Journal of Research in Business, Economics and Management (JRBEM
ISSN: 2395-2210

SCITECH
RESEARCH ORGANISATION

Volume 6, Issue 3
July 19, 2016

Journal of Research in Business, Economics and Management
www.scitecresearch.com

Success Factors for SMEs in the European Chemical Distribution Industry: A New Integrative Perspective

Evripidis Lampadarios
Leeds Beckett University, United Kingdom.

Abstract:

The European chemical distribution industry, despite its significant contribution to the economy and employment generation, remains largely unexplored with little research, both on an academic and industry level, in the factors contributing to SMEs success. With the majority of chemical distributors being small and medium-sized enterprises, this paper discusses the driving forces of the industry, arguing that only when a small business is able to cope with, adapt to and overcome these forces, can it be successful. Consequently, a number of factors are identified and a positive relationship with SMEs success is proposed. This paper informs thinking and research design and becomes the basis for future research in this field. It further offers a way forward for both practitioners and policy makers to support small and medium-sized European chemical distributors.

Keywords: European Chemical Distribution Industry; SMEs; Success Factors; Literature Review.

1. Introduction

Chemical distribution companies are an integral part of the European chemical industry, positioned between chemical producers and their customers (FECC, 2015; Chemagility, 2008). Distributors are a vital, well-established sector of the chemical industry helping manufacturers accessing local customers and markets while adding value by reducing complexity, trade-related risks and costs and providing financing and support (BCG, 2010; Districonsult, 2009). Chemical companies increasingly realise the value of chemical distributors as value chain partners and implement structured distributor management functionalities in their organisations (CEFIC, 2012; Hornke, 2012). In fact, every sector of the manufacturing base relies on chemical distributors for prompt availability of chemicals in a variety of grades and package sizes to produce their products (Burns, 2010; Chemagility, 2008; FECC, 2013).

Chemical distributors are a fragmented network and it is estimated that there are about 10,000 distributors, big and small servicing the end-users for their chemical needs (Brenntag, 2010; Boston Consulting Group, 2013). These are often small and medium enterprises with local and regional coverage (Bee and Chelliah, 2013; Chemagility, 2008). According to the European Federation of Chemical distributors (FECC, 2015), FECC members - mainly SMEs - create value in the chemical supply chain by meeting the demands of over 1 million downstream users ranging from over all branches of the industry, with their specific needs and diverse purchase volumes. About 9-10% of the overall output of chemical producers is distributed via independent chemical distributors, accounting for about EUR 142bn per annum. In fact, FECC represents over 1,700 companies with over 31,000 employees at more than 1,400 sites handling 6 million shipments and 31 million tonnes shipped with an industry turnover of EUR 27 billion every year (FECC, 2015). This means that there is a wide variety of organisations involved in the distribution and value chain between chemical producing companies and the industries using chemicals. It also establishes that SMEs have a strong presence in the specific industry and play an important role in its overall growth and performance (CEFIC, 2012; FECC, 2013).

Overall, the chemical distribution sector is of crucial importance to the European economy not only because of its significant contribution to the economy but also to employment generation (CEFIC, 2010; FECC, 2013). Eberhard (2014) reports that over the period 2008-2013 growth has been around 1.8% per year in Western Europe and 10% in Central and Eastern Europe with the industry growing at an average of 3.8% per annum from 38bn EUR to 44bn EUR in

2013. However, the industry remains largely unexplored with little research, both on an academic and industry level, in the factors contributing to SMEs success. With the majority of chemical distributors being small and medium-sized enterprises, this paper discusses the driving forces of the industry, arguing that only when a small business is able to cope with, adapt to and overcome these forces, can it be successful. Consequently, a number of factors are identified and a positive relationship with SMEs success is proposed.

2. Methodology

Even though there is extensive literature on SMEs and success factors in a wide range of settings, i.e. different countries and industries, there is very limited bibliography and academic research regarding the European chemical distribution industry. Following a review of the existing aliterature and utilising key business and management databases - Business Source Premier, Emerald Insight, Fame, Key Note, Marketline Advantage, Mintel, Nexis, Sage Journals online, Science Direct, Web of Science and World Market Intelligence - no academic research is found when the terms ‘SMEs’, ‘success factors’ and ‘European chemical distribution industry’ are used as the main keywords. Therefore, the literature review is extended to include industry sources.

In detail, Business Associations: the British Association of Chemical Specialties (BACS), the Chemical Business Association (CBA), the European Association of Chemical Distributors (FECC), the National Association of Chemical Distributors (NACD), the North East Process Industry cluster (NEPIC), private consultants: Chemagility, Neil A Burns LLC, Districonsult, Boston consulting group and Grosse-Hornke Private Consult, industry specific reports: Chemagility (UK Chemical distributor market report) and Plimsoll (UK Chemical wholesalers and distributors: an industry overview), industry publications and internet sources: the Journal of Business Chemistry, the Chemagility online database of chemical distributors, ICIS and Chemanager website and magazines are utilised.

Similarly, limited information is uncovered with a few references made to SMEs success in the specific industry and with only one consultancy study, conducted in 2011 and based on a small number of companies (62 in total), investigating the success factors for small chemical distributors operating in Germany, Austria and Switzerland (Hornke, 2012). However, a wealth of information is collected on the industry and more importantly on its driving forces and underlying trends. Coping successfully with and adapting to the aforementioned driving forces and trends is considered a prerequisite to success (Lampadarios, 2016a). On that account, this paper addresses the industry and its driving forces, from a small business perspective, in order to identify factors critical to the success of small and medium-sized European chemical distributors. Following this analysis, a number of success factors are presented and further established through the available industry literature.

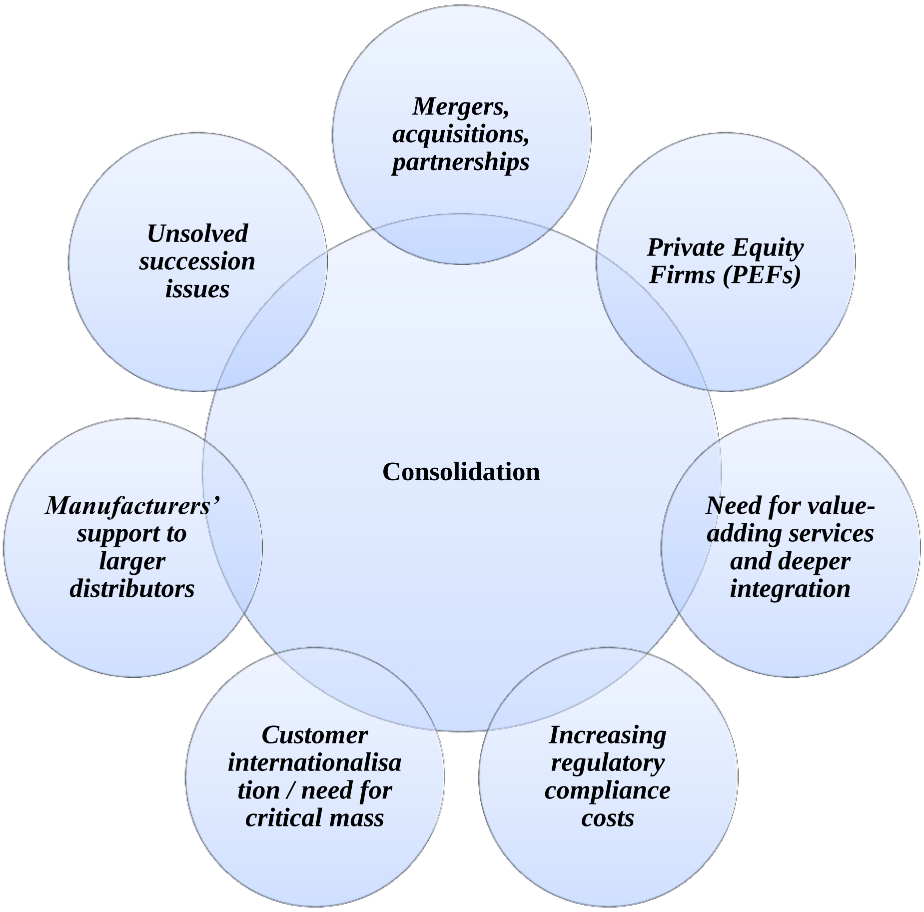
3. Literature Review and Analysis

Overall, consolidation and regulatory compliance are established as the most salient driving forces in the European chemical distribution industry (BCG, 2013; Berger, 2011; Chemagility, 2008; Districonsult, 2013; Eberhard, 2014; Fermont, 2007; Honrke, 2013; Kronimuns *et al.*, 2009; Mortelmans and Reniers, 2012).

3.1 Consolidation

The chemical distribution market is characterised by high fragmentation, with a number of top companies dominating specific markets and very strong trends of consolidation (BCG, 2013; FECC, 2013; Hornke, 2013; Mortelmans and Reniers, 2012; Jung *et al.*, 2014). According to the Federation of European Chemical distributors (in Young, 2012b), the industry has been steadily consolidating over the last 10 years and in 2010 the top 10 chemical distributors had a combined 23% share of the global market - much higher than a decade ago - making distribution a global industry present in every region worldwide. It also appears that there are significant regional differences depending on the maturity of the market. For instance, North America and Europe, both being mature markets, are the most consolidated markets where the top three distributors hold 30 to 40% and 15 to 20% of the market respectively while in the Middle East and Africa and the Asia-Pacific region, the top three players collectively hold 6 to 10% of the market (BCG 2013; Districonsult, 2012; Elser, 2012). Regarding the future, there is agreement that, as consolidation continues and the market grows, more global distributors are likely to emerge (BCG, 2013; Eberhard, 2014; FECC, 2013; Young 2012b; Jung et al., 2014). This reinforces the need for SME distributors to be prudent and prepared to deal with consolidation. In turn, this requires a deeper understanding of the ongoing consolidation trend in the European chemical distribution industry and its main drivers. These are identified by key industry authors (Burns 2010; Chemagility, 2008; Eberhard, 2014; Fermont, 2007; Districonsult, 2009; BCG, 2013; Hornke, 2013; Kronimuns *et al.*, 2009; Mortelmans and Reniers, 2012), presented in Figure 1 and further discussed to identify the factors contributory to SMEs success in the industry.

Figure 1: Main Drivers of Consolidation in the European Chemical Distribution Industry



3.1.1 Mergers, Acquisitions and Partnerships

Distributors have long identified acquisitions as a key element of their growth strategy and as a result, the mergers and acquisitions (M&A) activity in the chemical distribution sector has always been strong (Chemagility, 2008; Districonsult, 2012; Eberhard, 2014; FECC, 2011; Young, 2012a). This trend is set to continue as these transactions are a major growth driver for many companies with the rationale appearing to be expansion of industry and/or geographic coverage (BCG, 2013; Districonsult, 2013).

In more detail, large international distributors have always been seeking to increase their global presence through acquisitions particularly in the emerging markets, with a scope to build up sufficient market expertise and become legitimate alternatives to local players (BCG, 2013). Having standardised procedures in place and available resources and funding, facilitates the acquisition process (Elser, 2012; Hornke, 2013). However, in the more recent years, a number of medium-sized, privately owned distributors have also identified acquisitions as a key part of their growth strategy, realising that a certain geographic reach is required in order to be successful (Chemagility, 2008; Districonsult, 2012; Mortelmans and Reniers, 2012; Young, 2012b). In fact, in the period 2013-2014, in Europe, the majority of M&A activity was due to smaller or medium-sized privately held distributors (BCG, 2013). Likely acquisition targets for these companies are distributors generating sales between EUR 10 million and EUR 50 million per year (Hornke, 2013; Valk, 2012). It is becoming evident that SMEs operating in the chemical distribution industry require careful strategic planning with a well-defined, focused and forward-looking strategy alongside access to finance and solid financial resources to be able to grow and become successful in the market.

However, as the M&A activity continues to be strong, the obvious obstacle is the lack of available targets with sufficient quality, size, and market knowledge as there are not many willing sellers left in the market (Kronimuns *et al.*, 2009; Research and Markets, 2013). Consequently, M&A activity is now shifting to reflect more clearly the distributors' priorities (Research and Markets, 2013; Mortelmans and Reniers, 2012). In mature markets such as Europe, large and medium-sized players are acquiring smaller companies with specific industry expertise while in emerging markets large distributors are seeking companies that can help them expand their geographic reach (BCG, 2010 and 2013; Frost, 2013; Hornke, 2013). Business networks, regardless of whether they are formal or informal, appear to be invaluable in uncovering and exploiting such opportunities.

An alternative to mergers and acquisitions and a more viable growth solution for smaller or medium-sized distributors is the formation of international partnerships with distributors in different countries (BCG, 2013; Frost, 2013; Research and Markets, 2013). This allows smaller companies to compete with larger players on an international basis while reducing the risk of being dependent on the domestic market (Mintel, 2005; BCG, 2010). As this trend is set to continue (BCG, 2013; Frost, 2013; Research and Markets, 2013), a well-thought internationalisation and collaboration plan is required. This, in turn, must be part of the overall company strategy. In other words, internationalisation and strategic planning become of great importance in growing outside home markets.

3.1.2 Strong Presence of Private Equity Firms (PEFs)

In recent years, Private Equity Firms (PEFs) have been very active in the European chemical distribution industry acquiring chemical distributors (Bee and Chelliah, 2013). In fact, in 2010, among the top six European distributors, four were owned by private equity investors (ICIS, 2010). Private equity owners are primarily focusing on cash flow generation and tend to favour the reduction of working capital, namely inventory, customer credit and staff costs (Burns, 2010; Fermont, 2007). They are keen buyers of distribution companies to reduce competition and to increase the value of the companies they own with their preferred targets being high cash flow generating and asset rich distributors who offer good synergies with their existing assets (Chemagility 2008; Fermont, 2007; Valk, 2012).

Kamakura (2006) explores the factors that attract PEFs to the chemical industry and even though his research focuses on the chemical manufacturing industry, its dynamics are considered similar to the chemical distribution (Bee and Chelliah, 2013). In conjunction with Fermont's (2007) and Burns' (2010) research that specifically focuses on the European chemical distribution industry, PEFs are keen to invest in this industry as it benefits from economies of scale, is characterised by high cash flows, limited financial risks and profitable exit prospects, is highly fragmented and thus there is still significant room for consolidation. Evidently, only strong and focussed companies with a forward-looking strategy and mind-set are going to withstand the pressure (Districonsult, 2011; Hornke, 2013). Strategic planning is becoming paramount for SMEs in order to survive and thrive under these market conditions. Also, careful financial planning and utilisation of any available financial resources is necessary to fend off potential buyers and ensure financial stability.

3.1.3 Need for Value-Adding Services and Deeper Integration

Generally, the chemical industry used to drive growth by inventing breakthrough molecules and new products that manufacturing and distribution companies were able to develop into large sales and profit generators (Camelot Management Consultants, 2012; CEFIC, 2010; RSC, 2014). However, the ability to drive growth from new molecules seems to be at a plateau, yielding increasingly marginal and incremental growth rather than the breakthroughs seen in previous decades (Berger, 2011; Eastwood, 2012; Elser, 2012). Concurrently, chemical distributors are facing yet another challenge known as disintermediation, where producers deal directly with consumers (Bee and Chelliah, 2013; Rowley, 2002). Chemical producers are going directly to end-users, eliminating chemical distributors and reducing their costs so as to offer a better proposition (Tay and Chelliah, 2010). In fact, Boston Consulting Group (2010) research reveals that 79% of the chemical producers only outsource their distribution to companies which buy less than EUR 100,000, effectively meaning that many of the large customers are eventually buying directly from producers. Consequently, it is becoming imperative for distributors to add new services and achieve a deeper integration across the value chain by shaping new product and service propositions for producers and customers, adopting new approaches to integration of end-to-end distribution and marketing capabilities so as to generate value (BCG, 2013; Chemagility 2008; Mortelmans and Reniers, 2012). This process requires a solid strategic view with investment needed in both financial and human terms that would inevitably lead to a larger size company.

According to BCG (2013), the value-adding services that chemical distributors offer vary with the geographical region and the maturity of the market. For instance, in early emerging markets such as Africa, distributors are likely to offer a very basic model that is oriented around reliable logistics; in more advanced markets, such as Asia, there is a strong need for 'logistics-plus' services, such as simple packaging, filling, mixing, and vendor-managed inventories; in mature markets such as the United States and Europe, distributors are increasingly becoming full-service partners of chemical producers, offering advanced technical and formulation services (BCG, 2013; Districonsult, 2010; Mortelmans and Reniers, 2012). Further value-adding services include speed and precise timing of delivery, additional information including digital support and customized interactions (Chemanager, 2012; Elser, 2012; Mortelmans and Reniers, 2012). SME chemical distributors need to be aware which value-adding services to offer and to which market based on their level of maturity. Business networking, incorporating the use of consultants, customers, suppliers, partners, industry events and exhibitions etc., appears to be an effective way to obtain that information.

With regards to disintermediation, chemical distributors can back-integrate their activities and adopt the role of 'pseudo-manufacturer', creating the perception that they are also chemical producers (BCG, 2013; Burns, 2010). That is achieved by buying products in bulk, re-packaging and re-selling them under their own brand, getting products to be produced under their own specification and brand name and requiring chemical formulators to come up with blended products (Bee and Chelliah, 2013; Districonsult, 2013; Frost, 2013). This trend will remain strong in the foreseeable future and opportunities for value-adding services are expected to increase in all markets (BCG, 2013; Districonsult, 2010; Elser, 2012; Hornke, 2013; Mortelmans and Reniers, 2012). As a result, it becomes evident that if a company wants to be successful in the chemical distribution industry it needs to continuously enlarge, diversify and specialise its portfolio, enhance and back integrate its services to its customers and choose its markets wisely. In other words, excellent customer service, market and product development (MPD) and strategic planning are of the outmost importance and are considered as critical success factors.

In addition, the requirement to constantly adapt and change continues to drive strategies in a highly competitive environment (BCG, 2013; Berger, 2011; Fermont, 2007). The need to provide additional services, either to grow the business as such or to differentiate companies from competitors requires significant investments and capital expenditures (Districonsult, 2011; Valk, 2012). Moreover, the business must be able to carry the financial burden over a reasonable time period, meaning that access to finance and good financial resources are once again required for success (BCG, 2013; Jung *et al.*, 2014; Mortelmans and Reniers, 2012).

The increasing emphasis on value-adding services brings human resources challenges to many distributors, who experience difficulty finding employees with the required technical expertise (BCG, 2013; Burridge, 2014a; Hornke, 2013). If restrictions in attracting and retaining talent and the increasing competition from other industrial sectors are taken into consideration (for instance the banking and finance sectors), it explains why recruitment and retention has become a top priority for many chemical distributors (Burridge, 2014b; Chemagility, 2008; Fermont, 2007). In fact, the European federation of chemical distributors (FECC, 2013) already reports that human resources are becoming a challenge for chemical distributors and note that there has been increasing focus on employee qualification and retentions programs alongside increased activity on employer branding. According to Richard Northcote, Chief Sustainability office at Bayer Material Science, (in Burridge, 2014b, p.45) '*attracting and retaining talent will be a critical element of ensuring a sustainable business in the future*'. Hornke (2012) and Mortelmans and Reniers (2012) support the ever growing shortage of highly skilled workers and further argue that getting the right people and keeping them is becoming more of a challenge for small and medium-sized chemical distribution companies as they lack the resources to compete with larger distributors and offer less secure employment. As a result, human resources, as in recruiting, managing and developing employees, are a critical success factor for SMEs in the industry.

3.1.4 Increasing Regulatory Compliance Costs

Even though the effect of regulatory compliance is discussed in more detail later in this paper, it is worth mentioning that the existing regulatory framework has a significant cost impact on chemical distributors (ECHA, 2014; BCG, 2013; Whyte, 2012). Smaller businesses are now facing steep increases in costs due to the implementation of Reach legislation, the new initiatives on classification, labelling and packaging (CLP) of substances and competition laws (Bishop and Walker, 2010; Flavell-While, 2012; Health and Safety Authority, 2011; Pistolese, 2011). Apart from the direct implementation cost, there are also indirect costs due to the extra workload generated and the need for more manpower and expertise (Whyte, 2012; Hornke, 2013). Districonsult (2011) further supports that regulation along with quality and service related requirements lead to an increasing need for in-house expertise regarding technologies and management methodologies. All that requires cash, financial capabilities and a long-term outlook and access to or lack of these resources is going to determine whether mainly smaller distributors can stay in the business or be forced to exit the market. Also, small companies heavily dependent on non-EU suppliers are looking to divest, merge or acquire complimentary business to reduce the financial impacts of legislation (Chemagility, 2008). Strategic planning is required to set the company's strategy alongside careful planning of the required financial and human resources.

3.1.5 Customer Internationalisation and the Need for Critical Mass

The current strong globalisation trends impose a greater need for distributors to achieve critical mass in order to service their customers that increasingly expand their operations in wider geographic areas (Chemagility, 2008; BCG, 2013; FECC, 2013; Jung *et al.*, 2014). Furthermore, due to the increased competition, smaller distributors can easily be driven out of the market by more aggressive, financially strong competitors (Eberhard, 2014; BCG, 2013). The fact that they also have to cope with an ever-increasing fixed cost burden, is inevitably stimulating the growth of larger distribution companies at the expense of smaller ones (BCG, 2013; Districonsult, 2013; FECC, 2013). The future outlook is also in favour of medium-sized local champions and large international players, reporting increasingly challenging conditions for small distributors (BCG, 2013; Districonsult, 2013).

Based on the above, it seems that company size is an important factor in chemical distribution and could potentially affect business success. There is agreement in the literature that chemical distribution companies must either be big enough to cover large geographical areas and large parts of core industrial areas or they must concentrate and specialise in certain industries that allows them an expert approach with high focus (BCG, 2010 and 2013; Burns, 2010; Chemagility, 2008; Jung *et al.*, 2014; Districonsult, 2010). Eberhard (2014) argue that chemical distributors need to ensure that they maintain the critical mass that is required to have a broad enough presence in the market or be confined in small niche markets. As a result, the only way for smaller companies to remain competitive and on the leading edge of the industry is to focus on a few selected applications, in order to avoid dilution of their efforts and to add depth (Districonsult 2011 and 2013; Young, 2012b). BCG (2013) further argues that the small distributor model works best in two situations: speciality chemicals with a high need for technical knowledge and regions in which outsiders do not yet have any local insights or where access and reach are difficult.

Following customer internationalisation, Mortelmans and Reniers (2012), Honrke (2013) and Young (2012b) argue that some small and medium-sized businesses operating in the distribution industry need to extend their networks and forecast that in the future the most important SMEs are going to be the international ones. These companies are more likely to gain a higher share of the growth in emerging market as a result of the accumulated local knowledge, existing networks and expertise on quality standards (BCG, 2013; Burns, 2010; Hornke, 2013). This further stresses the importance of the internationalisation process and strategy to the success or failure of these businesses.

However, several authors argue that international distributors, unless they acquire or do a joint venture with a local distributor, are not going to be able to completely replace small and medium-sized local champions, especially those with strong relationships in place and the means to continue building their local networks with industry-specific service offerings (BCG, 2010; Chemanager, 2013; Chemagility, 2008; Hornke, 2013). Once again, the importance of business networks and customer relationship management in the survival and success of local SMEs is highlighted.

3.1.6 Manufacturers' Growing Support to Larger over Smaller Distributors

Overall, there is a trend for larger producers to reduce the number of distributor relationships in favour of preferred partnerships and offer more support, resources and services in a smaller number of carefully selected distribution companies (BCG, 2013; Districonsult, 2013; Mortelmans and Reniers, 2012). Meanwhile, global producers, especially in emerging markets, tend to outsource distribution to established international players further reducing the number of local distributors they deal with (BCG, 2010; Elser, 2012; Fermont, 2007). This continuing consolidation trend inevitably reduces the supply options for SME distributors who find it increasingly difficult to find new suppliers to compensate for loss of old principals (Fermont, 2007; Hornke, 2013; Mortelmans and Reniers, 2012). Most importantly, as manufacturers seek to improve productivity and reduce production costs, a rationalisation of production is inevitable (BCG, 2013; Burns, 2010). In fact, reductions in sales growth and margins in the recent years intensify this process of rationalisation, restructuring the product portfolio, with companies focusing on higher value sectors such as pharmaceuticals and speciality chemicals for which demand is less sensitive to variations in the business cycle (CEFIC, 2012; Chemagility, 2008; Marketline, 2013; Mintel, 2005; VCI, 2013). The concentration on speciality chemicals is particularly evident in the UK distribution industry (Chemical Industries Association, 2009; Mintel 2005). Therefore, SME chemical distributors, in an attempt to withstand these pressures, need to establish and maintain strong relationships with both suppliers and customers (customer relationship management) while continuously seeking and investing in geographical expansion (internationalisation). Product diversification, market selection (market and product development) and strategic planning also become essential factors for success.

3.1.7 Unsolved Succession Issues in Privately Owned Companies

Many small, privately owned distributors were set up in the 1970s and 1980s by their entrepreneurial owners and as they are now approaching retirement (Chemagility, 2008) succession planning is high in the agenda. Succession planning involves handing the business over to new management but other options include selling the business and liquidating the value built up to fund retirement costs (Burns, 2010; Chemagility, 2008). Unsolved succession issues further drives consolidation in the market. Strategic planning is required to manage the process, minimise disruptions and sustain the business.

3.2 Regulatory Compliance

Similar to the chemical industry, the chemical distribution industry - which plays a crucial role in the chemical supply chain - is subject to strong regulatory trends (European Chemicals Agency, 2014; FECC, 2014; Jensen-Korte, 2013). The main regulatory challenges that the European distribution industry faces are REACH and CLP compliance and implementation and the EU competition rules regarding information exchange between suppliers and distributors (Eacott, 2013; Fermont, 2007; Jensen-Korte, 2013; Whyte, 2012).

As chemical manufacturers have been increasingly focusing on their core activities, the operating environment of the distribution sector has been shifting, requiring from distributors to provide additional services; as a result repackaging, mixing, compounding and blending are services now more commonly being provided (Jensen-Korte, 2013). However, by offering such services, distributors are, in the context of REACH and CLP, being considered as downstream users

(Pistolese, 2011). Since distributors are also often importers they face similar problems as manufacturers in terms of REACH and CLP compliance issues (Flavell-While, 2012). During the earlier stages on REACH and CLP implementation, it had been mainly larger companies (manufacturers and distributors) that were mostly affected (Eacott, 2012; Whyte, 2013). However, all chemical distributors have to eventually register themselves, their imported chemicals and any 'in house' blends and formulations (Fermont, 2007). In fact, as the majority of the chemical distributors are SMEs, the regulatory impact on the industry becomes even more important (Boston Consulting Group, 2010; Bee and Chelliah; 2013; FECC, 2013). Eventually, this extra workload will result in small businesses either using external expertise (i.e. advisory services) or employing additional staff to cope with the increased work load and expertise required (Young, 2012b; Whyte, 2012). This is mainly due to the fact that SMEs do not usually have in-house regulatory specialists to deal with the many volumes of official REACH guidance which exist and are thus making them more vulnerable to regulatory changes (Hornke, 2013; Whyte, 2012). The importance of human resources in the long terms and business networks, as in identifying sources of formal and informal advice, is unquestionable. The role of manufacturers and principals is also crucial in dealing with these requirements and as such a good relationship between SMEs and their sources is required. Suppliers management inevitably falls under the wider category of customer relations management.

More importantly, as the 2018 deadline requires the registration of substances produced or imported in lower volumes, data generation and data access costs for small businesses becomes a major issue which could lead to potential interruptions in the supply chain (Berger, 2011; Districonsult, 2013).Whyte (2012) argues that SMEs are going to be significantly affected by and have to bear both direct costs - such as Pre-registration, Chemical Safety Assessments, Registration, Product testing, evaluation and authorisation - and internal or indirect costs - such as adapting Safety Data sheets and literature, communication to customers, confidentiality issues - with these costs potentially being as high as 20% of the company annual turnover. In fact, industry sources (BCG, 2013; Chemagility, 2008; Districonsult, 2013; Flavell-While, 2012; Hornke, 2012; Whyte, 2012) predict that regulatory compliance is going to have an adverse impact on the industry and players leading to increases in products and raw material prices; an increase in the operating costs of the distributors involved in those sectors; increased reformulation, re-approval, substitution, or even product withdrawals activity; loss of intellectual development; an increased risk that suppliers may deal direct with customers reducing many distributor SMEs to agents and further consolidation in the industry. Small businesses need to manage effectively and efficiently their product portfolio and market reach, work closely and keep communication flowing with their suppliers and customers alike. An investment in human resources appears unavoidable as are the financial implications, for example extra capital required, potentially increased lending, new investors needed etc.

A number of producers have already discontinued the marketing and sales of certain products in Europe as the cost for registration and subsequent collection and evaluation of information is not economically viable or recoverable (Districonsult, 2013). If this trend continues, this will lead to product rationalisation and a reduction of product variety which in turn will potentially have an over-proportional effect on distribution, as the smaller-volume products which will be affected are the realm of the indirect channel (Districonsult, 2013; Fermont, 2007; Hornke, 2013). Market and product orientation thus becomes critical in the survival of small business that will need to identify new products and/or new markets to cope with REACH.

Districonsult (2013) also reports that regulatory compliance is absorbing an increasing amount of management time at distributors. In a survey conducted by the same company among a number of companies from EU and non-EU countries, 69% of the participants said that they have assigned accountability for the respective strategy and its implementation to a member of their management team and have allocated a specific budget position for regulatory compliance. Regarding information on the subject, suppliers are normally seen as important sources of information, followed by trade associations. Regulatory compliance is seen as critical to business success but not as something that would create a competitive advantage and a means of differentiation. Yet, compliance stipulates all aspects of strategic planning, financial and human resources, business networking, market and product orientation, customers and suppliers management etc.

Apart from REACH and CLP compliance, companies also have to comply with rules on information exchange between suppliers and distributors as the EU competition rules which were introduced in 2001, are now being fully implemented (Bishop and Walker, 2010; BCG, 2013; Fermont, 2007; Young, 2012b). FECC (2011), reports that the chemical distribution sector still remains under scrutiny by Europe's antitrust authorities, following several high-profile cases in recent years. From a legal standpoint, distributors operate and compete on the same markets with their suppliers. Consequently, producers are not allowed to exchange pricing and customer information with their distributors and have to operate commercially independently from one another (Flavell-While, 2012; Whyte, 2012). The guidelines also state that all recommendations by producers on resale prices by distributors must be legally and, in practice, non-binding and distributors must be free to set their own prices (Bishop and Walker, 2010; BCG, 2013). Suppliers are not allowed to restrict sale territories or to impose supply exclusivity (Bishop and Walker, 2010; Fermont, 2007) but still a close and trustful relationship (and consequently a managed process) is required to manage the requirement to the best interest of the business.

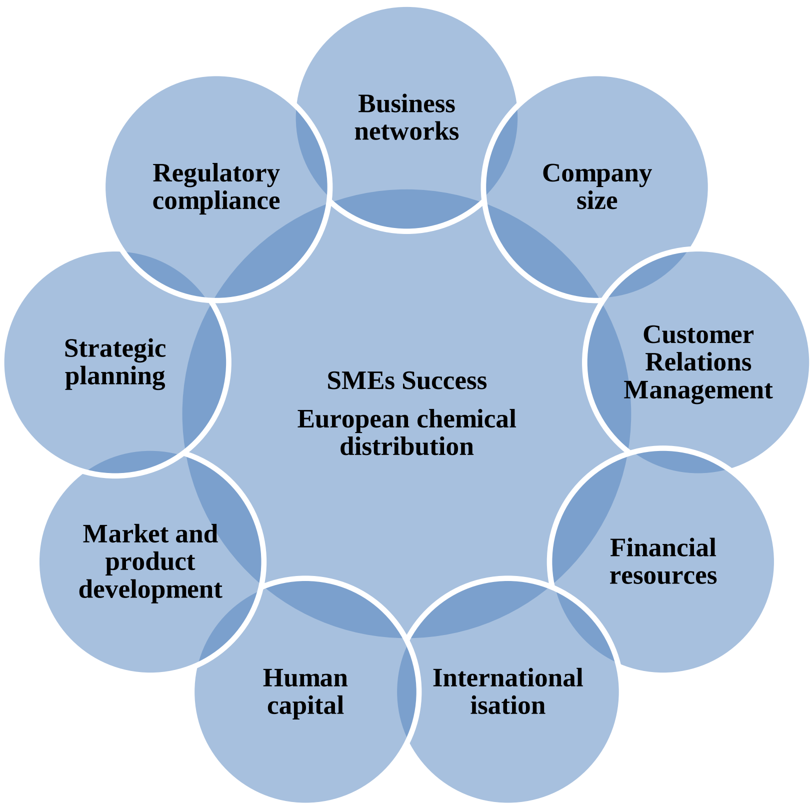
Overall, the trend towards increased regulation is expected to continue (BCG 2013; Burns, 2010; Frost, 2013; Hornke, 2013; Whyte, 2012). While REACH and CLP are implemented in Europe, similar regulations are likely to be introduced in the United States, along with rules calling for an upgrading of facilities, such as in Brazil, and stronger environmental regulations, such as in China (BCG, 2013). Even though there are some markets that still remain largely unregulated - including Africa and the Middle East- those seem to be the exceptions. Undeniably, increased regulatory pressures do not only affect mid-size and larger operators but also smaller distributors that do not currently comply in many cases and cannot justify the investments needed to do so (Districonsult, 2013; Eacott, 2012; Flavell-While, 2012). Small-scale distributors have to fully implement the measures necessary to comply with applicable regulations otherwise they will not be able to operate in these markets. Regulatory compliance is a prerequisite for small businesses success in the chemical distribution industry.

4. Discussion and Concluding Remarks

An extensive review of the literature reveals that there is limited academic research investigating success factors for SMEs in the European chemical distribution industry (CBA, 2015; Chemagility, 2012; FECC, 2105). Notably, the only known study on SMEs and success factors in the European chemical distribution industry is that of Matthias Hornke of Grosse-Hornke Private Consult. Hornke (2012) investigated the success factors for SMEs operating in the chemical distribution industry in Germany, Austria and Switzerland. This study, which was conducted in 2011 and based on 62 participating companies, identified: (i) employees and employer qualifications enlargement, (ii) diversification and specialisation of portfolio; (iii) enhancement of services; (iv) focusing on specific regions and (v) expansion to international sales.

Given the lack of information on an academic and industry level, the driving forces of the European chemical distribution industry have been utilised to identify the factors critical to SMEs success. In line with Lampadarios' research (2016a,b), only when small and medium-sized distributors address and overcome these forces in their business environment, can they be successful and thrive. In more detail, success in an environment characterised by high mergers and acquisition activity, strong presence of private equity firms (PEFs), a continuous need for value-adding services and deeper integration due to customers' requirements, customer internationalisation, and intense global competition and increasing costs due to more complex health, safety and environmental legislation, depends upon a number of factors. These have been identified in the literature and consolidated as per Figure 1 below.

Figure 2: SMEs Success Factors in the European Chemical Distribution Industry



Even though the importance of each individual factor cannot be determined without further research, this paper strongly suggests that success for SMEs in the European chemical distribution industry is a multidimensional phenomenon. This means that a number of contributing factors need to be taken into consideration and addressed simultaneously as satisfying one or two conditions does not necessarily guarantee success. This is in line with prior research in this industry by Lampadarios (2016a, b).

4.1 Business Networks

One of the key advantages of small businesses in the distribution industry are the strong relationships they have developed with customers and the good local networks they have built up allowing them to concentrate on niche markets and applications that larger companies find difficult to service. Especially in the specialty distribution, a well-established sales network that facilitates the distribution of goods to local customers while reducing cost and complexity offers SMEs a strong differentiation point. Business networks are also incremental in uncovering suppliers, acquisition opportunities and partnerships and are deemed a good source for advisory services and consultants.

4.2 Company Size

The future favours medium-sized local champions and large international players, while small distributors face increasingly challenging conditions. In order to survive and thrive, companies must either be big enough to cover large geographical areas and large parts of core industrial areas or they must concentrate and specialise in certain industries that allows them an expert approach with high focus. Any distribution companies lacking the required critical mass and sufficient volume must either partner with competitors or seek an acquisition or merger. Speciality distributors need to target both organic and inorganic growth in order to address regional and product gaps in their portfolios. The need for value-adding services is imperative but adding such services requires investment in physical and human resources and assumes that the company is of a certain size to be able to cope. Therefore, the size of the company is an important factor in chemical distribution and potentially affects business success.

4.3 Customer Relationship Management (CRM)

Satisfying customer needs, offering a good service and expanding one's services is the cornerstone of success for chemical distributors, especially as customers' demand for reliability, speed and flexibility has increased significantly. Distributors have to build up a trusting atmosphere and a close relationship to get problems solved and challenges managed. Customer relationship management also includes supplier management as this is a central business factor. Finding and securing new suppliers is a difficult task and as a result, it is important to install and develop relationship management across hierarchy levels and build up a network within the supplier organization. Equally important in the success of SMEs in the distribution industry is managing and maintaining a close relationship with current suppliers and establishing platforms to provide regular feedback, market and product intelligence to them.

4.4 Financial Resources

SMEs operating in the chemical distribution industry require significant investments and capital expenditures to remain financially sound, maintain their current position in the market, cope with increasing regulatory compliance costs, strengthen against acquisitions/hostile takeovers, acquire companies and finance their expansion into new markets. Small and medium-sized distributors need to ensure their survival by establishing financial stability first. Once their viability is assured, they can differentiate themselves and build market share through specialisation; for instance developing a differentiated offering in a specific niche, with local expertise, value-adding services, and real adaptation to supplier needs.

4.5 Human Resources

Human capital is becoming a challenge for chemical distributors in Europe and there has been increasing focus on employee qualification and retentions programmes. A strong expertise regarding products and applications is essential to drive market development and is viewed as a success factor. In fact, distributors that truly understand their products and formulations are in a position to provide better technical sales support and establish stronger relationship with their customers. There is also a well-documented growing shortage of highly skilled workers. Thus, getting the right people and keeping them is becoming a challenge and a critical success factor for small-medium sized chemical distribution companies as they lack the resources to compete with larger distributors and offer less secure employment.

4.6 Internationalisation

SMEs above all companies have to expand to other markets to grow and thrive and as such a well thought and executed internationalisation plan is required. Smaller distributors further need to extend their networks as a result of customer internationalisation, a trend they need to follow to protect their customer base. Another viable growth solution for smaller or medium-sized distributors is the formation of international partnerships and collaborations with distributors in different countries. This 'solution' requires careful planning and selection of partners and a strong international collaborative mind-set that needs to be cultivated and maintained in the company.

4.7 Market and Product Development (MPD)

Choosing the right product portfolio that reflects market trends and customer needs and marketing those in carefully selected markets and industries is imperative to the success of any distributor and is widely recognised as a critical success factor. Focusing on product categories, industries and applications provides good prospects to small-medium sized distribution companies. Distributors with deep knowledge of local-market demands are more likely to excel at category management and develop a full portfolio of the chemicals needed to establish a strong presence in related market segments. The need for value-adding services remains strong in the future and successful companies have to continuously enlarge, diversify and specialise their portfolio and choose markets wisely.

4.8 Strategic Planning

Chemical distribution is a very attractive industry but only strong and focussed companies with a forward-looking strategy and mind set shall thrive. Distribution companies must actively plan to address current and future challenges, for instance achieving growth, adding more services, acquisition planning, deeper integration, succession planning and suppliers management, so as to compete effectively and survive in the market. Also, strategic planning should be used to anticipate new trends and handling challenges, as it is indispensable to know the development of society, needs and infrastructure in a market; for instance, in light of an aging society, distributors need to react to an increasing requirement for health, cosmetics, nutraceuticals and pharmaceuticals. Regulatory compliance is seen as the most significant challenges of our times and as such a strategy needs to be formulated and executed to ensure survival. Last, process quality and IT excellence is also seen as an integral part of strategic planning and critical to the success of chemical distributors. The use of technology streamlines logistics, reduces overheads, provides a cost advantage and further enables distributors to share commercial and marketing data with their suppliers.

5. Summary and Implications

This paper has raised issues regarding the lack of academic research on the European chemical distribution industry, the small businesses (SMEs) operating in it and most importantly the factors contributory to their success and consequently makes the first academic attempt to address this gap. The driving forces of the industry are investigated and utilised, alongside any further research on a professional level and industry publications, as the basis to highlight success factors for small businesses in the specific industry. Business networks, company size, customer relations management, financial resources, internationalisation, human capital, market and product development, regulatory compliance and strategic planning are identified and a positive relationship with SMEs success in the European chemical distribution industry is proposed. Table 3 provides a summary of these findings.

This paper offers an insight into the success of small business in the specific industry, setting the foundations for further academic research into this under-explored area. The set of factors identified can be further utilised by stakeholders (i.e. government, policy makers, SMEs, practitioners) to improve strategy formulation and decision-making process in order to support chemical distribution SMEs being successful and equally strengthen them against failure.

In detail, SMEs owners/managers may use the findings to develop and implement their strategy, identify the necessary resources required, uncover 'weaknesses' and training needs and plan efficiently for the future. Policy makers can develop and implement policies directed at SMEs in the specific industry, improve and develop the necessary support infrastructure, extend the nature and the range of advice and offer training for SME owners, managers and employees. Non-government, industry-specific organizations such as the FECC, the Chemical Business Association (CBA) and the British Association of Chemical Specialties (BACS), also benefit from this research as it increases their understanding of the industry and the small businesses operating in it.

References

[1] Bee, TK, & Chelliah, J (2013). Why are Private Equity Firms Acquiring Chemical Distributors Worldwide?. *The Journal of International Management Studies*, *8*(1), 108-113.
[2] Berger, R. (2011). *A different world - Chemicals 2030.* [online] http://www.think-act.com/en/content/a-different-world-chemicals-2030.html (Accessed 18 August 2015).
[3] Bishop, S., & Walker, M (2010). *The Economics of EC Competition Law: Concepts, Application and Measurement.* London: Sweet and Maxwell.
[4] Brenntag (2010). *About us.* [online] http://www.brenntag.com/ (Accessed 16 September 2015).
[5] Burns, N. A. (2010). *Chemical Distributors* [online] http://www.neilaburns.com/chemical-distributors/ (Accessed 21 December 2015).
[6] Burridge, E. (2013). Industry needs to cultivate talent. *ICIS Chemical Business*, 5 May, 15-17.
[7] Burridge, E. (2014). An eye on the future-FECC supplement. *ICIS Chemical Business*, 14 May, 14-15.

[8] Camelot Management Consultants (2012). *Focus Topics 2012 for the Chemical Industry, Outlook based on CheMonitor study results*. [online] http://www.camelot-mc.com/fileadmin/user_upload/Flyer/Camelot-Focus-Topics-2012-Chemical-Industry.pdf (Accessed 10 June 2015).
[9] CBA (2015). *CBA Supply Chain Trends March 2015*. [online] http://www.chemical.org.uk/news/cbanews/cbasupplychaintrendsmarch2015.aspx (Accessed 10 July 2015).
[10] CEFIC (2010). *Is European chemical industry losing its global leadership?*. [online] http://www.cefic.be/files/Publications/Cefic_Dipliant_2015.pdf (Accessed 20 July 2015).
[11] CEFIC (2012). *Facts and figures: the European chemical industry in a worldwide perspective, European Chemical Industry Council (CEFIC.* [online] http://www.cefic.org/Facts-and-Figures/
[12] Facts--Figures-Brochures (Accessed 14 February 2014).
[13] Chemagility (2008). *UK Chemical Distributor Market Report 2008*: *Information, Insight and analysis of the UK Chemical distribution industry*. Surrey: Chemagility.
[14] Chemagility (2012). *A Global Perspective on the World Chemical Distribution Market*, First Panel Session: Chemical Distribution Industry Landscape, presented at the FECC Annual Congress, Lisbon, May 21-23, 2012. [online] http://www.assicconline.it/menu/documents/06_brown.pdf (Accessed 29 May 2015).
[15] Chemanager (2012). C*hemical Distribution: Global Mind with Local Focus. Biesterfeld's CEO Birger Kuck Discusses Success Factors for the Chemical Distribution Industry*. [online] http://www.chemanager-online.com/en/news-opinions/interviews/chemical-distribution-global-mind-local-focus (Accessed 19 May 2015).
[16] Chemanager (2013). *Distribution and Logistics for the Chemical and Life Sciences Industries*. [online] http://www.chemanager-online.com/sites/chemanager-online.com/files/printausgabe/epapers/SDL/SDL0113/blaetterkatalog/index.html (Accessed 20 June 2015).
[17] Chemical Business Association (CBA) (2015). *About us.* [online] http://www.chemical.org.uk/aboutus.aspx (Accessed 25 February 2015).
[18] Chemical Industries Association (2009). *Chemicals-The UK advantage: adding value for global investors and industries.* [online] http://www.cia.org.uk/portals/0/downloads_pdf_1_Chemicals-Brochure-FINAL-JAN-2009.pdf (Accessed 30 July 2015).
[19] Districonsult (2009). *Chemical Distribution in 2009: Challenges and Uncertainties*. [online] http://www.districonsult.com (Accessed 15 June 2015).
[20] Districonsult (2010). *Wheels of change spin in distribution*. [online] http://www.districonsult.com/en/index-districonsult%2Bnewsletter-1-31%2B~%2Bwheels%2Bchange%2Bspin%2Bdistribution.html (Accessed 24 February 2014).
[21] Districonsult (2011). *Oligopsony or Monopsony?*. [online] http://www.districonsult.com/en/index-di s t r i consul t%2Bnews letter - 1 -33%2B~%2Bsmiling%2Bfaces%2Bdespite%2Bchallenges%2Bahead.html (Accessed 11 May 2013).
[22] Districonsult (2012). *Chemical Distribution in 2012: What's next on the horizon?*, 6th Brazilian Congress of Chemicals and Petrochemical Distributors (EBDQUIM), Praia do Forte (Bahia), 16th March 2012 [online] http://www.associquim.org.br/ebdquim2012/palestras/Ebdquim2012_G%C3%BCentherEberhard.pdf (Accessed 10 May 2013).
[23] Districonsult (2013). *Old Game - New Rules? Chemical Distribution in the Age of Volatility*. [online] http://www.districonsult.com/en/indexdistriconsult%
[24] 2Bnewsletter-1-34%2B~%2Bold%2Bgame%2Bnew%2Brules%2B2013.html (Accessed 27 February 2015).
[25] Eacott, C. (2012). Surviving and thriving under REACH. *The Chemical Engineer*, 5 June, 28-29.
[26] Eastwood, A. (2012). 2012 Petrochemicals review. *Hydrocarbon Processing, 91*(12), 64-65.
[27] Eberhard, G. (2014) 'Growth and consolidation', *ICIS Chemical Business*, 21-27 July, pp. 44-46.
[28] Elser, B. (2012). Distribution is a lever for growth. *ICIS Chemical Business. 281*(18), 23-24.
[29] European Chemicals Agency (ECHA) (2014). *About us*. [online] http://echa.europa.eu (Accessed 30 July 2015)
[30] FECC (2011). *Communication in the supply chain - distributors' challenges.* ECHA – ENES Meeting 24th-25th November 2011, Brussels, [online] https://echa.europa.eu/documents/10162/13587/echa_enes_jensen_korte_en.pdf (Accessed 30 July 2015).
[31] FECC (2013). *The Chemical distribution Sector in Europe*. [online] http://www.fecc.org/fecc/about-fecc/the-chemical-distribution-sector-in-europe (Accessed 26 April 2015).
[32] FECC (2015). *European business plan 2015*. [online] http://www.fecc.org/fecc/images/stories/downloads/GTDP/2014/FECC_BusPlan_2015_def.pdf (Accessed 15 May 2015).
[33] Fermont, M. (2007). Channel Management in the Chemical Industry - Selecting the Right Option. *Journal of Business Chemistry*, *4*(3), 90-95.
[34] Flavell-While, C. (2012). Ch-Ch-Ch-Changes. *The Chemical Engineer, 853*(2), 44-46.
[35] Frost, L. (2013). Distribution: Capturing growth opportunities. *IHS Chemical Week*, 4 November, 23-25.

[36] Health and Safety Authority (HSA) (2011). *Chemical Distributor Duties under REACH and CLP Information sheet.* [online] http://www.hsa.ie/eng/Publications_and_Forms/Publications/Information_Sheets/Chemical_Distributor_Duties_REACH_and_CLP.pdf (Accessed 28 April 2015)
[37] Hornke, M. (2013). The future of chemical distribution in Europe: Customer relations as key value lever. *Journal of Business Chemistry*, *9*(2), 65-66.
[38] Hornke, M. (2012). *Chemical Distribution 2012*. [online] http://www.chemanager-online.com/file/track/11755/1 (Accessed 28 July 2015).
[39] ICIS (2010). *Chemical Mergers and Acquisitions set to rise in 2011*. [online] http://www.icis.com/Articles/2010/12/06/9415854/html (Accessed 16 April 2015).
[40] Jensen-Korte, U. (2013). *REACH 2013 challenges and best practice in the chemical distribution industry*. European Chemical Agency Newsletter, [online]
[41] http://newsletter.echa.europa.eu/home/newsletter/entry/1_13_guest_fecc;jsessionid=630BA1472F0473C9F0BDB77106D1D705.live2 (Accessed 30 July 2015).
[42] Jung, U, Wolleswinkel, R, Hoffmann, C, Rothman, A. (2014). *Specialty Chemical Distribution-Market Update*. Boston Consulting Group, [online] https://www.bcgperspectives.com/content/articles/process_industries_go_to_market_strategy_specialty_chemical_distribution_market_update/?chapter=2 (Accessed 16 May 2015).
[43] Kamakura, Y. (2006). Corporate Structural Change and Social Dialogue in the Chemical Industry. *International Labour Office*, Geneva.
[44] Kronimuns, A, Roos, A, Stelter, D. (2009). *M&A: Ready for Lift-off? A survey of European companies' Merger and Acquisition Plans for 2010*. Boston Consulting Group, [online] https://www.bcg.com/documents/file36677.pdf (Accessed 30 July 2015).
[45] Lampadarios, E. (2016a). Critical challenges for SMEs in the UK chemical distribution industry. *Journal of Business Chemistry*, *13*(1), 17-32.
[46] Lampadarios, E. (2016b). Critical success factors for SMEs: an empirical study in the UK chemical distribution industry. *International Journal of Business and Management,* 11(7), 67-82. http://dx.doi.org/10.5539/ijbm.v11n7p67
[47] MarketLine (2013). *Chemicals in Europe*. London: MarketLine.
[48] MINTEL (2005). *Chemical Distribution-Industrial Report*. London: MarketLine.
[49] Mortelmans, S, & Reniers, G. (2012). Chemical distribution in Belgium from 2007 to 2010: An empirical study. *Journal of Business Chemistry*, *9*(2), 105-113.
[50] Pistolese, P. (2011). CLP Regulation and REACH Regulation: links, implementation and control in Italy. *Annali Dell'istituto Superiore Di Sanità*, *47*(2), 157-164.
[51] Research and Markets (2013). *Global Chemical Distribution Market 2012-2014.* [online] http://www.researchandmarkets.com/research/8xg2bb/global_chemical (Accessed 22 July 2015).
[52] Rowley, J. (2002). Synergy and strategy in e-business. *Marketing Intelligence and Planning*, *20*(4), 215-222. http://dx.doi.org/10.1108/02634500210431603
[53] Royal Society of Chemistry (RSC) (2014). *Campaigning & outreach.* [online] http://www.rsc.org/get-involved/importance-of-chemical-sciences/Economic_benefit.asp (Accessed 19 May 2015).
[54] Tay, KB, & Chelliah, J. (2010). Disintermediation of Traditional Chemical Intermediary Roles in the Electronic Business-To-Business (e-B2B) Exchange World. *Journal of Strategic Information Systems, 20*(3), 217-231. http://dx.doi.org/10.1016/j.jsis.2010.11.003
[55] Valk, V. (2012). Distribution: New markets and a changing business mode. *IHS Chemical Week*, 19 November, 29-30.
[56] VCI (2013). *Messages and demands for the issue: Raw Materials Base of the Chemical Industry*. [online] https://www.vci.de/Downloads/Top-Thema/OPen_Raw_Materials_Base_of_the_Chemical_Industry.pdf (Accessed 25 May 2015).
[57] Whyte, M. (2012). *REACH and its impact on SME.* [online] http://ec.europa.eu/enterprise/sectors/chemicals/files/sherper_conference/sh_2f_m_whyte_refac_en.pdf. (Accessed 30 July 2015).
[58] Young, I. (2012a). Distribution: Robust Despite Market Uncertainty. *IHS Chemical Week*, 7-14 May, 21-25.
[59] Young, I. (2012b). FECC 2012: Distributors Adapt to Changing Markets. *IHS Chemical Week*, 28 May, 36-37.

Author's information

EL is an Associate Lecturer in the School of Strategy, PR and Communication and in the School of HRM and OB. He holds a BSc in Chemistry from the University of Athens, an MSc in Food Science from the University of Leeds and a MA in Business Studies from Leeds Beckett University. He has also obtained a PhD in his current institution with his research focusing on small business success and sustainable growth in the UK chemical distribution industry. He is a Fellow of the Institute of Sales and Marketing management (FInstSMM), a member of the Institute of Small Business and Entrepreneurship (ISBE), a member of the British Academy of Management, a Fellow of the Greek Society of Chemists Management and a holder of a 6 sigma Green Belt.

EL is also a very experienced professional and consultant in the chemical industry and has had a number of sales and management roles over the last 15 years. In the recent years he has been focusing on the chemical distribution industry in Europe and the Middle East.

His professional and academic areas of expertise include but are not limited to SMEs, success and growth, business strategy, business development, human resource management, supplier, product and channel management and operations with special focus in the chemical and chemical distribution industry.