

'The facilitation of KT for Maritime Plymouth, a marine industry cluster group, challenges, lessons and results'- short paper

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Abstract

This short paper will cover some of the background issues behind why KT was and continues to be required in this and other instances.

By reference to a specific case example (centred on local and global marine economics) the paper will outline what the crucial considerations were in developing the cluster group 'voice', leadership and development.

The later part of the paper will outline what we subsequently feel are more general concerns with making industry based KTPs succeed.

Introduction and aims

Maritime clusters were a political tool on the early part of the millennium funded by the RDAs. In many instances the guidance on sustainability was lacking and once funding ran out clusters closed. Those that have survived have diversified and adapted to increase funding through membership to remain sustainable rather than focussing on sustainable practices in order to increase membership. The CAMIS (Channel Arc Manche Integrated Strategy) project has studied marine clusters along the south coast of England and identified 3 elements that must be present for success – purpose, leadership and trust. The purpose of the KT event reported in this paper was to aid the understanding and development of these elements for a specific cluster.

This short paper will then outline and analyse the practical experience of designing and delivering the KT event which took place in Plymouth in early March 2011. The key expected benefits of the KT will be outlined as will the real and potential barriers. The full paper to be completed subsequently will report the actions taken and the developments post the KT event, and relate the case to a wider KT agenda around effectiveness and value of KT activity.

The full paper will expand finally to develop a more general 'lessons learned' section for the benefit of future KT activists and signpost a brief, practical KT facilitation guide.

Background

Some of the clear benefits and advantages of KT for clusters

Clusters are geographic concentrations of interconnected companies and institutions in a particular field. They encompass an array of linked industries and other entities important to competition (Porter, 1998). Clusters extend vertically to customers and horizontally to manufacturers of complementary products and to companies in industries related by skills, technologies, or common inputs (Reid, N. 2009). Clusters can form diagonally to include governmental and other institutions - such as universities, think tanks, vocational training providers, and trade associations - that provide specialised training, education, information, research, and technical support (Porter, 1998). Geographically concentrated networks and value chains of suppliers and/or knowledge institutes collaborate with the aim of developing innovations (Hospers and Beugelsdijk, 2002).

Clustering allows firms to have better access to resources such as technology, information, 'knowhow' inputs, customers, and channels, than they would normally have if they operated in isolation. Clustering can save a company valuable time and money through collaboration on knowledge and sharing of resources (Smith and Brown, 2009). Clustering can also improve efficiency and benefit the end user through high quality products at lower cost due to reduced development and production costs (De Langen, 2002). Clustering provides an environment that encourages new business formation, lowers the barriers to entry, and spreads the risk of start-

up (Porter, 1998). Better knowledge transfer results in increased innovation and speeds up economic growth (Isaksen, 2009). Clustering is not automatic though, the success of a cluster cannot be explained by agglomeration economies alone, there has to be clustering activities taking place such as collective efficiency which in turn is highly dependent on the input of social capital (Reid et al., 2007, Porter, 1998).

Numerous methods exist for the identification of companies suitable for establishing a cluster-based economic development strategy. Although clusters are essentially a naturally occurring business focussed phenomenon there are good economic reasons for identifying and strengthening the ties in order to help sustain and develop them. The main key to success tends to lie in collaboration and trust (Reid et al., 2007).

One of the main benefits that clustering provides is the opportunity to exchange knowledge. According to (Arikan, 2009a), a cluster exists to create a competitive advantage for collective and individual firms by the creation of knowledge. Knowledge creation and spillovers are believed to be major characteristics of business clusters and inherently intertwined with innovation. Arikan studies inter-firm knowledge exchange in business clusters and defines it as formal or informal interactions between firms that involve either voluntary or involuntary forms of knowledge exchanges (Arikan, 2009b). In his study to find evidence of such inter-firm knowledge in clusters, he devises and tests eleven propositions concerning knowledge: lead time, modularity in product technology, level of technological dynamism, exploration-based search strategies, number of industries that use the same technology, the lead firm's level of cooperation, tacit knowledge, information channels and knowledge brokers, knowledge overlap between cluster firms, knowledge exchanges between cluster firms and outside entities, and the dissolution of knowledge relationships that no longer enhance knowledge creation. However, most of the research on inter-firm knowledge and clusters is not generic (Arikan, 2009a), but focused on different business sectors which makes it increasingly difficult to draw universally acceptable conclusions (Ozman, 2009).

Practical work Specific Case 'The facilitation of KT for Maritime Plymouth'

Maritime Plymouth (MP) is a locational cluster with a generic marine membership. The members pay a fee to join and in return they are able to attend regular network events, receive monthly newsletters and can access a comprehensive database of other members. MP also has a dedicated 'friends' area where anyone with a marine interest can ask to join free of charge in order to be kept up to date on the activities of the cluster. The purpose of the network was to lobby the local council and increase the profile of the maritime industry in Plymouth whilst encouraging cooperation and collaboration between its members. Although originally funded through start-up by the Regional Development Agency (SWERDA), once RDA funding ran out there was concerns about sustainability and funding of the activities that had been initiated. MP approached the CAMIS project (University of Chichester) in October 2010 to look at best practice within clustering to enable the cluster to increase its attractiveness and sustainability.

In December 2010 a selection of interviews were carried out with members of the cluster. The aim of the research was to ascertain the benefits and perceptions of membership of Maritime Plymouth and to look for ways to increase these benefits ensuring the viability of MP continued and grew. Although initially MP felt that increasing the income through membership fees would ensure increased growth it was apparent that for the cluster to remain – and increase – its attractiveness it had to adapt and evolve through increased cluster activities thereby increasing the chances of achieving sustainability.

As a result of these interviews the evidence obtained indicated that the cluster was perceived to be an important part of the maritime framework in Plymouth. Members felt the networking ability and branding of the group gave them a sense of belonging to a successful maritime focussed organisation. The network itself does not have a particular niche to market but prefers to work with the general consensus of the members on issues that are pertinent at the time. This encourages the majority of maritime industries to be part of the cluster but as there is no specific direction for the group to work towards there is a limited commitment by members. A major resource limitation was that most of the administration and general duties of the cluster are performed by just three key, unpaid members.

The funds from membership fees that are generated by the cluster do not cover the cost of the primary administration therefore most of the work is carried out for little recompense. It is apparent that the lack of funds became the focus of the desire to develop rather than the need to create additional benefits. This is a fundamental problem as membership will not be increased at the current rate of activities and extra funds would not be available to create additional benefits for members.

The main issues that were raised during the interviews seemed to be concerning communication and relationship building with both each other and outside agencies. The current relationship with the Local Authority and the Chambers of Commerce was perceived to be weak. The Chambers of Commerce in Plymouth has a limited maritime membership and therefore little maritime activities. Considering the future Local Enterprise partnerships (LEPs) will be utilising the Chambers of Commerce (CofCs) to identify necessary support in the future it is important that the marine and maritime industry is able to strengthen the ties and build a good working relationship with them. Communication between members and also between other local maritime industries also appears sporadic and limited and this is mainly felt to be due to lack of trust and a sense of losing competitive advantage if too much information is divulged.

Training and maritime awareness are seen as issues that need addressing both within the network and as an industry. Collaboration with Cornwall Marine Network is starting to impact on this positively and the beginnings of a larger marine cluster are emerging through sharing of best practice and knowledge transfer. MP provides good networking opportunities but the potential for business to engage in activities drawn from these opportunities is not being taken full advantage of. Many of these opportunities lie in cost savings and collaborative working. Joint tenders, group savings and bulk buying are all aspects of cost efficiency that need to be investigated.

The original idea for clusters through RDA funding was to provide benefits freely to the industry. Now funding is an issue there is a reluctance to pay for something that was once free and therefore deemed as a 'right'. Until MP can show that full membership comes with a range of benefits that makes the membership fee worth paying the friends will continue to reap the benefit of free information. This is one particular area that needs addressing and is something that the next phase of work under CAMIS can help to facilitate.

Agreement was reached with the cluster group leadership that a facilitated event be held as part of the next monthly meeting to thrash out issues from the research and identify ways forward to building a sustainable cluster.

This event happened in March 2011 facilitated by the researchers. During the evening event, where over 40 members of the cluster group were present, the findings of the report were discussed briefly and a discussion of the advantages of knowledge sharing took place, followed by an interactive session whereby attendees worked in small groups to identify both barriers to improvement and consider their own commitment levels to making MP a success. The event demonstrated a high degree of willingness to contribute to the success of the cluster, but also highlighted a lack of direction and a lack of clarity about which issues to prioritise.

The event was followed by a written evaluation report and collection of the ideas and suggestions from the attendees which was submitted to the cluster management for circulation to members. This document was intended as a further stimulus for action by cluster group members. At this point the involvement of the researchers in this specific KT was effectively terminated.

Discussion - Generalised lessons from the case

Whilst this case is ongoing, there are a number of lessons that can be garnered already and will be featured more strongly in the full paper. Additional research will be incorporated to support or counter the findings from this case with a view to establishing further evidence to generate a picture of what represents fertile ground for KT and what factors seem to be the most common areas of resistance.

We have already seen the factors such as trust, a clear vision and long term sustainability need to feature. Without any of these the potential benefits from any KT are severely limited. In addition we feel from the experience so far of the specific MP case there is a need for organisations involved in KT to '*want to change*'. To benefit fully from a KT process the organisation must face the fact that changes in their modus operandi are highly likely. This means *both the processes and behaviours* may well need to change. This brings into the arena the organisations appetite for change. Where this appetite is strong the KT process has a fighting chance of delivering significant value. Where change is seen as a threat, unduly destabilising and is likely to be resisted, the outputs of any KT process may come up against organisational inertia sufficient to resist any potential gains.

Life cycles are also pertinent to long term cluster sustainability. A cluster needs a purpose and if this is a short term objective the cluster will falter once that objective has been completed. Unless the objectives are repeatedly replaced with new objectives that suit the majority of the cluster the likelihood of membership being renewed will decrease. This brings into question the viability of a cluster format generic to a sector. Each cluster will

have different sets of objectives that are applicable to the social, economic, political and geographical and demographical aspects of each locality. The clusters will evolve as the different aspects of each locality change and the purpose adapted to suit. No two areas are the same and no two clusters are the same therefore KT of best practice will benefit each cluster only when the specific knowledge and practice that are applicable to the local region is used.

Leadership has been shown to be important to cluster sustainability yet there is a clear need for the leadership to evolve along with the cluster. A leader that leads in the same direction the members wish to follow will increase the sustainability of a cluster more than a leader unaware of the needs of the members. Communication is imperative to sustainable clustering and strong leadership involves effective communication.

Trust, as the third element of sustainable clustering, also provides the weakest point. Trust is not a given and developing trust takes time and effort. KT will not occur if trust is missing from a KT relationship such as a cluster and this element needs nurturing in order for sustainability to be achieved.

Conclusion

One of the aims of this research, like that of so many other researchers into KTP working, is to identify aspects of KTP participants behaviour that would positively support the initiative and, almost by default, those that act as a hindrance.

In preparing this short paper, we have supplemented our own work, with lengthy interviews with several KT practitioners from a range of industry sectors. High-tech communications companies, (Orange and Unisys), traditional manufacturing (Rolls Royce), large scale retailing (Sainsburys) and project based construction companies (Thames Water, Costain). From this rich and diverse source of evidence we were able to construct the following two fundamental lists.

The list of the attributes that support more effective KT is 'The A list'. The list that would serve to stifle its development is 'The B list'.

The 'A' List - Factors that positively support KT

- Recognition that personal and organisational knowledge development is a source of competitive advantage-**without this there is no energy for the changes required**
- Reference to knowledge sharing and the need for collective working in strategic planning and top team presentations-**putting knowledge based working on everyone's agenda**
- Rewards and recognition allocated for knowledge building and knowledge sharing-**most people will pay attention to what they get measured on, and rewarded for.**
- Technology systems based around supporting ever expanding connectivity-**this means the technology systems have to allow for human interaction (e.g. 'chat rooms', or virtual communities of practice) and not just be about efficient data transfer**
- Recognition that flexibility is more desirable than conformity-**knowledge transfer works better where people have tacit permission to change as a result of new knowledge**
- High levels of trust exist between co-workers, managers and customers-**so that any knowledge shared will be used wisely and constructively**

The 'B' List- Factors that hinder KT (in addition to the opposites of the previous list)

- Excessive short-term results focus-**will prevent any investment required for longer term gain**
- Technology systems based solely around controlling and measuring-**will not allow for feedback or monitoring loops to share what has been learned**
- High levels of confusion over what knowledge transfer is all about-**until clarity is achieved about terminology and the benefits effort will be dissipated**
- No allocation of budget, performance measurement or time to learning or other knowledge development activity-**if such activity is not recognised as valuable it will not happen**
- Cultural hold ups to knowledge gathering, sharing and development-**e.g. fear of what would happen to me or others if I shared my knowledge**
- Structural barriers to knowledge sharing-**such as silo structures, incompatible technology, language and communications restrictions**

Finally there may even be critical point during the KT process where some or all parties recognise that the best outcome might actually be to allow for a demise in order that a new, better aligned phoenix can rise from its ashes. This is a further aspect that the full paper will address.

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