhibitor to the experiences related to a night out. As a result, it can be suggested that the participation level, contrary to the value it provides for the outgoer, must be carefully considered during this phase.

6.4 Comments on the topic modelling experiments

The usage of the gold standard enabled to identify topics with a score above 35% of cosine similarity (Table 3) between kinship and the topics: memory, anticipation, excitement and joy. Findings suggests that a more refined pre-processing must be done on these topics due to the high ambiguity. To illustrate, the category *memory* had aspects written in past form, while having a high cosine similarity score with kinship. Therefore, such understanding is impossible for the model to grasp during the topic modelling.
A further indication of a more refined pre-processing was from the difference in achieved accuracy upon consolidating the categories: kinship, memory, excitement, joy and anticipation (Figure 3).

Based on the discussion regarding pre-processing, the second research question: *What identified topics within nightlife would benefit from a further refined pre-processing to be applicable toward a topic modelling algorithm?* will now be answered. The findings indicate that kinship, memory, excitement, joy and anticipation are categories discussed with high ambiguity and would require more refined pre-processing in order to be incorporated in a topic modelling algorithm.

On the contrary, the low amount of data to train the model can be an impacting factor towards the high difference of accuracy in Figure 2 or 3. This do however imply that with scarce data in terms of volume, increasing the veracity of the data through proper pre-processing could especially be of importance for low sample size of the dataset (Ghasemaghaei & Calic, 2019). Furthermore, some categories were excluded due to the limited amount of data further reducing its applicability in an operational setting. The trained model in this study is dependent on certain keywords occurring in categories and on the keywords for a certain category consisting of a few keywords in the model. As a result, the model is not robust enough for other settings than text written in a microblogging context as the usage of words might be different in other text settings, such as image message with a short caption or a chat message. This became evident as the less frequent labelled categories had many similar words of other categories. Therefore, it is suggested that other sources of information could be gathered to aid the classification process, not only text-based data. For example, certain interactions within the software could aid the model to understand ambiguity between two related topics and then provide content which has a higher chance of appearing to be relevant towards the end-user. A second source of information might enable the model to incorporate less frequent occurring words to pinpoint the related topics. Another improvement for the model, is to synthesize data. As the data has been carefully labelled based on findings from the netnographic study, it can be possible to synthesize data that can further strengthen the robustness of the model. In addition, synthesizing could also make it possible to include the less frequently occurring labelled categories in the model.

To conclude, findings indicate that the model could further be improved by: 1) improving pre-processing of the categories which indicate high cosine similarity toward the category kinship, 2) incorporating a second source of information into the categorisation process, 3) conducting data synthesis to cope with the low volume of data.

7 Conclusion

This study has identified aspects of the customer experience of outgoers and discussed its implication for a software systems ability to facilitate the customer experience within nightlife through co-creation. Based on the discussion, the first research question is answered the following way: Software could incorporate outgoers, organizers and venues to make night-time activities more available towards the outgoer and thus enabling the outgoer to achieve the most desirable customer experience, while also increasing the variety of customer experience through co-creation of events. Furthermore, software could improve the customer experience between the outgoer and the software, but also between one outgoer and another outgoer through co-creation. Such offerings are suggested to provide customer experiences during the post-purchase stage which are related to: anticipation, joy, celebration, social adventures, memory of the previous nights out (stories), current music preferences or new desires occurring spontaneously, such as going to another venue and knowing beforehand if the place is too crowded. It was also suggested to improve customer experience during the pre-purchasing stage by considering aspects related to age, interests in atmosphere, type of activity, the preferred music genres, spending time with friends or facilitating escapism.

The second research question aimed to answer what categories within nightlife would benefit from a more refined pre-processing was answered based on the empirical findings that indicated that kinship, memory of the previous nights out, excitement, joy and anticipation are categories discussed with high ambiguity. Thus, texts categorized to any of these categories would require more refined pre-processing to be incorporated in a topic modelling algorithm.

Furthermore, this study contributed empirical insights towards nightlife within Swedish context. Regarding sustainability, the discussion illustrated how software as an institution could potentially diversify the offerings and type of venues within nightlife, both in terms of age and demographics, thereby contributing to goal 10.2: *Promote Universal Social, Economic and Political Inclusion* (United Nations, 2021b). However, this study only answers how it could be beneficial for the customer experience of an outgoer. Other important considerations are the economic feasibility for organizers and venues, how customers should interact with the system to provide the necessary information and how broad the audience really are to provide further diversification of one-time occurring venues.

7.1.1 Managerial implications

There is potential for value creation through software in nightlife, however managers must cope with the involvement of organizers, venues and outgoers. It is important to identify what incitements there are for the actors to engage in the software platform for a particular customer experience. This study suggests that managers should consider crowd-sourcing or community based involvement as a way to improve customer experience for outgoers through the use of software. With the proper methods of gathering and analysing user data from these interactions, organizers and venues could benefit as they are able to connect with their desired audience, or even creating a new audience. This would impact the outgoers' consumer decision process in a positive way, making nightlife more accessible.

Managers must also be aware of the low degree of control the software provides in regards to the customer experience of an outgoer in nightlife. To mitigate negative association with the brand of the software upon negative customer experiences, it is important to involve the organizers and venues brand as they play an important part in the delivered customer

experience. By cooperating with organizers and venues, it is also easier to deliver a coherent customer experience and hence, mitigating risks of negative customer experience occurring.

There is potential to innovate functionality within software to enhance the customer experiences which could improve the relationship towards the brand and the outgoers' experience. Such functionality can aim to improve the customer experience in regards to the following dimensions: anticipation, bonding with friends, social adventures, memory of the previous nights out, current music preferences or new desires occurring spontaneously such as going to another venue and knowing beforehand if the place is too crowded.

While much previous research focused on youths, findings of this study highlight that there is a relationship with nightlife throughout many stages in life. One clear insight however is that the customer experience adapts throughout the stages in life and therefore, a beneficial feature towards a software product is to cope with this customer centric adaptation. On the other hand, there are similar dimensions of the customer experience throughout the ages such as escapism, feeling beautiful, kinship, spontaneity. Furthermore, as there are many deviations towards a night out, which limits the feasible position of software within the value chain. This is because a great deal of niche products toward multiple kinds of venues will be required to be developed in order to provide a coherent customer experience.

7.1.2 Limitations

This study has its limitations in terms of the data gathered on Instagram. Firstly, female posters were overrepresented in the data, making it hard to conclude if certain topics also were applicable towards men. Secondly, it was hard to interpret ages of the posters due to makeup and similar clothing styles regardless of age. For the third, using hashtags on Instagram is not as popular today as it was in the early days of Instagram, which might explain why the age distribution of posters appear to increase in terms of their age for each year during 2017-2020. On the contrary, older posters tend to characterise longer post descriptions. In addition, it was sometimes possible to identify age by looking further into the user profiles. Furthermore, the older posters might aid the explanation of the younger posters' context given the assumption that there is similarity in the experiences that are desired. On certain kinds of posts these links seemed reasonable while on other topics it could not be concluded.

During the discussion other actors were considered towards the customer experience. This study does not address the impact that co-creation implies to other actors than the customer (outgoer) itself. Important considerations are for example: the economic feasibility for organizers and venues, how customers should interact with the system to provide the necessary information and how broad the audience is to provide further diversification of one-time occurring venues.

Regarding the topic modelling, a limitation is the small data sample and the need for further refined pre-processing on the categories which had a high pairwise cosine similarity with the category *kinship*.

7.1.3 Future research

A future study could conduct netnography on Instagram data during earlier years than 2017. Such study would probably obtain higher concentration on data made by posters of ages between 18 - 24. It could also enable a more extensive review of users who have posted

multiple posts throughout the years, therefore further enabling an understanding of how the individual changes in behaviour due to maturity of consumption or aging. Another approach to deepen the understanding of the experiences when going out is to not only observe, but to participate. Questions to the posters could be asked to obtain a holistic understanding of the context and experiences perceived by the poster. Such study could improve the understanding of what combinations of the dimensionality of experiences are experienced throughout the customer journey within nightlife.

Regarding service dominant logic, this study has suggested how software could oversee the coordination of the co-creation. Based on the discussion of this research, there are indicators towards crowd-sourcing through a software being an effective approach towards answering: *How should coordination take place?* The beneficiary would obtain value through an improved customer's experience, while also providing network effects which could facilitate other actors in their value creation. On the other hand, the software must manage to retrieve beneficial insights towards other actors (e.g., venues). Therefore, a future study could investigate how the coordination could be conducted through crowd-sourced based interactions while the software functions as an overseer of the multi-actor network setting. The proposed study could provide further insights regarding how such coordination impacts the co-created value (Ostrom, et al., 2015).

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