

BUILD BACK BETTER FRAMEWORK CASE STUDY: SYDENHAM BUSINESSES

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Disclaimer – All these conference papers have been submitted as partial fulfilment for the project requirement for the BE(Hon) degree. Although they have been assessed, no errors or factual information have been corrected or checked.

Abstract

The term *Build Back Better* (BBB) was first introduced following the 2004 Indian Ocean tsunami. A report by Clinton (2006) formalised the BBB principles. To assess and monitor the implementation of BBB principles researchers at the University of Auckland developed the BBB framework. The BBB framework is used to guide a multifaceted approach to disaster recovery, considering the physical, psychosocial, and economic aspects of recovery. The framework has three key categories, disaster risk reduction, community recovery and effective implementation. This research uses the BBB framework as a means of assessing the recovery in Sydenham, Christchurch following the devastating 2011 earthquake. The primary objective is to understand the recovery of businesses in Sydenham, thus identifying ways in which businesses can become more resilient. Data was obtained using a semi-structured interview process and an online questionnaire. The questions were formulated using the categories of the BBB framework. Research identified that small businesses lacked the resources and knowledge to implement thorough disaster risk management plans. The lack of clear communication channels between the regulatory bodies and business owners hindered the recovery of businesses in the region. Business were generally positive with the recovery in Sydenham but indicated the recovery process was still ongoing.

1. Introduction

1.1. Overview

H. Khan, Vasilescu and A. Khan (2008) stated that “A disaster is a result from the combination of hazard, vulnerability and insufficient capacity or measures to reduce the potential chances of risk” (pg.2). The management of such disasters has been typically viewed through the *Disaster Management Cycle*, which has four key phases; mitigation, preparedness, response, and recovery (Khan et al. 2008). Recovery is one of the least understood phases of the disaster management cycle (Berke, Kartez & Wenger, 1993). Traditionally recovery was viewed solely through the repairing of physical assets to their pre-disaster state. Recent research refutes the traditional approach recovery arguing that a community will remain vulnerable to another disaster if infrastructure is simply built back to its pre-disaster state (Kennedy, Ashmore, Babister, & Kelman, 2008; Lyons, 2009).

Natural disasters are occurring with increased magnitude (Red Cross, 2010) and increased frequency (United Nations Environment Programme [UNEP], 2008), which has prompted significant research in the field of disaster recovery.

The phrase *Build Back Better* was familiarized by Clinton (2006) who released the report “Key propositions to building back better” following the Indian Ocean tsunami in 2004. The *Build Back Better* principles enforces the concept of resilience, which seeks to reduce the inherent vulnerabilities within communities. Resilience can be most simply defined as the ability of a community to “bounce back” following a disaster (Twig, 2009).

The *Build Back Better* (BBB) framework was developed at the University of Auckland by Mannakkara and Wilkinson (2014) as a means of assessing and monitoring the implementation of *Build Back Better* principles (Mannakkara, 2014). The BBB framework guides a multifaceted approach to disaster recovery, considering the recovery of physical, psychosocial, and economic aspects of recovery. This framework recognises the importance of major stakeholder interaction in disaster recovery.

This research looks at the application of the BBB framework in the recovery of Christchurch following the 2010/2011 earthquakes. This research uses a case study approach focusing on businesses in Sydenham, Christchurch.

1.2. Christchurch Earthquakes

New Zealand is situated on large geographical faults spanning the length of the country. The largest faults

being the Alpine and Wellington fault lines. The Darfield earthquake that struck in 2010 was caused by the Greendale Fault (GNS Science, 2011). The more devastating 2011 earthquake was caused by an unknown fault that did not break the surface. This made it difficult to determine the location and nature of the fault (GNS Science, 2011).

Six years on from the devastating 2011 earthquake, the Christchurch region is moving from the recovery phase to regeneration phase (Regenerate Christchurch, n.d.). As the recovery has progressed it is becoming more apparent that there is a disparity in the recovery between suburbs (Stevenson, Noy, McDonald, Seville, & Vargo, 2016).

1.3. Sydenham

Sydenham is a suburb of Christchurch located just outside of the central business district (CBD) of Christchurch as seen in Figure 1. Sydenham primarily facilitates businesses with only a small residential area. Sydenham suffered immense damage in the September 2010 earthquake with the loss of cultural, heritage, retail, and business sites (Christchurch City Council [CCC], 2011).

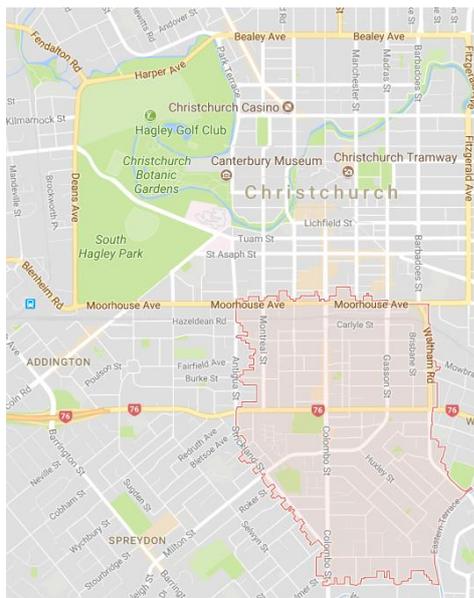


Figure 1: Sydenham in context with the wider Christchurch area (Google Maps, 2017)

1.4. Scope

Sydenham was identified by Opus Research as a region that had seen significant growth in the post-disaster environment but had begun to plateau. Due to time and resource constraints, the decision was made in conjunction with Opus Research to solely focus on the businesses in Sydenham. This was justified as Sydenham comprises mostly businesses, with a relatively small residential area.

1.5. Objectives

The main objective of this research is to understand the recovery of businesses in the suburb of Sydenham. This will be assessed using the BBB framework. Several sub-objectives have been developed to aid and focus the research;

- a) Evaluating the impacts of the 2010/2011 Canterbury Earthquakes on businesses in Sydenham;
- b) Understand the business recovery plans in place for Sydenham;
- c) Investigate the post-disaster experiences of businesses in Sydenham;
- d) Identify ways in which the business sector could be made more resilient.

2. Literature Review

2.1. The Build Back Better Framework

The BBB framework has three main pillars; disaster risk reduction, community recovery and effective implementation (Mannakkara, 2014). Each represents a different aspect of disaster recovery. The main pillars are refined into several further categories giving a more detailed assessment of the application of BBB principals. The BBB framework has been used to assess the recovery of disasters such as the Victorian Bushfires (Mannakkara, 2014). The framework was formed as follows:

- 1) Disaster Risk Reduction (DRR)
 - Resilient Physical Assets
 - Multi-Hazard Based Land Use
 - DRR Education and Awareness
- 2) Community and Business Recovery
 - Social and Psychological Recovery
 - Business Recovery
- 3) Effective Implementation
 - Institutional Mechanism
 - Legislation and Regulation
 - Monitoring and Evaluation

2.2. Christchurch Regulatory Bodies

There are many different organisations that are involved in the recovery of Christchurch. The Christchurch Earthquake Recovery Authority (CERA) was a public service department formed in 2011 which was established to organise the rebuild of the Canterbury region (Earthquake Commission, n.d.). In 2016 CERA was officially dissolved. The responsibilities and roles of CERA have now been distributed to other organisations, including the Greater Christchurch Group (GCG), under the direction of the Department of the Prime Minister and Cabinet (DPMC).

The GCG is tasked with leading and coordinating the Government's role in the regeneration of

the Canterbury region (DPMC, n.d.). The responsibility of the entity is to monitor and report on the recovery in the Christchurch region. They also provide advice to the Ministers and support Regenerate Christchurch and Otakaro Limited.

Regenerate Christchurch is a joint central and local government entity that focuses on the long-term development of Christchurch. Regenerate Christchurch is working and advocating for communities and stakeholders in this process (Regenerate Christchurch, n.d.).

Otakaro Limited is part of the responsibility of the GCG which works towards delivering key projects in Christchurch. Due to Otakaro status as a Crown company they can accelerate work and deliver it in a transparent manner (Otakaro Limited, n.d.). It aligns commercial outcomes of the Christchurch area with the Crowns regeneration objectives.

The GCG in conjunction with Regenerate Christchurch and Otakaro Limited formed with other significant stakeholders in the region to create the Greater Christchurch Partnership.

2.3. Sydenham Master Plan

A series of master plans were developed for the Christchurch region, to support recovery and regeneration in the worst affected areas. It was specifically stated in the plan that there was no responsibility of the council to provide plans following the disaster (CCC, 2011).

The council believed that Sydenham was at risk of a permanent loss of commercial function, therefore actioned the formation of a master plan (CCC, 2011). The Sydenham Master Plan was developed through extensive consultation with the community. Actions established through the plan had a time frame ranging from, immediate to long-term actions of more than 10 years (CCC, 2011).

The plan recognised the following as the most significant challenges Sydenham faces in its recovery;

- The significant loss of commercial buildings
- No support from an immediate residential catchment
- Reduction in passing trade
- Lower socio-economic residential area, that relied on local shops without access to a vehicle
- Urban renewal process that began pre-earthquake
- Negative opinions of the Sydenham area
- Competition from surrounding areas

Despite the challenges the area faces, Sydenham benefits from being in walking distance to major supermarkets, education, health, and sport centres which attracts a unique demographic to the area.

3. Methodology

3.1. Overview

A qualitative data collection method was required to obtain results from businesses in Sydenham. A semi-structured interview process was used. Prepared questions were used to direct the responses whilst also allowing the interview to take its own direction and adapt to the interviewees responses. The interviews took place over one business week July 2016. They were scheduled for an hour in length. This was flexible and often depended on the interviewee's willingness to provide information.

3.2. Business Selection

The Sydenham businesses were categorised based on their size and market sector, such that a range of business types were obtained.

A list of businesses and their contact information was obtained through online sources, as the researchers did not have the resources to access businesses in Sydenham. Listed businesses were contacted via email which explained the project information and if willing, requested an interview with the business.

A multi-choice online questionnaire was established later in the research to obtain further information from businesses. The questionnaire was sent out to businesses on the pre-established list. It excluded those that had already participated in the interview process.

3.3. Data Collection

Interviews were conducted according to the University of Auckland Ethics guidelines. Interviewees were presented with the Participant Information Sheet (PIS) and the Consent Form (CF) prior to the commencement of the interview. Only participants that signed the consent forms were recorded. There was no interaction between the participants ensuring that the results were independent.

The online multi-choice validation questionnaire was presented using Google Forms with the questions following a similar structure to those used in the interview process. Online participants were required to give consent prior to carrying out the questionnaire.

The researchers contacted both Christchurch City Council and Regenerate Christchurch to conduct an informal interview process.

3.4. Data Analysis

For those that consented, the interviews were recorded. The interviews were transcribed post-interview which allowed for easy access and analysis of the data. Data was obtained in the form of quotations. The data was then categorised based on the BBB framework categories and the business sector. The data was analysed using NVivo

11, which allowed the researchers to group similar and contrasting data.

Data obtained from the online questionnaire was presented in an Excel document. Each question displayed the response information. With only six respondents to the questionnaire there was no need for further data manipulation.

3.5. Interview Profile

As per the ethics submission, all participants in the study are kept confidential. Businesses were categorised as shown in Table 1.

Table 1: Profile of interviewed businesses.

Code	Sector	Size	Ownership
P1	Hospitality	Small	Franchise
P2	Consultancy	Large	Division/Branch
P3	Retail	Micro	Independent
P4	Retail	Micro	Independent
P5	Consultancy	Medium	Independent
P6	Retail	Micro	Independent

3.6. Validation Questionnaire Profile

Those that participated in the validation survey were categorised as shown in Table 2.

Table 2: Profile of businesses participating in the validation questionnaire.

Code	Sector	Size	Ownership
P7	Retail	Micro	Franchise
P8	Hospitality	Micro	Subsidiary
P9	Health	Micro	Independent
P10	Health	Micro	Division/Branch
P11	Trades	Micro	Independent
P12	Retail	Micro	Independent

4. Results

4.1. Disaster Risk Reduction

4.1.1. Hospitality

When asked about the disaster risk management plans the business had in place P1 responded, “yea run fast”. P1 further confirmed that they did not have any plans in place when the 2011 earthquake struck. Prior to the 2010 earthquake there was no indication that earthquakes were a hazard in the Christchurch region. P1 had therefore insured the businesses against events such as fire from the kitchens, so lacked extensive earthquake cover.

P1 indicated that they “do have a bit of a plan in place” now, but did not elaborate further. Neither P1 or P8 had received any formal training on disaster management planning. Both recognised that it could be useful in their businesses. Neither P1 or P8 made any indication that their business had plans in place to ensure

resilient physical assets through processes such as building or land assessments.

4.1.2. Consultancy

P2 had 170 staff when the earthquake struck, this presented a logistical issue in their disaster planning. P2 stated that “health and safety is part of our business so we did have a plan in place and it kind worked”. P2 noted that while the plan worked there were improvements that could have been made. P2 felt that one of the major problems was that “people were out of the building and couldn’t get back and communications were down”, this was not factored into their response plan. In the post-disaster environment, they now have a more detailed communication plan. This plan includes an “alternate site” that can be used to group employees should the office be inaccessible. The business learnt not to “rely on technology” and to “have different ways of communication”, and have applied this to their business functions.

P5 did not have any clear disaster risk management plans in place and felt they could have done better in their response. P5 said “I didn’t even have all my staffs phone numbers in my cell phone” this is something that P5 recognised was a major safety concern and has since been rectified for future disasters. P5 said “I think business as a whole could get a whole lot better felt” and indicated that there were still some things that could be improved in their disaster management plan.

P5 did not give any indication that the business had processes in place to identify or regulate building safety standards unlike P2. P2 has a company policy which ensures they have a “minimum building standard B class building”. This company policy ensures the safety of their staff and resilience of their physical assets in a future disaster.

4.1.3. Retail

P3 gave no evidence to suggest that they had a disaster risk management plan in place suggesting that if another disaster “happens again you just have to re-evaluate and see can you move somewhere else”. Similar sentiments were echoed by P4 who said that “apart from insurance” they did not have a disaster risk management plan in place. P6 also has used insurance as the main form of disaster risk reduction. Both P4 and P6 indicated that there have been significant issues with the insurance process. P6 elaborated on this saying “as far as issues and things insurance is number one”. P4 also noted that their insurance claim had only just being settled in February (2017).

P4 felt that most of the businesses had tried to sort “insurance first” in order to get the money to rebuild. P4 thought that businesses who took this approach then the more likely “people forget about you and, yeah someone else will maybe take your market share”. Further to this neither P7 or 12 had received any sort of

training relating to disaster risk management. P7 thought disaster risk management training may be useful for their business, while P12 felt that training would not be useful to their business.

P3 felt that their business was flexible stating “we could be in a different location” adding that they “could be online only, that’s another option”. This flexibility increased the businesses resilience to a future disaster. With the flexibility of location P3 felt that they did not need a disaster management plan. P6 then had to move into their house they were “still [doing] what [they] could to conduct business, taking repairs and doing valuations for people”, while this not desirable it still gave them the opportunity to operate in the post disaster environment.

P6 indicated that they had made changes to their business following the 2011 earthquakes. They had moved their stock management system online and outsourcing this to Australia allowing them to keep track of inventory. They had also prepared staff in disaster response. There was no evidence suggest that there were further plans in place for the operational aspects of their business.

4.1.4. Other

P9 and P10 were both established prior to the 2010 earthquakes. P9 did not have a disaster risk management plan in place prior to the earthquake and do not have one in place as of 2017. They thought than any further training in disaster risk management would not be beneficial to their business.

P10 did have a disaster risk management plan in place prior to the earthquake however indicated that it was not successful. They have since received training for disaster risk management planning and consequently have a plan in place. P11 was established after the 2011 earthquake, they have also had some form of training in disaster risk management and have a plan in place.

4.2. Community and Business Recovery

4.2.1. Hospitality

P1 noted that the “business hasn’t made profit we’ve made a profit 6 months out of 4 years”. The business has reduced the number of working days and had to reduce the number of staff from 28 from 14. P1 felt that they were better off than other areas of Christchurch such as “a section of Riccarton road that had road works going on for the best part of 6 months”, which has prevented people turning into businesses along this section of road.

P1 felt that the recovery efforts in the Sydenham area were “a disaster” specifically noting that “it just hasn’t worked for hospitality”. P1 was clearly disheartened by the recovery process and felt there was not anything they could do to “drag it [business] back”, stating “it’s like pulling teeth from a donkey”.

P1 felt poor recovery in the sector was due to the difficult access into Sydenham, stating “people won’t travel across Moorhouse Ave”, due to the traffic and difficult navigation. P8 also believed that restricted accesses into the Sydenham area significant threat to the future of their business. P1 felt that the weak tourist market, which they estimated to be “40% of [there] business” was exacerbating the problem. P1 felt that “Christchurch is still fairly weak, no hotels, no stadiums, no events”, which is reducing foot traffic and spending in the area. P8 confirmed this indicating that a lack of customers was a threat to their business.

P1 said that the Sydenham area was meeting expectations. P1 had therefore had a “serious look at relocating back into town”. P8 had a differing opinion indicated that the business and community recovery in Sydenham was meeting their expectations. They felt that the area had a good atmosphere, consequently they were not inclined to move back into the city centre.

4.2.2. Consultancy

P2 stated that when they first arrived “the Columbo [mall] hadn’t really started up” and “even before the earthquake there were hardly any shops here”. This indicated that the area had significantly improved since the 2011 earthquakes. P5 was also positive about Sydenham saying “to [a] number of people, keep your eye out for Sydenham”. With a lot of the old sites being demolished much of the area was empty lots. P5 located in Sydenham because it was “a good location” “we’ve got free parking we’ve got good access to Brougham street that’s an arterial out to Rolleston and Lincoln”. P5 they felt that the “[didn’t] need to be in the middle of the city” and believed Sydenham provided all the necessary amenities for the business.

P5 said that Sydenham had “met expectation, not our first expectation”, but overall was positive about the recovery. P5 said that they had to reduce rent on their property, which was had been a disappointment however it was necessary to attract tenants. P5 felt that this was reflective on the potential stagnating business growth in the area.

P2 was one of the few participants that experienced largely positive recovery stating the “the growth [in the business] has been quite amazing because it is sustainable growth because we now do more different types of consultancy”. The earthquake not only increased P2 presence in Christchurch allowed them to recognise “lots of opportunities in the South Island”, they recently opened an office in Nelson and Queenstown. P2 felt that the business growth had “a lot of it is to do with the earthquake but a lot of it is because we are here and we have got bigger we have more opportunities and people know who we are now”.

The prolific business understood the impact they could have in such a difficult period of time. They therefore initiated projects within the community

collaborating with a “few other non-profit organizations to do the pop up garden”. They also focused on using “local suppliers”, commenting “that coffee cart over there was our other meeting room”. They understood the importance of community recovery and the effect that their business had on the area.

Despite the businesses positive experience in Sydenham P2 stated that they had no intention to stay. Company policy they have a policy “to be close to our clients”, which was incorporated with their “5-year plan” to “plan was always to move back to the city and be a leader”.

4.2.3. Retail

P3 was able to move into a pop-up shop in Sydenham which was perfect for their business as it was “not [a] big overhead or commitment [it was only a] 6 months lease [with] cheap rent”. This initiative established by the Colombo Mall gave small starting businesses a place to enter the market. P4 was also positive about the creation of the mall saying that they are “reasonably positive [about the future] I think because of the cohesion of this [Colombo] mall, and the fact that you can park, it’s still city fringe and you’ve got kinda population close by”. P6 also stated that “there [were] good things happening with the Colombo”.

As well as the accessibility of the business P3 noted that the “mall staff [have] been helpful and we have become good friends with the storage people”, which indicated that the P3 feels there is a good community vibe in the area. This was echoed by P4 who had found the support network that had been created by the Colombo Mall. Like the other participants in the study P6 indicated that “there were good things happening in the area so that’s what attracted us to Sydenham”.

P3 noted that they had looked for other places around Christchurch however stated that the “rents [were] quite high and they were wanting me to sign for [a] 10-year lease”. P3 had looked at other areas of Christchurch such as Wigram and the Landing but felt the rents were too high. P6 had to start looking for permeant places when they realised that the CBD was going to be a long-extended recovery process. Sydenham was shortlisted as a viable option for recovery because P6 felt “[t]here was a good vibe, a bit of stuff out in the media of sort of a council sort of regeneration plan and things like that”. P6 decided against going into the mall because it limited the business to fixed ours and a fixed style, so rather they decided on a shop on Colombo Street.

P3 stated that the business was unlikely to move into the city as “but this location [Sydenham] works for us because we have big furniture we need the carpark”. Similarly, P4 felt that Sydenham that was more aligned with the customers and businesses needs in comparison to that of a more commercialised area such as large malls and the CBD.

P4 states that Sydenham as “exceeded my expectations” and noted that they “were one of the first inner city retailers to reopen”, with the process taking around seven months. While P4 was able to physically re-establish the business presence relatively quickly it was noted that sales “[took] a while to get momentum”. P4 who also owns a business in the city said that there was a significant contrast between their store in the CBD and the Sydenham store. P4 stated that for their CBD store they “just have it locked”, this means that they are just “paying rent, [and] because there’s no people”, they cannot justify having a store open.

Similar to P3 and P4, P6 has “found it [Sydenham] a really good area, there’s a really good vibe down here, and a lot of our customers we tend to be a bit of a destination store”, due to the nature of their business they felt that they did not need to relocate to the CBD. P6 thought that one of the most important things for the business was the “access and parking”, something that the CBD is currently struggling with.

P4 indicated that while that they were positive there were still some major challenges ahead especially with the effect of continuing construction in and around the area.

P4 states that the recovery in the CBD had been “quite demoralising for the staff because they’re in there just almost going crazy”, as P4 reflected on the physiological aspects of the recovery. P4 stated the last “six months “months have been, have probably been the hardest in this city that I’ve ever experience in 20 odd years”.

Reflecting on the Sydenham area P6 stated that and “things really, they haven’t progressed here like I would have thought they would” and “things have plateaued a wee bit lately”. There were still positive aspects to recovery in Sydenham an example of this is the “Thursday night[s] [which are] sort of late night in the area, everyone’s open till 9 if they’re a part of it, the Colombo really get on board”. In terms of the physical recovery of P6 felt that there was “a lot of empty lots and derelict things around that while there’s been some progress made, not as much as I would have thought in the 6 years”. P6 noted that despite the decline in business recently “at this stage I wouldn’t see us moving back into town”, all though did note that if the opportunity came up they would consider moving to another location. P6 said that “few years ago [I would have been] less inclined to” move to another.

P7 thought the business recovery in Sydenham was more than meeting expectations, the business was already in Sydenham when they took over and had decided to stay in the area. P7 indicated that they had no plans to leave Sydenham in the future. P12 was less pleased with the recovery in Sydenham indicating that business recovery was not meeting expectations. P7 and P12 both indicated that the wider community recovery was meeting expectations.

Both P7 and P12 felt a lack of customers and restricted access to Sydenham would be a major problem to their business. P7 further indicated that malls and the CBD reopening would be a significant threat, while P12 felt that continued financial losses were a significant threat.

4.2.4. *Other*

P10 which was established prior to the 2010 earthquakes indicated that there was still ongoing physiological stress associated with the disaster.

P8 and P9 felt that the community recovery was only meeting their expectations whereas P11 felt that the community recovery in Sydenham was exceeding expectations

P9 and P10 felt the business recovery was meeting expectations. Both respondents chose the area because they felt Sydenham had a good atmosphere and it was a good location. P10 elaborated that there was good foot traffic and parking which was beneficial to their business.

None of the respondents had any plans to move into the CBD. P9 and P11 felt that a lack of customers would be the most significant threat to their business. P10 and P11 felt the restricted access to Sydenham was also a significant threat to their business.

4.3. **Effective Implementation**

4.3.1. *Hospitality*

P1 was used turnover as the primary metric for assessing the recovery of their business. P1's interactions with the council had left them feeling as though "the council is not interested" and had a "fairly ambivalent attitude" to the recovery of businesses in the area.

P1 also felt that area organisers had not fully considered the effect that events had on the hospitality sector. An example that P1 gave was the night noodle markets. One of the stall owners was someone that P1 knew personally, P1 said that "he brought over all his staff over an employed 1 person here from Christchurch he brought his food with him because the price in Australia is a lot cheaper on protein items", the market was therefore pulling more money away from those in Christchurch.

Despite P1's disapproval of the councils' support in the post disaster recovery environment, P1 felt that they could not be more helpful at this stage in the recovery as the business was already established in the area.

P1 thought that the "masterplans and things like that have been unsuccessful" and were not rejuvenating the area as planned. The consenting process for P1 has been a constant struggle suggesting that there was "no pace at all", which was frustrating for the business owners looking for new sites. P1 felt that talking to council representatives on the phone was the best way to

contact them as other methods were slow and laborious. P1 also said that the councils preapplication "fees have horrendously gone up" which is frustrating for businesses that are already struggling.

Regarding the legislation and regulation aspects of the disaster P1 said that "It's really not a thing that I get into" and relied on organisations such as Hospitality New Zealand and Canterbury Inc to guide discussions and processes. P1 felt that while the communication and organisation between the group was successful in the beginning "after 5 months it drifted off".

P1 felt that moving back into town was unfeasible as the "rent [was] far too high" having almost "have double to almost tripled what [they] were paying pre- earthquake". This is a significant barrier to entry for many of the small to medium businesses who must make more revenue in a challenging business environment just to breakeven. P1 felt that there was not sufficient legislations or regulations to support smaller businesses moving back into the centre city.

4.3.2. *Consultancy*

P2 had little to add about the government and regulatory bodies. This was primarily due to their size. Being part of a wider company structure mean that they had the support from their business line. This meant they did rely on support from the government. P2 worked with the regulatory bodies in the recovery of the city so they saw their business as a leading entity in the post disaster environment.

P5 felt that the support they had received from the council was poor and even noted that "if Christchurch city council had a competitor to go to that we [P5's business] could go to get building consents, they would get all my work", P5 felt that their process was inefficient and hard to deal with elaborating that "there was a period, the few months after the quake, where council went to ground". P5 said that in the post disaster "all the consent officers, basically there were none, and it was quite cool cause basically we could go around saying well look we can't get hold of council".

P5 felt that the council were not the only ones who lacked communication in the post disaster environment, "there [also] was nothing that came from IPENZ", with so many engineers working in the post disaster environment P5 felt that there could have been better support from the professional body.

4.3.3. *Retail*

P4 felt that private developers had contributed most positively to the recover as "they've reinvested in and built while the city council and government have just been doing a lot of infrastructure". To draw on this P4 feels that some of the infrastructure work that has been completed by the council unnecessary as they "because as soon as the heavy machinery comes in to build these new buildings it just ruins what they've done".

P4 indicated that they predominately look at profits and turn over to measure recovery. P4 felt that over the “years and looking at the bookwork I feel we recovered or we got through something but now the figures speak volumes. It’s constant between here and Embassy. Except the city just plummeting it’s like 40% down”. The figures that P4 gave indicates the clear disparity in growth and recovery between Sydenham and the CBD. P4 was more positive about the recovery in the Sydenham than that of the CBD.

P4 said that their business “had some help with wages initially”. P4 realised that they would not be able to keep their staff after the 10-week period so “I had to make them redundant but all but one came back so that quite good”.

When P6 was finding a new location, they found it difficult as there was inconsistent information and a number of unknowns that were created by the 2011 earthquake. The lack of communication in the immediate post disaster was something that many of the participants identified as an issue in the recovery.

4.3.4. Other

P9 indicated that there had been major difficulties with insurance however P10 felt that the process was easy. P10 indicated that they had major difficulties with the communication with the regulatory bodies. P9 indicated that they experienced only minor difficulties. P10 received sufficient support from the council/government following the disaster. P9 had the opposite experience in which they received no support, consequently they felt that the support could have been better.

5. Discussion

Compared to the retail and hospitality sector the consultancies were equipped with the technical knowledge and resources to implement successful disaster risk management plans. Their management plans heavily focused on the physical response, rather than a business operation response.

Retail businesses had more flexibility in their business location, with a lower number of staff and assets. This increased the resilience of these businesses. The retail businesses clearly lacked the knowledge and resources required to successfully implement disaster risk management plans.

Most of the smaller businesses had accepted the risk rather than mitigating the risk of another disaster. They displayed a blasé attitude towards disaster risk management. They felt they were successfully mitigating risk through insurance and did not have the resources or knowledge to develop a thorough disaster risk management plan.

The smaller businesses tended towards insurance as being their only form of risk mitigation. Despite many of the businesses indicating that there were still ongoing issues with insurance even six years on from

the earthquake, none had actively changed their disaster risk strategy.

Smaller businesses in the retail and hospitality and other sectors were more inclined to seek business locations based on the feel or aesthetic of the area. There was no evidence to suggest they had actively sought areas or buildings that were deemed lower risk.

The Columbo Mall was recognised by many of the participants as a positive development in the recovery of Sydenham. The mall’s modern and fresh architecture combined with a good mix of retail and hospitality shops had created a point of interest in the area. Having a centralised mall has provided significant attraction, improving foot traffic in the area.

The participants recognised the importance of collaborative events between businesses in the area. Groups such as the Sydenham Business Quarter, which facilitated interactions between business has had a positive impact on the recovery in Sydenham. The have events helped draw customers into the area and promote businesses in Sydenham. More events in the future would also provide an opportunity for community bonding and aid in the physiological recovery of the area.

Professional companies picked the location of their business based on the needs of their clients. P2’s focus was to be physically close to their clients while, P5 wanted accessibility to parking for their clients. This differed to the location needs of the smaller business in the retail and hospitality sector who relied more heavily on passing foot traffic to stimulate business demand.

Despite Sydenham’s closeness to the CBD it will struggle to attract large professional services in the future as it does not have the allure of a CBD. Sydenham provides an attractive option for the smaller businesses as it offers lower rent and less constricting rental agreements. Smaller business felt that Sydenham was competitive compared to the CBD as it had better parking and access to shops.

Regarding business recovery in the area most smaller businesses felt that restricted access to Sydenham and a lack of foot traffic were the most significant threats to their business. It is important that these threats are mitigated in the future planning and regeneration of Sydenham.

That lack of information coming from the local council in the post disaster recovery was clearly a struggle for businesses in both the CBD and Sydenham. While the information can be found with extensive research, businesses owners need faster and more concise access to information. With new entities being formed as the city moves into its regeneration phase the clarity of communication channels is not improving.

The roles and responsibilities of business owners and regulatory bodies was confusing for the businesses owners. Improving the clarity of entity responsibilities would reduce confusion in

communication and facilitate better communication between the two parties.

Collectively businesses found that the information regarding funded projects was confusing. Many of the businesses felt that the council was doing unnecessary work. While the information it exists, it may not be clear or easily accessible to business owners. By improving the communication of the council decisions, much tension between business and the council could be alleviated.

6. Limitations of Research

6.1. Resource and Time Constraints

The researchers were only able to carry out interviews over one business week in July. The interviews were conducted in Christchurch, which limited the number of interviews that could be conducted. The time constraint further restricted the number of willing participants to those that were available during that week.

6.2. Number of Participants

Obtaining willing participants was difficult. Businesses were approached via email, however the response rate to this was very low. The researchers contacted The Sydenham Quarter Businesses association and the Christchurch Chamber of Commerce, however these contacts did not provide any additional participants.

6.3. Application to Businesses Recovery

The BBB framework was developed to look at the recovery aspects of a community as a whole. This research focuses on the just the business in Sydenham. This is justified as the residential population is small compared to the business population. Therefore, much of the community recovery is intrinsically related to businesses recovery in the area.

6.4. Bias to Respondents

The results obtained are basis to those who took part in the interview and questionnaire. Participation in the interview and questionnaire may be biased towards those strong opinions on the recovery. Those who are generally satisfied with the recovery may not have felt that their response added to the research. The research is biased to those who participated and therefore may not be reflective of the wider Sydenham business recovery.

6.5. Researcher Bias

Analysis was carried out by coding the information that we had obtained from the interviews. While the interviews were recorded, the information still had to be coded into the nodes recognised by the BBB framework and this was at the discretion of the researcher. To overcome this is the researchers did not have any personal connection or previous understanding of the area.

7. Conclusions

One of the most concerning trends was the lack of disaster management plans in place, particularly for small businesses. There was typically little understanding of how business operations could continue following the disaster. Many of the businesses lacked the training or knowledge to effectively implement disaster risk reduction principles. This significantly reduced the community's resilience to another disaster.

In general, the participants felt that community recovery was meeting expectations, with a few indicating that it was below their expectations. This came down to the unique disaster experiences of the participants. Businesses that were doing well and prospering were understandably more likely to view the recovery more favourably. The effect that the disaster was having on businesses even six years from the 2011 earthquake was apparent. This highlighted the need for support groups such as the Sydenham Business Quarter Association to ensure resilience in the community should another disaster strike.

Many businesses felt that there had not been sufficient support from the government in terms of legislation and regulation. This was of greatest concern to the small groups who could not rely on a wider business group for financial stability or support. The perceived lack of communication between the business owners and regulatory bodies was also a significant threat to the successful recovery of businesses in the area. The confusion may have been caused by the lack of understanding of the roles and responsibilities of the different parties. The lack of understanding resulted in unclear communication channels which hindered recovery.

8. Recommendations

8.1. Improving Business Resilience

The following recommendations are suggested by the researcher to improve the more resilience of Sydenham to a future disaster.

- 1) Provide engaging educational programs regarding disaster risk management. The program should be designed to accommodate for the different needs of small to medium businesses;
- 2) Improve businesses understanding of building safety ratings and how these can be utilised to make businesses more resilient;
- 3) Create an educational platform that delivers this information of the roles and responsibilities of entities in a clear and concise manner. Improve resilience through increased understanding of communication channels and expectations of the parties;
- 4) Provide educational workshops in the area to enhance the business understanding. Create a

collaborative environment which businesses are working together to recover;

- 5) Ensure that future plans assess the impact of developments on access and pedestrian foot traffic in Sydenham;
- 6) Promote Sydenham with the continued support of events, designed to showcase the local businesses.

8.2. Future Research

The following points for future research have been identified;

- 1) Further data collection of a wider group of businesses and of residents in Sydenham;
- 2) Evaluate different suburbs in Christchurch and contrast their recovery journeys to identify common weaknesses in their resilience;
- 3) Understand and identify techniques which can improve the effectiveness of local and central government communication;
- 4) Understand and identify the ways to mitigate the unique challenges that small to medium enterprises face in recovery.

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