EVIDENCE-BASED RETAIL AND COMMERCIAL PLANNING FOR AUSTRALIAN UNIVERSITY CAMPUSES

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ABSTRACT

The nature of university campuses in Australia is changing. Retail and commercial activities are becoming increasingly important on campus, especially since the change from compulsory to voluntary student union fees. While decisions about retail and commercial activities in the private sector are carefully planned, retail and commercial growth on university campuses has been more reactive and opportunistic to date. As opposed to traditional retail areas, such as those in suburban and city centres, there is currently no evidence-based retail and commercial methodology to assist with the master planning of University campuses in Australia. This paper describes a proposed methodology to assist in this important and growing area of campus master planning.

Keywords: Retail, evidence-based research, master planning, university campus.

INTRODUCTION

Traditionally, retail and commercial venues on Australian university campuses have grown organically. In recent years there have been major changes to retail and commercial activities on campuses, with the introduction of voluntary student union fees and a corresponding increased involvement of the private sector. This latter development reflects the growth of a more outward (rather than inward) orientation on the part of university administrators and a further blurring of the boundaries between ‘town and gown’.

The expectations of university students, and their changing lifestyles, have driven a transformation in the nature of on-campus retail and commerce. For contemporary students not all study is done in formal settings such as the library—meetings and study groups are often held in cafes rather than classrooms—and eating and drinking, as well as shopping, are done continuously, aptly described as ‘grazing’! (Levinson 2004).

In traditional retail planning a number of data sources are used to inform decision-making. These include customer surveys, customer profiles (customer numbers, travel patterns and locations), and the performance of existing surrounding or comparable retail. More recently, agent-based modeling techniques have utilised evidence-based information in the simulation of spatial choice in retail behaviour, providing intelligent decision-supporting tools and validation techniques (Parker et al 2003). To date there has been no evidence in the literature of the application of these data sources and techniques in the planning of retail and commercial activities on Australian university campuses. However, some literature does exist but this is within the context of traditional suburban and city-centre retail facilities (Findlay and Sparks, 2009; Lendlease, 2012; Planning Institute of Australia, 2012)
The authors propose six key data sources in evidence-based retail and commercial methodology. This paper presents the categories of proposed data collection and discusses their potential impact on university planning and the future of retail and commercial activities on university campuses.

METHOD AND DISCUSSION

The conceptual starting point for the master plan methodology described in this paper lies in an innovative exploratory and analytical approach. The proposed methodology combines qualitative and quantitative approaches during different phases of the research process to create a master plan that is aligned with particular theoretical and practical paradigms. This mixed method would utilise qualitative data, incorporating interviews and focus group discussions (Yin 2009), and quantitative data, incorporating the likes of statistical analysis of customer activity and population (Urbis, 2009; Australian Bureau of Statistics, 2011). Data would then be interpolated to analyse and identify campus patterns and dynamics, which can then be visually represented. This method is able to account for the multiple dimensions considered in planning decisions by analysing different data (user interactions, user cases, etc.) to reveal impacts on planning requirements and constraints in the context of university campuses.

Within this new approach to planning for campus retail and commercial development, the following six forms of evidence would be collated and analysed:

1. Student and staff consultation data
2. Customer numbers and locations on-campus
3. Customer numbers and locations off-campus
4. Customer travel patterns
5. Performance of on-campus retail
6. Performance of nearby off-campus retail

Student and staff consultation data

Student and staff data could be collected through forums, focus groups or surveys. Student participants would be recruited from a broad cross-section of those attending the university, including residential and non-residential students, international and local students, and postgraduate and undergraduate students. Staff members should be a combination of both university and entities staff. Important themes would focus on the preferred provision of services and facilities and the generation of ideas, with consensus and preference. The staff and student consultation process should identify a number of priorities for commercial and retail activities on campus.

Customer numbers and locations on-campus

Due to the difficulty in pinpointing the exact locations of potential customers on campus at any one time, routine data collected by university administration systems would be used to
determine the approximate numbers and locations of staff and students within the main campus precincts.

The following three data sets would be recommended: (i) numbers of students identified by their predominant teaching location, (ii) numbers of staff identified by their office location, and (iii) teaching space capacity across the campus.

This data would be utilised to identify the percentage distribution of students and staff across the campus thus identifying the central points of the on-campus precincts. Data on the location of staff and students across the campus would help determine the balance of consolidated retail venues together with satellite facilities. These would normally consist of a variety of food and beverage (F&B) retail, together with destination retail.

Satellite facilities should be designed only for niche markets (for example, locating a café in a sports centre/gym) or as short-term ventures for basic needs (such as coffee carts). In general, satellite sites should seek to complement, not compete with or undermine, the broader offerings of consolidated venues.

Customer numbers and locations off-campus

In order to assess the extent to which residents from suburbs adjacent to the campus could be potential customers for retail and commercial activities on campus, demographic data relating to suburbs/areas bordering the campus would be analysed using the most recently available Australian Bureau of Statistics census data. These surrounding suburbs/areas potentially constitute a primary catchment area (PCA) for on-campus retail and services. The demographic census items analysed should include: country of birth, income, age, and type of house occupancy. This data when analysed could identify any potential off-campus retail customers who could also be drawn to the campus.

Customer travel patterns

Determining how far people are prepared to travel to access both F&B retail outlets and destination retail/commercial services (such as banks, post offices and medical services) will indicate the optimal location for those outlets on campus. Account must be taken of the prevailing environmental conditions, as it will affect how far a person is prepared to travel.

Customer travel patterns for F&B retail would be determined by identifying the central points of the on-campus precincts. The distance people are prepared to walk to access F&B retail would be calculated for both good and adverse environmental conditions (wet, cold or hot weather) based on previous research (Burke and Brown 2007). For destination retail/commercial services, a similar estimate was made. Travel times were calculated assuming a person can walk 75 metres per minute (Burke and Brown 2007).

Based on previous research (Burke and Brown 2007) it was found that people would travel on average 500 metres (or approx. 6.7 minutes) for F&B retail in good environmental conditions. However, under adverse environmental conditions pedestrians will travel a lesser distance for such services (250 metres or approx. 3.3 minutes). For destination retail, customers will travel on average 800 metres (or approx.10.7 minutes). These calculations
would be applied to the precincts of the campus. From the centre of each of the precincts the
relevant travel distance i.e. 500m, 250m and 800m would be measured and represented by
circles on a plan, the overlap of the circles indicate the optimal locations for F&B retail and
destination retail.

Given that people are prepared to walk further (500m or approx. 6.7 minutes) for F&B retail
in good environmental conditions, but shorter distances in adverse environmental conditions
(250m or approx. 3.3 minutes) decisions regarding the location of campus F&B retail outlets
need to reflect this. Such outlets need to be located in easily accessible areas where there are
high concentrations of people. Similarly, since customers are prepared to walk further (800m
or approx. 10.7 minutes) to reach destination retail, such as a bank, post office or medical
service, those facilities need to be positioned accordingly across the campus. While
destination retail does not need to have a central location, it would benefit from co-location
with F&B outlets. Niche market outlets, such as a sports centre/gym, could be positioned in
less accessible locations, but they too would benefit from co-location with high volume
outlets.

**Performance of on-campus retail**

The performance of on-campus retail (if any) would be based on data provided by the
retailers and from industry sources. Retailers’ track moving annual turnover (MAT) as a
measure of trading performance and capacity to pay rent. The performance of each of the
externally leased outlets on campus, based on MAT data, would be compared to the
mainstream shopping centre sector, or industry benchmarks (Urbis, 2009).

The data collected on the performance of on-campus retail will identify performing and
underperforming retail that may need to related, closed or expanded. These results when
compared to industry benchmarks should be interpreted in light of the fact that actual trading
hours on campus are approximately two thirds of those in mainstream retail centres. This is
due to the fact that many on-campus retail outlets do not operate on Thursday evenings,
Saturdays or Sundays, which are prime shopping times, and they either do not operate at all
or have limited patronage during semester breaks.

**Performance of off-campus retail**

In order to determine how best to meet the retail and commercial needs of on-campus users
and to estimate existing retail competition close to, but off-campus, it is necessary to consider
retail outlets located in close proximity to the campus. Within a five-kilometre radius of the
campus assess the influence of existing retail and the benefit or otherwise they may gain from
proximity to the campus.

With regard to the performance of off-campus retail and its proximity to the campus, findings
that some retail outlets such as supermarkets, where sales exceeded industry benchmarks,
may indicate a discernible benefit from their proximity to the campus may be explained by
the fact that some campus users live in neighbouring suburbs, rather than by the presence of
the campus itself.
NEED FOR INTEGRATED ANALYSIS AND COMPUTATIONAL SIMULATION

As demonstrated in the above discussion, qualitative interpretation of the six key data sources provides a powerful and effective tool for planning. The multi-attribute data establishes a rich, contextual framework capable of depicting the complexities of social behaviors relative to retail and commercial activities in unique environments, such as a university campus. By undertaking further quantitative analysis of these multi-attribute data sets, university planners will be able to identify correlations, causal links and hidden dynamics from the six categories of data.

Further, in the field of multi-agent systems, spatial and social modeling is gaining new momentum as a support tool for planning (Schenk et al 2007, 2004; Miller et al 2004). Spatial modeling offers the possibility of simulating human behaviour on a micro scale in a way that blends in with the existing network of theoretical approaches in the social sciences. The potential of the evidence-based data collected from the study presented in this paper provides opportunities to examine the applicability of techniques that simulate spatial choice in retail and commercial behavior on a university campus.

CONCLUSION

Retail on a university campus is not unlike aspects of retail in the foyers and entrances of major office buildings. They both have a high concentration of people but usually only for certain times of the day and week. In addition, universities have variations in attendance throughout the year due to semester timetables/teaching periods. On-campus retail services cannot hope to satisfy all the needs of their ‘captive audience’ all the time, so the campus users will be required to travel further for a broader or more specialised shopping experience.

This paper has provided a methodology on which an Australian university campus can master plan decisions about future retail and commercial activities. However, there are a number of strengths and weakness in this method and they should be acknowledged here. The quality of the evidence for decision-making in the retail and commercial sector is not as rigorous as it should be and is certainly nowhere near as precise as that used in other disciplines, such as medical research. More research would be required on the needs of all campus users, as well as more comprehensive data on customer travel patterns within university grounds. Despite these deficits, and for the first time, this study has attempted to use the best available evidence to provide the best possible information for planning and decision-making.

This is the first time a retail and commercial master planning methodology has been developed for Australian university campuses. It marks a move away from reactive, opportunistic retail and commercial growth, which has been the norm on campuses. It attempts to enhance the experience of all campus users while ensuring commercial sustainability for service providers and retailers. It is the application of evidence normally used in mainstream retail and commercial decision-making, which heralds a change in how campus planning should be done in the future.
REFERENCES


