# Regional Resilience in Recessionary Times: A case study of the East Midlands Lynn Oxborrow, Nottingham Trent University Burton Street, Nottingham, UK and Professor Clare Brindley, Nottingham Trent University

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#### **Abstract**

**Purpose:** Since the 1990's the fashion industry has reflected the issues generally arising in the manufacturing sector, namely rapid and deep structural changes, the development of new supply chain relationships, ICT impacts and increasing globalisation with the attendant issues of ethical sourcing, off-shoring, new emerging markets and recessionary ripples. This paper focuses on one particular aspect of the fashion industry, namely the apparel sector and in particular 'fast fashion' to explore the issues arising for the SMEs in the supply chain

**Approach:** The research adopts a qualitative methodology and is longitudinal in nature, spanning 5 years from August 2006. The first stage of the research is reported here, where a series of focussed interview scenarios were conducted over an eighteenth month period. The sample of 12 SMEs was a convenience one, drawn from the 30 participants who took part in a business to business event in Leicester, a geographical location which acts as a microcosm of the apparel industry. Interviews

were used to elicit narrative data about was what was actually happening in these apparel supply chains.

**Findings:** The apparel supply chain has changed significantly due to recessionary ripples and structural changes. The SMEs have had more success in managing the upstream rather than the downstream relationships and relationships between buyer and suppliers continue to be fractious. Innovation has occurred but is hampered by the relationships that persist. Culture has proved to be a key dimension

**Implications:** There is a lack of research on supply chains, especially, apparel supply chains that focus on reality rather than best practice. The relationships that are exerted in the supply chain and the cultural aspects that influence them have also lacked academic focus.

Value: Adds empirical data to the paucity of theoretical work in the area by the construction of a model that articulates the key factors (relationships, innovation and culture) that operate within cluster supply chains. It also identifies the unequal relationships and how SMEs devise strategies to cope or not, to some extent dependent on their culture.

**Key words:** SME, cluster, culture, process innovation, recession, relationships, supply chain

Research paper

#### Introduction

In recent times, the fashion industry has acted as a barometer to wider issues in the manufacturing sector. Technological changes, a move from local to global sourcing, lengthening of the supply chain, changes in supplier relationships, the emergence of new markets particularly focussed on fast changing or 'fast fashion', an increase in awareness of sustainability issues and turbulent economic conditions, have all resulted in significant adaptations of industry structures, often within unprecedented timescales. The term 'apparel' is that defined by Hines and McGowan (2005:p.522): "The apparel manufacturer will cut the cloth, make it up and trim to a design template specified by the retail organization before finishing (packing, labelling, pricing) and delivering to a retail customer...". Fast fashion refers to apparel styles introduced more regularly than the two seasons per year tradition of the industry. Leicester, in the UK, has traditionally been associated with apparel manufacture and provides the focus of the study to elucidate how the sector has innovated and responded to market changes, especially in recessionary times. The paper begins with a description of the apparel sector in Leicester where signs of industry concentration or 'clustering' (Porter 1998) are particularly pronounced. This background provides a context for the discussion of previous work. Our methodological approach is then explained, followed by findings from the primary research. Finally conclusions are drawn and implications discussed.

# The UK apparel market

The UK apparel market was worth £30 billion in 2009 (Mintel Oxygen 2010a), is mature, and the limited growth reported since the onset of recession has been driven by fashion conscious young consumers. Older consumers have chosen to favour lower priced clothing in order to save money, rather than buying less (Mintel Oxygen 2010b) and the expectation from customers to see more rapidly changing styles or 'fast fashion' applies to both younger and older consumers. The rapid growth in low value retailers has continued throughout the recession and the ability to be responsive to market change at low cost, is critical to success. Low value retailing has grown in parallel with the rapid growth in overseas apparel supply and attendant decline of the domestic apparel manufacturing sector (Stratton and Warburton 2006; Lowson, 2002). However, in spite of this decline, there remain a significant number of manufacturing businesses providing a variety of services including product development, flexible manufacturing and sourcing, in order to maintain the flow of goods into a number of increasingly volatile markets.

### The Apparel Sector in the Leicester, UK

One such concentration of firms is that in Leicester where the historical focus on mass market hosiery and knitwear production has rapidly been replaced by a cluster of small firms. The average firm size is 13 workers, with 75% employing fewer than 10

people (ONS 2009<sup>1</sup>), and there is a heavy representation from ethnic minority entrepreneurs, accounting for half of the sector's employment in 2000 (EMDA, 2001). These small firms are manufacturing women's apparel but utilising the network of available knitted textiles, dyeing and finishing capacity and the plethora of vacated former textile mills in inner-city Leicester. Leicester, has large concentrations of knitted articles enterprises and smaller but stable or growing activity in knitted textiles and more obvious growth in textile finishing. Put another way, the industry in Leicester shows a concentration of activities that support the apparel supply chain, consistent with cluster theory. In Leicester City, the concentration of apparel employment (measured by location quotient, a comparable measure of industrial activity concentration) is 16 times that of the UK National Average for 2008, a substantial increase in concentration having risen from four times the national average in 1984. In textiles the Leicester LQ has declined more slowly than elsewhere (based on ONS, 2009). Such a disproportionately high concentration of employment is one sign of a local concentration of activity or inter-industry cluster, as defined by Doeringer and Terkla (1995). However, the majority of the SMEs' customers are based elsewhere in the UK and Europe, in contrast to Porter's original cluster concept (1998) of a vertically integrated cluster.

While firms operate from a low cost base, paying low wages, using poor premises and with most offering a combination of local and off-shore production, they have gained a reputation for quick response capability and a capacity for market responsive design adaptations. These developments are concurrent to the growth in bulk imports of women's apparel, providing a source of supply for low-value, fast fashion retailers (such as New Look, H&M and Primark) who benefit from designs which inject newness to their in-house collections and compensate for any missed trends and supply failures. There are a number of key characteristics of the sector: design and product development, vertical or network integration, information technology, off-shoring and buyer relationships.

The recent developments within the Leicester Fast Fashion cluster illustrate the trade-off choices that the fashion industry faces between low cost volume manufacture and customer responsiveness in a volatile market. Feedback from design-led fast fashion companies indicates that the trade-off is more apparent to themselves than to their retail customers who appear to expect the best of both worlds - a view echoed by Christopher (cited in Davies, 2004). Although as Aage and Belussi (2008:p.476) argue "in the production of fashion goods, ... (sic)value is mainly attached to the design." It appears that the evolution of the large company dominated supply chains suggests that the focus of these retailers is towards reducing variation in order to facilitate cost reduction and efficient supply chain development. This is a move which contradicts the market failures experienced by several major companies, exacerbated by recession perhaps but ostensibly caused by a deep seated failure to

<sup>&</sup>lt;sup>1</sup> More recent data is inconsistent due to changes in SIC categories.

innovate and offer customer value (Mintel Oxygen 2010b). While steps have been made to reduce the rigidity of the efficient supply chain by developing enhanced information sharing and postponement strategies to allow product differentiation to be delayed, in reality these strategies have effectively supported globalisation rather than quick response capability.

As the examination of the apparel market in Leicester has shown the sector has contracted, new players have emerged, power relationships have changed and new supply chain practices have developed. To what extent this is normative or unusual is now discussed.

# Relationships in the fast fashion sector

Hines and McGowan (2005:p.525) believe that "there is a real dearth of research into the nature and character of buyer-seller relationships in the specific context of the fashion industry,...." A context that has experienced rapid changes due to the move towards global sourcing and offshore manufacturing (Stratton and Warburton, 2006). Some suppliers have been better in responding to these changes, either by becoming design driven (Khan et al, 2008) or becoming more entrepreneurial (Doeringer and Courault, 2008).

How entrepreneurial SMEs can be within the fashion supply chain is open to debate. A further issue needing discussion is the prevalence of ethnic minority SMEs within the apparel market (EMDA 2001). Entrepreneurialism can be hampered by the perceived lack of significance of SMEs in the process of innovation (Johnsen and Ford, 2006) and customer imposition of technologies and relationships which can hamper SME responsiveness. Furthermore, lack of trust, especially with ethnic minority SMEs, together with restricted transparency, deter SMEs from developing collaborative relationships, limiting their potential for adding value.

Though as Wynarczyk and Watson (2005: 39) found "... many SMEs appear to display a marked preference for conducting business via informal networks consisting of a limited number of close inter-firm and inter-personal relationships" though not necessarily geared towards achieving commercial success. Cultural ties can embed these relationships further (see Ram and Smallbone, 2003; Waldinger et al, 1990) and such SMEs "have been able to successfully establish themselves using less formal business contacts and methods (Wynarczyk and Watson,2005: 49). In contrast, Worthington et al (2008) find that transaction costs are higher when dealing with ethnic minority businesses and that few purchasers seek competitive advantage by dealing with ethnically managed firms. Lack of trust and perceived trustworthiness hampers the building of relationships, restricts information sharing between buyer and SMEs and constrains their long term potential for success (Jones et al, 2010) — especially in relatively low skill sectors, such as apparel (Jones, 2006).

Where spatial concentrations of sectoral activity develop, opportunities for collaboration and competition are compounded (Porter, 1994) and market integration

is often present. Common needs can result in shared infrastructural resources, industry training provision, specialist universities, logistics and sympathetic financial institutions. Vertical supply chain relationships, horizontal relationships around institutions and labour availability, or a combination of both (Doeringer and Terkla, 1995) enable these benefits to be enhanced. Some of these characteristics are found in the Leicestershire companies discussed here and are integral to understanding the industry's reaction to recent developments in markets, supply and technology. Rosenfeld refers to such business-based interdependencies as the 'associative economy' (2005:p.5).

Clustered SMEs, collaborating in flexible production and marketing can compete in niche markets that lack the economies of scale that would attract large firms (Piore and Sabel, 1984). It is the essence of this interaction which, according to Rosenfeld (1997) helps clusters to achieve benefits beyond the capability of individual or small groups of firms or, for that matter, transactional supply chains: "A cluster is represented by a local production system that is embedded in a local social system. Each affects the ability of a cluster to produce synergy. The most effective clusters, which are animated or 'working', are relatively complete systems with specialized support and considerable social capital (Rosenfeld 1997:p.22)

Rigby and Essletzbichler (1997) talk of location specific differentiation which enables buyers to find clusters of potential suppliers well-matched to their needs. Meanwhile Saxenian and Hsu (2001) refer to cluster success factors including the differential transition from vertical integration towards outsourcing relationships, innovative risk-taking; favourable global trends as well as internal conditions; and dynamism invigorated by new start firms. Successful clusters can, according to Doeringer and Terkla (1995) reduce the effects of economic shock, particularly for SMEs. For Bozarth et al (2007) there is scope for the advantages attributed to local industry cluster development to be a consideration in the development of supply chain strategy. Indeed, the benefits of a cluster of firms is discussed by Aage and Belussi (2008:p.486) who found "the existence of a local common culture favours a process of information sharing" integral to fashion as well as other supply chains.

Furthermore, the social ecology within clusters enables trust and commitment to develop (Sako and Helper 1998; Zineldin and Jansson, 2000) breaking down some of the obstacles to relationship development, collaboration and information sharing (Rosenfeld 1997; Campaniaris et al, 2011). Where factors external to the cluster are concerned, however, Humphrey and Schmitz (2002) find that the nature of relationships with external buyers can promote or constrain upgrading of firms within clusters, particularly where buyers govern suppliers in such a way that innovation is discouraged and knowledge retained by the buyer. Relationships within the cluster can be categorised as upstream, which engage raw material, processing, subcontracting suppliers, whereas downstream relationships, are those that engage wholesalers and retailers, predominately located outside the cluster. Trust and commitment are critical to the development of mutually beneficial relationships (van

Hoek, 2000). Johnsen et al (2006; after Sako, 1998) identify that trust is advanced only once commitment develops. Issues such as interpretation of contractual expectations, personnel changes, weak actor bonds and differing corporate cultures are, however, found to compromise the development of commitment and therefore trust. These are all areas which can be applied to the Leicester fast-fashion cluster and may prove decisive in shaping the relationships that have been developed and the sustainability of the sector.

# Methodology

The research adopts a qualitative methodology and is longitudinal in nature, spanning 5 years from August 2006. The first stage of the research is reported here, where a series of focussed interview scenarios were conducted over an eighteenth month period. Hines and McGowan (2005) called for research that focussed on the SME supply chain and this study is designed using the principles for qualitative methodologies described by Gabriel and Griffiths, (2004). It supports Fillis (2006) by studying the real SME context rather than theoretical expectations of the same, by getting the SMEs to voice their experiences. The sample is drawn from the 30 participants who took part in a business to business event in Leicester where SME apparel manufacturers could exhibit and meet buyers. Leicester acts as a microcosm of the industry because the decline in the apparel cluster has been less severe than in other regions, the SMEs represent the whole supply chain (from materials to processing, manufacture to intermediaries) and there is a high concentration of SMEs, including those from ethnic minorities. The sample of twelve case companies (see Appendix 1) was a convenience one and one of the researchers attended the event as an observer and undertook prior and post event interviews to gain rich narrative data about what had happened to the 12 businesses as a result of their participation. The SMEs ranged in size from a single freelance designer to a knitwear manufacturer employing some 30 people. All supplied UK retailers and two also had customers overseas. At each stage of the research, participants were asked a number of open questions about the context in which they worked and the issues that they faced, such as: their current customer and supplier base, their experience of meeting new customers and trying to develop relationships with them and what had happened in the intervening period since the last discussion. This was intended to facilitate the detailed exploration of what was actually happening in these apparel supply chains. The participants had the opportunity to listen to each other's responses and often voiced their agreement with simple 'that's happened to me too' type statements, prompting them to relate their own stories.

Themes from the narratives were drawn out in a coding exercise, taking the SME as the unit of analysis and considering the context and story-teller as contributing factors to the study (Gabriel and Griffiths, 2004). Initial coding in line with King's (2004) labelling of important issues, revealed a number of common themes from the narratives, which were considered independently by the two researchers on a coding

sheet and then a discussed to refine themes (Charmaz, 2006). The coding focussed on the content of the story, using verbal nouns (Charmaz, 2006) to avoid premature theorising. From this stage the final three themes of relationships, innovation and culture, were arrived at.

A summary table that provides short biographies of the twelve cases in the sample and highlights the themes drawn under the three main codes can be found as an appendix.(Appendix 1). The findings section contains illustrative comments of consensus viewpoints. Responses that do not resonate with the group are identified. A discussion of the analysis of the findings follows.

# **Findings and Discussion**

There is evidence from the findings that the SMEs in the sample have taken a number of steps to attempt to change the nature and structure of their dealings with customers and upstream manufacture. The Companies themselves identify this transition, by commenting on the way that the wholesale business has changed and contracted, with only a few reputable wholesalers or 'jobbers' now acting as intermediaries with mainstream retailers. The industry norm in the Leicester area has been for contracted manufacturers to finance the fabric and production (as opposed to hiring out labour), so this has provided a natural step to dealing directly with retailers, cutting out the role of the wholesaler. Some of the Companies sampled were spin-out businesses from upstream fabric suppliers, keen to capitalise on the opportunity to maintain a However, through observing conversations with the market for their fabrics. Companies, it was evident that their motivations for changing the nature of relationships may be at odds with the objectives of their customers. suppliers were looking for larger, regular and more lucrative orders than wholesale markets afforded to them, the retailers were most likely to use SME suppliers to make up for short-term shortfalls in their order book, because of missed trends or unexpected sales, and generally appear very unwilling to commit to large, regular or predictable orders. This is supported by Hines and McGowan (2005:p.534) who argued that retailers need "regionally local and domestic suppliers who can respond quickly for smaller volumes to counterbalance the volumes shipped on the 'high seas'." However, the value of the suppliers in providing such a service to potential customers seems to be overlooked by both parties and the cost and risk of doing business 'direct' is a constant source of difficulty to the suppliers.

From the experiences recounted by the 12 case companies, the nature of the relationships that have developed can be grouped into 3 broad areas: culture, innovation and relationships which are now each discussed in turn.

#### Culture

Closely associated with the development and progress of relationships are cultural issues within the SMEs. The sample included nine SMEs of ethnic minority

ownership, one freelance designer and one larger firm by way of contrast. For the majority of the SMEs the relationships with customers are placed in the hands of young and often Caucasian, designer come sales/business development personnel. In half the cases these were employed by the SME on a freelance basis and one owner manager clearly stated that "designers who can't sell and develop business don't last long." However, this works both ways, one designer commented: "We parted on not great terms because he quibbled about the bill....he said I want to work with you going forward, what can you do? I knocked a day off..... He might come back to me next year, but I won't be jumping at the chance." This structure within the SME raises a number of issues. While these individuals may represent the pool of design talent available to the SMEs, it could be considered that this is in response to the needs of the market and has evolved as a mechanism for building relationships with retail buyers. Indeed the value of the designer/ sales person is exemplified by one owner manager who caused a long lasting family rift by head-hunting the designer from a relative's business.

The nature of the relationship between the designer and the SME is also worthy of exploration. The designer/ sales person is in a strong position to acquire considerable knowledge of the market and the customer base in particular and is thus instrumental to knowledge transfer, acting as key account managers and managing expectations both upstream and downstream. The relationship also goes someway to addressing buyers' resistance to dealing with ethnic minority businesses as identified by Worthington et al. (2008). Moreover, there is evidence to suggest that often the ethnic owners are compliant to retail requests however realistic they may be or not and thus an individual who can manage expectations is an asset. A view illustrated by one respondent but which was echoed by a large majority of the sample: "we've got a situation at the moment as a smallish supplier working with a big retailer, and we just can't do it. The guy that runs the company wants us to do it, but we just can't cope....." This is consistent with Doeringer and Courault's (2008) concept of high effort contracting.

Suppliers, particularly SMEs, appear to seek relationships, however one sided; appear to have a deficiency of trust within these relationships, as defined by Johnsen and Ford (2006), and operate in a sector where the industrial legacy and perhaps cultural aspects inhibit the development of commitment and trust. One of the interviewees also referred to the importance of appearing 'trustworthy', describing herself, a sales person, as a "vehicle of trust", apparently an exception to the findings of Jones et al (2010), but one which illustrates the key role of the designers at the interface for many of the SMEs in the sample.

However, if buyers move and take their contacts with them this can be to an SMEs advantage but if the designer moves on there is a risk of losing contact with, or knowledge of, a key customer. Hiring designers on a freelance, transactional basis for such a strategic task is a high risk approach at odds with the trust placed in the

freelancer to manage business with the SME's main customers. On the other hand, the challenge to designers to be able to sell, and manage complex relationships with both SMEs and retail customers, perhaps contributes to their commercialisation expertise – a winning attribute from the buyer's perspective. It is not clear that cultural factors have influenced off-shoring decisions. Since the sample is primarily Asian owned business, it is perhaps surprising that those involved in quick response fashion supply have tended to develop relationships with factories in the Mediterranean basin or Eastern Europe to minimise cost and lead times but this system is fallible. The pressure of shorter lead times and delayed retail ordering is inconsistent with the supply chain becoming longer to deal with other operational issues as exemplified by two respondents: "The problem is we manufacture in Eastern Europe and the factories are full and colours not available. The yarn suppliers have cut right back their capacity and don't hold enough stock to last late into the season" and "Larger or more cost sensitive orders tend to be sourced from China, it's not about not wanting to do it [be flexible], you just don't want the confusion in the factory... if they are confused they just make whatever they want. China won't touch it but India has a charm where they just do things..... You have to be incredibly clear to be able to be flexible .... so you have to not change things. The ramifications of change are immense!" Popp (2000:p.152) found "that some geographical interfaces may also coincide with cultural influences, whose impacts may be quite different to those of geography" and this area is worthy of further exploration. It does appear that kinship and upstream ties inherent within the cluster have supported the quick response fashion supply but where suppliers are external to the cluster, fragmentation occurs and downstream influence remains limited.

## Innovation

From a technological perspective there is evidence that recent developments in ICT have been incorporated into the day-to-day management of relationships with both suppliers and customers, primarily to exchange contractual data, initially relating to costings, lead-times and quantities and progressing to order confirmation and progress chasing. In fewer cases product and style data is exchanged electronically, although more advanced technologies, such as file sharing using CAD, is used by the minority. A further twist on the growth of email communications, was however illustrated by one SME, who had received email confirmation that their samples, which were thought to be under consideration by the buyer, had been sent to a competitor and any resulting orders placed elsewhere. Whilst others in the sample were accustomed to being taken for granted they were shocked that the retailer had committed this practice to email. Trust is a key antecedent of take-up of ICT's either by SMEs themselves or by their suppliers and customers (Ritchie and Brindley, 2005).

While it is possible to reflect that the innovations in ICT are relatively low-level, it is also clear from the cases that personal relationships have not been completely

replaced by ICT. Where ICT innovations have been introduced relationships have been on the whole enhanced but consistent with Humphrey and Schmitz (2002) the nature of relationship constrained further innovation due to short term relationships. It is still important to be seen as local and visits to customers, including those overseas, reportedly take place at least once each season to show styles and understand customer needs, and in one case weekly just to 'keep in the frame'. This represents a significant drain on time and resources but one which is considered a necessity to generate additional business. As Ritchie and Brindley (2005:p.11) found in the textile industry, "the underlying cultural philosophy was founded on personal face-to-face contact, which they viewed as not only essential to building confidence and trust between the parties but also a distinctive source of competitive advantage". In addition, the choice of personnel nominated to 'own' the relationship with the buyer is also important to the development of the relationship. The emergence of upstream 'off-shoring' has been in parallel with the adoption of improved ICT, although for the majority the full advantages have not been exploited. Communication of order specifications, production planning information, deadlines and progress reporting can all be exchanged by email. Some SMEs use CAD/ CAM to communicate with suppliers, though one SME admitted to posting the CAD specifications.

The case companies demonstrate some investment in new production technology, with one SME in particular upgrading its knitwear plant using the latest 3D knitting technology. However, this then raised another challenge for the SME in identifying whether to maximise ROI through bulk supply, or use the technology to innovate in niche markets. Popp (2000:p.151) states that "supply chain theory frequently conveys implicit assumptions about the institutional structures within which these issues are situated" and uses the example of the importance of IT. However, as these cases illustrate, such assumptions do not convey the heterogeneity of the market. While quick response, financial arrangements and small volumes hamper product innovations, it is the SMEs that have to shoulder the cost of large sample portfolios in order to gain business. The SMEs accept that there is a degree of copying and sometimes they themselves are asked to reproduce designs and if they do so are rewarded by additional business. There is thus no need to innovate if such practices are ripe. Moreover buying decisions made in haste can be easily cancelled and an 'innovation' can be a costly mistake.

The cluster of SMEs in Leicester support process innovations in terms of planned changes such as new styles, quick fabric turnarounds or unplanned late changes, in that a quicker short term process for fabric/garment quality can be adopted. Significantly there are some instances where SMEs have tried to innovate into new product/ market areas but with very limited success, examples include one respondent, who tried to move into performance knitwear, one who was experimenting with one piece knitwear and another who attempted to market a range of sustainable fashion. It would appear that innovations within the familiar product area are more successful than those outside and this reinforces cluster 'strengths'.

# Relationships

Hines and McGowan (2005:p.519) point to "[T]he dramatic shift in the scale and power of major retail buyers in the market." The SMEs in this sample, report a number of instances in which buyers appear to exploit the relative imbalance of power, as seen in the case of the company whose samples were openly given to a competitor. One retailer, acclaimed for enabling buyers to make autonomous decisions in order to speed up the buying process, was found to have cancelled contracts for specific items with two of the SMEs (on different occasions) after orders for fabrics had been placed, in one case because the buyer had moved on - anecdotally a common reason given for the on-off nature of some established relationships.

Another SME – an importer of leather accessories - explained that it was not fully understood that payment would only be made to the supplier once the goods were delivered into the retail branches until delivery had been made to a retail distribution centre. This is not surprising given that "retailers have to co-ordinate their supply chains to ensure supply and minimise risks of losing sales through non-availability of merchandise" (Hines and McGowan,2005:p.533). The SME was left to fund cashflow for a significant inventory, until the retailer needed to replenish retail stock. Some items were eventually returned to the supplier unsold. This is not untypical as Wagner and Bode (2008:p.310) reported "[D]isruptions occur here from a mismatch between a company's projections and actual demand as well as from poor supply chain co-ordination."

Some of the SMEs report retailers retrospectively adding storage or catalogue costs which make doing business uneconomic within agreed prices, a practice that resonated with the sample. This is in line with the suggestion by Hines and McGowan (2005:p.525) that "Coercive power uses punishment rather than reward to control another party." Unfortunately, in this case the punishment seems to be for being the less powerful partner, with the larger company employing specialists to recoup penalty costs which have been automatically and in their view, unfairly imposed. Charges, penalties and procurement restrictions can be equally frustrating to the buyers, who in some cases appear to struggle to select the items that they wish to source within the procurement constraints imposed upon them. This is reflected by one SME who could only supply one customer as a 'new' supplier, which left them perpetually on trial, subject to punitive terms and constantly under threat of deselection. This resonates with Cox (2004:p.346) who argued "... there is no single way of managing business relationships for a buyer that is always appropriate in all circumstances." Those with a more sustained relationship, however, often fair little better, with contract prices for similar products being reduced year-on-year with little regard to any joint initiative to reduce costs. As Doeringer and Courault (2008:p.13) posit that "hierarchical contracting relationships are pervasive at each level of the supply chain." Indeed, the general consensus of SMEs is that additional expectations,

which historically may have been rewarded either financially or with loyalty, are now considered a minimum requirement. As Wynarczyk and Watson (2005:p.41) stated in discussing single ties to a large contractor found that they "can tip the balance of power strongly toward the large contractor and encourage opportunism."

However, it is the key account relationships that are instrumental to developing trustworthiness. In SMEs this is sometimes just liaising with one or two buyers and often it is the freelance designer that is doing the liaising and their experience in larger firms helps both the relationship and the process. It is true to say that in this cluster, fractious but long term retail relationships, with a lack of upstream information sharing are the norm. Upstream relationships are supported by proximity rather than culture.

In theory, clustering should support the sector in transition from a manufacturing to a predominantly service one based on outsourcing, by fostering the more skilled and knowledgeable white collar workers needed as firms take on a service role (Demitriadis and Koh, 2005). However, the move towards global sourcing in many apparel supply chains, appears to counter co-location and promote anti-clustering behaviour (Holweg et al, 2011). Where alternative strategies have been adopted the dynamism of the remaining firms can help SMEs in particular to find and service alternative, niche, markets and ways of organising production in order to add-value for specific groups of customers – for example where there is a need for fast response, flexibility, quality and exclusivity (Doeringer and Terkla 1995; Doeringer et al, 2009). Aage and Belussi (2008), researching in Italian districts, find that the concept of 'fashion' is considered especially relevant in the knowledge sharing context of industry clusters. Cluster firms, it is concluded, use a multiplicity of sources including institutional resources and 'internal-to-the-district and external-to-thedistrict' designers. This enables firms to acquire knowledge for the prediction of trends, conceptual design, selection and sampling of new styles. In Lecicester, through operating in an industrial district and utilising effectively kinship ties and other embedded relationships there can be sector rather than individual innovation and it is the freelance designer that is key to knowledge transfer from the market place.

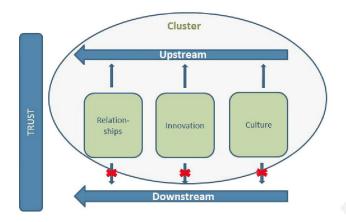
The retailers use the Leicester SME suppliers as a means of 'Open Source' product development (Aage and Belussi, 2008), bringing in new ideas to complement those of their own design teams. In Italy, Aage and Belussi (2008:p.487) refer to a 'district laboratory' which reduces the risk of 'not knowing' the winning fashion trends. In the Leicester apparel sector, as in Italian fashion clusters this role falls to freelance or employed designers in what refer to as an open-source model of market knowledge and design. The inter-firm cultural relationships seem to facilitate the structural capacity for fast fashion but potentially they inhibit the information and relationships downstream. The open-source design/freelance intermediary appears to compensate by bringing in information and softening the relationships. So the two sides complement each other but it takes the cultural mix to arrive at innovation. Furthermore, by outsourcing their own manufacture, some of the SMEs have taken on

the intermediary's role of co-ordinating supply, and all of the communications, quality, logistics and cashflow implications associated with this – effectively pushing part of the role upstream. This differs from the experience of those SMEs which had been developed by textile manufacturers as a mechanism for maintaining their presence within the market. Indeed, taking the three key themes drawn from the findings together one can see a disjoint between how they should positively reinforce downstream relationships but this is not effective ( see Diagram 1 below). The 3 themes support or rather should support trusting relationships but impingements occur upstream, where relationships are outside of the cluster and downstream, in spite of the effort exhibited by the SMEs.

The primary contribution from this research is the construction of a model that seeks to articulate the key factors that operate within cluster supply chains. The core influences on supply chain effectiveness drawn from the findings are: relationships, innovation and culture. Upstream as the arrows demonstrate the 3 influences work effectively, binding the cluster actors together and ensuring the resilience of the region. Downstream as the broken arrows illustrate the influencers are hampered by the constraints occurring between the retailers and the SME suppliers. The flawed and often fractious relationships between retailers and the SMEs signify a culture that isn't shared and a constraint on innovation because of the transactional nature of buying. Thus, for the cluster to be most effective, i.e. with the 3 influencers operating unhindered, both upstream and downstream and leading to a foundation of trust, then the focus needs to be on improving downstream relationships. It is recommended that future research explores further the downstream operation of regional clusters to identify how kinship ties that operate effectively upstream can work more effectively downstream, consistent with Zineldin and Jansson (2000) and moreover, how the innovation that clusters enhance can be marketed downstream more effectively. SMEs could also learn from best practice in global sourcing where technologies are used to improve relationships external to the cluster.

Although the implied flow of the logic within the Diagram suggests a set of linear relationships between the components, it would be incorrect to assume this. The 3 influencers may not be simply uni-directional but bi-directional too. The findings suggest that culture is the key influencer on relationship development and that it is relationships that inhibit innovation. It should be noted that the nature of the model is contingent and so it may have general application across a number of sectors where clusters operate, not just the apparel industry, where influencers in the Model can be different due to exposure to different change agents and circumstances.

Diagram 1: Relationships innovation and culture shape fast fashion supply



### **Conclusions**

The data collection has resulted in rich narrative data. It is evident from the data that the apparel supply chain has responded to market changes, through either the SMEs dealing directly with retailers, or moving into overseas manufacturing or indeed doing both. However, it is clear from the research that the experience of the sample SMEs is far removed from that of the 'agile' supply chain identified by Christopher and Towill (2000) as a solution to market uncertainty. While there have been shifts in technology, these are mainly relatively low level changes which in some cases make use of readily available office communications. While further developments might be desirable, there is little opportunity for either party to invest in sophisticated communications technologies while such transient relationships are the norm. The inequality of power within the relationship appears to have been emphasised by the disintermediation of the supply chain, leaving SMEs with limited opportunity or resource to make the innovations that could strengthen their position. The situation belies the value that the SMEs appear to offer by providing newness of product and responsiveness of supply. Culture raises a number of issues that appear not to have diminished within an increasingly global supply base and again, while the response by suppliers is relatively low-key, it is evident that the use of external expertise helps to mitigate some of the limiting factors in maintaining relationships. This also has an impact on the re-shaping of the supply structure, with freelance or employed designers apparently assuming some of the role of the intermediary, other members of the company managing outsourcing relationships, while the role of selecting suppliers, coordinating ranges, distribution and contractual terms falls within the remit of the powerful retailer – possibly to the detriment of the supplier.

All of these developments are exacerbated by the consequent lack of trust within the relationships that have developed as the supply chain has been re-shaped. Those aspects identified by Johnsen et al (2006) - interpretation of contractual expectations, personnel changes, weak actor bonds and differing corporate cultures - are all factors that are found to be at work within this group of apparel SMEs included in the research. While it can be said that retailers have power with risks (for example of supplier failure, additional supply chain costs and complexity) these are a trade-off for the risk of failure to respond to market changes. The buyers are incentivised by buying cheaply and from their perspective if they make a mistake in forecasting trends they can 'switch-off' their SME supplier or alternatively if they have missed a trend they can quickly use an SME supplier. Short-termism exemplifies the retailers relationships with the SME suppliers and inhibits the SMEs opportunity to proactively accommodate market changes.

There is evidence to suggest that the SMEs have had more success in managing the upstream rather than the downstream changes, supported by their move towards a more design driven system. As previous work has suggested, the SMEs willingness to adopt such strategies has been motivated by their wish to 'own' the relationship with the buyer but relationships have continued to be fractious. The Leicester district remains a cluster and by doing so has coped with recessionary ripples and structural changes. However, what this study has surfaced is the perspective of ethnic minority owed SMEs and adds a dimension to the cluster literature in terms of knowledge sharing and inter-firm relationships. Their strengths lie in design, they are not 'jobbing' SMEs, and they broadly fit the size profile of those small firms that are most likely to have survived restructuring within the sector. The apparel sector has over the last 30 years suffered several recessionary periods and it is true to say that the impact of the most recent recession has been felt keenly by the sector and indeed earlier than in some markets. Indeed, it appears that this cluster of firms may be helping retailers to deal with the recessionary trends outlined, as exemplified by anecdotal evidence of a return to local manufacture (Just-Style, 2012).

## References

Aage, T., And Belussi, F, 2008 "From Fashion Networks to Design: Creative Networks in Industrial Districts" *Industry and Innovation*, Vol. 15, No. 5, October, pp. 475-491.

Bozarth, C., Blackhurst, J. And Handfield, R. (2007) "Following the thread" Industry cluster theory; *Production and Operations Management* 16/1: 154-157

Brindley C.S. (ed) (2004), Supply Chain Risk, Ashgate Publishing Ltd., UK

Campaniaris, C., Hayes, S., Jeffrey M. And Murray R.(2011), The applicability of cluster theory to Canada's small and medium-sized apparel companies, *Journal of Fashion Marketing and Management*, Vol. 15 No. 1, 2011 pp. 8-26

Charmaz, K. (2006) Constructing Grounded Theory through Qualitative Analysis: a Practical Guide, Sage, London

Cousins, P, Lamming, R Lawson, B Squire, B (2008) *Strategic supply management:* principles, theories and practice, Prentice Hall Financial Times, New York

Cox, A. (2004) The art of the possible: relationship management in power regimes and supply chains, *Supply Chain Management: An International Journal*, Vol. 9. no. 5, pp. 346-356.

Davies, C. (2004) Agility in a Changing Market Place, Supply Chain Europe November/December, pp. 22-23

Doeringer, P. and Courault, B. (2008) "Garment District Performance: Sweatshop-efficiency vs Innovation-efficiency, *Alfred P Sloan Foundation Industry Studies, Annual Conference Proceedings*, May 2008. Available at http://web.mit.edu/is08/pdf/doeringer\_courault.pdf [accessed 30.7.10]

Doeringer, P.B. And D. G. Terkla, (1995) "Business Strategies and Cross-Industry Clusters," *Economic Development Quarterly*, Vol. 9, No. 3, August, pp. 225-237.

EMDA 2001 Textiles and Clothing Cluster Analysis, [Nottingham]: Trends Business Research

Fillis, I., (2006) A biographical approach to researching entrepreneurship in the smaller firm, *Management Decision*, Vol 44, no 2, pp. 198-212

Gabriel, Y. and Griffiths, D., (2004) Stories in Organisational Research, in Cassell C. and Symons G., (eds) *Essential Guide to Qualitative Methods in Organisational Research*, London: Sage.

Hines, T. and McGowan, P. (2005) Supply Chain Strategies in the UK Fashion Industry – The rhetoric of Partnership and Realities of Power, *International Entrepreneurship and Management Journal* Vol1, pp. 519-537

Holweg, M., Reichhart, A., and Hong, E. (2011) On risk and cost in global sourcing, *International Journal of Production Economics*, no. 131 pp. 333–341

Humphrey J. And Schmitz, H. 2002. "How does insertion in global value chains affect upgrading in industrial clusters?" *Regional Studies* vol. 36(9), pages 1017-1027

Johnsen, R., and Ford, D. (2006) Interaction capability of smaller suppliers in relationships with larger customers, *Industrial Marketing Management*, Vol. 35, no. 8, pp.1002-1015

Johnsen, R., Johnsen, T. and Arab, R. (2006) Coping with outsourcing: an interaction and network perspective, *Problems and Perspectives in Management*, Vol 4, Issue 2, pp.78-85

Jones R. (2006) The Apparel Industry, Blackwell Publishing Ltd., Oxford

Jones, S., Fawcett, S., Fawcett, A., and Wallin, C. (2010), Benchmarking trust signals in supply chain alliances: moving toward a robust measure of trust, *Benchmarking: An International Journal*, Vol. 17 Iss: 5, pp.705 - 727

Just-Style (2012) *John Lewis sees "resurgence" in local sourcing*, 14 March, online at: <a href="http://www.just-style.com/news/john-lewis-sees-resurgence-in-local-sourcing">http://www.just-style.com/news/john-lewis-sees-resurgence-in-local-sourcing</a> id113758.aspx [accessed 22.3.12]

Khan O. and Creazza A. (2008) "The impact of product design on the supply chain" A research study for CILT (UK)

King (2004) Doing interviews in Qualitative Research, in Cassell C. and Symons G., (eds) *Essential Guide to Qualitative Methods in Organisational Research*, London: Sage, pp. 13-33

Lowson, R. (2002) Apparel Sourcing Offshore: An Optimal Operational Strategy? *Journal of the Textile Institute*, Vol 93, pp.15-24

Mintel Oxygen, 2010a, Clothing Retailing UK - October 2010

Mintel Oxygen, 2010b, Fashion: Impact of the Recession – June 2010

ONS 2009, *UK Business: Activity, Size and Location*, Office for National Statistics [available at http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=933] accessed May 2010

Piore, M. J. And C. F. Sabel, 1984, *The Second Industrial Divide: Possibilities for Prosperity*, Basic Books, New York.

Popp, A., (2000) Swamped in information but starved of data: information and intermediaries in clothing supply chains, *Supply Chain Management: An International Journal*, Vol.5 Issue 3, pp. 151 – 161

Porter, M., (1998) Clusters and the New Economics of Competition, *Harvard Business Review*, Nov/Dec, Vol. 76, Issue 6, pp. 77-90

Rigby D, And Essletzbichler J. (1997) Evolution, Process Variety and Regional Trajectories of Technological Change in U.S. Manufacturing, *Economic Geography*, volume 73, no. 3 pp. 269-284

Ritchie B. and Brindley C., (2005) 'ICT adoption by SMEs: implications for relationships and management' *New Technology Work and Employment*, Vol. 20, no. 3 pp. 205-217.

Ritchie B. and Brindley C.S. (2007) 'Supply Chain Risk Management and Performance: A Guiding Framework for Future Development' *International Journal of Operations and Production Management* Vol.27 no. 3 pp. 303-322

Ritchie, R.L and Brindley C S, (2000) Disintermediation, disintegration and risk in the SME global supply chain, *Management Decision*, Vol.38, no. 8, pp. 575-583.

Rosenfeld, S. (1997) Bringing business clusters into the mainstream of economic development, *European Planning Studies*, Vol. 5 Issue 1, pp. 3-24

Rosenfeld, S. (2005) Industry Clusters: Business Choice, Policy Outcome or Branding Strategy, *Journal of New Business Ideas and Trends*, 2005 3, Vol. no. 2 pp. 4-13

Sako M., and Helper, S. 1998, Determinants of Trust in supplier relations: evidence from the automotive industry in Japan and the United States, *Journal of Economic Behaviour and Organisation*, Vol 34, pp. 387-417

Sako, M., (1998), Does Trust Improve Business Performance? In Lane, C. and Bachmann, R., (eds) 1998 *Trust Within and Between Organisations*; Oxford University Press., Oxford, Pp. 88-117

Saxenian, A. and Hsu, J. (2001) The Silicon Valley-Hsinchu Connection: Technical Communities and Industrial Upgrading, *Industrial and Corporate Change*, Vol 10/4. pp893-920

Stratton, R., and Warburton, R. (2006) Managing the trade-off implications of global supply, *International Journal of Production Economics*, 103, pp. 667-679

van Hoek, R. (2000) The thesis of legality revisited, *International Journal of Agile Management Systems*, Vol. 2, no. 3, pp. 196-201

Wagner S.M. and Bode C. (2008) "Am empirical examination of supply chain performance along several dimensions of risk" *Journal of Business Logistics* Vol.29 No. 1 pp. 307-325

Wynarczyk P. and Watson, R, (2005) Firm Growth and Supply Chain Partnerships: An Empirical Analysis of U.K. SME Subcontractors; *Small Business Economics* vol 24, pp. 39–51.

Zineldin, M., And Jonsson, P., (2000) An examination of the main factors affecting trust/commitment in supplier-dealer relationships: an empirical study of the Swedish wood industry, *The TQM Magazine*, Vol. 12 Issue 4, pp.245 - 266