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New Paradigms in SCM Learning: the NITL Experience

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new paradigms in scm learning: the NITL experience

By EDWARD SWEENEY, Director of Learning, NITL

INTRODUCTION: SCM PARADIGM SHIFTS

The role of the supply chain professional is an ever-changing one. As markets become more sophisticated and customers more discerning, designing and implementing supply chains which meet the often diverse levels of customer service demanded in different targeted market segments, becomes a more difficult challenge. Combine this with the fact that high levels of competition are driving down profit margins - with the resulting need to ensure that supply chain costs are optimised - and we are faced with unprecedented supply chain management (SCM) challenges.

Martin Christopher (1) outlines some of the major paradigm shifts which are currently occurring, or are likely to occur in the near future.

Fred Hewitt (2) provides another perspective on the changing supply chain environment. He describes the evolution of SCM in terms of three stages: specialisation, functional management, process management. The defining characteristics of the stages are in terms of management focus and priorities, information systems characteristics, organisation structure and relationship characteristics. Hewitt suggests that the new environment - stage four - can be defined as shown in Table 1 (below).

Sweeney and Faulkner (3) have proposed another perspective based on a global/virtual model. Supply chains have become more global as a direct result of structural changes in the world economy. In addition, they have become more virtual as companies outsource key supply chain functions. These two factors have resulted in SCM becoming a more important determinant of competitive advantage than ever before. They have also made SCM more complex than ever before.

The above changes clearly have a major impact on the knowledge and skills requirements of supply chain professionals. The rest of this article assesses this impact in an Irish context with a particular emphasis on the provision of appropriate SCM learning programmes.

SCM IN IRELAND: THE FUTURE

In developed economies, the continuing shift in emphasis away from manufacturing and towards the provision of high-value services will have a major impact on the essence of SCM in the coming years and decades. Ireland will be particularly affected by this trend, due to the open nature of the economy and the high proportion of imports and exports as a percentage of GDP. Logistics and SCM will become less about the physical movement of material on to and off the island. If Ireland is to become a logistics centre of excellence (at least within the European context), there is a need to think of SCM in a radically different way. In short, SCM will need to move up the value-adding hierarchy. As SCM becomes less concerned with the physical movement of material, it will become more concerned with the management of information and knowledge. This shift has profound implications for the knowledge and skill base of Irish logisticians and supply chain professionals. A recent report by FÁS indicated that demand for supply chain personnel will far exceed supply at all levels if action is not taken (4). Changing SCM also has implications in terms of IT and communications infrastructure. These issues were discussed in more detail in an earlier Logistics Solutions article (5). As pointed out by Sean Dorgan, the CEO of IDA Ireland, in a recent speech (6) "All advanced countries must now think in terms of growing by knowing".

The remainder of this article focuses on

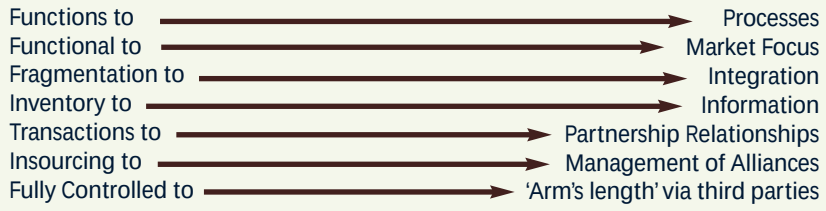

Figure 1 – Paradigm shifts in SCM (modified from Martin Christopher)

'THE ROLE OF THE SUPPLY CHAIN PROFESSIONAL IS AN EVER-CHANGING ONE. AS MARKETS BECOME MORE SOPHISTICATED AND CUSTOMERS MORE DISCERNING, DESIGNING AND IMPLEMENTING SUPPLY CHAINS WHICH MEET THE OFTEN DIVERSE LEVELS OF CUSTOMER SERVICE DEMANDED IN DIFFERENT TARGETED MARKET SEGMENTS, BECOMES A MORE DIFFICULT CHALLENGE'

the learning issues raised by this evolving supply chain environment.

KNOWLEDGE-BASED SCM IN IRELAND: SOME LEARNING ISSUES

People at all levels in the supply chain require broader perspectives combined with the ability and motivation to manage change. As SCM becomes increasingly complex and knowledge-intensive, existing management must constantly develop their competencies to be able to manage the supply chain from strategy through implementation to competitive operation. The development of learning programmes aimed at meeting these needs must address the challenges outlined in the following questions:

- Can programmes be fitted into the busy lives of supply chain professionals?
- How can programmes promote active and involving learning experiences?
- Can programmes be run in different modes and in different locations?
- Do entry requirements recognise the professional and other experience learners bring to programmes?
- Are programmes flexible enough to facilitate individual learning goals and needs?
- Are programmes modular with year-round scheduling?
- Do programmes recognise the services required by learners prior to enrolment?

These questions are based on the model of lifelong learning outlined by Diana Kelly elsewhere in this edition of Logistics Solutions. The next section explores these questions in more detail in relation to NITL's Executive Development Programme (EDP).

LIFELONG LEARNING PARADIGMS IN SCM LEARNING: NITL'S EDP EXPERIENCE

Background

As a consequence of the lack of suitable development opportunities, much of the

Management Focus and Priorities	Information Systems Characteristics	Organisation Structure	Relationship Characteristics
Value Creation	Use of Internet/Extranet/XML/ Browser-accessible applications	Multiple Enterprise	Command Responsibilities
Innovation	Linked ERP for transaction	Connected	Emphasis on trust
Agility/Responsiveness	CPFRs for planning and control	De-centralised	Actively collaborative
Demand-driven		Complementary Contributors	Framework/Agreement/ Rules of membership
		Appointed leaders/ administrators	

Table 1 – Stage Four Logistics Characteristics

PEOPLE AT ALL LEVELS IN THE SUPPLY CHAIN REQUIRE BROADER PERSPECTIVES COMBINED WITH THE ABILITY AND MOTIVATION TO MANAGE CHANGE. AS SCM BECOMES INCREASINGLY COMPLEX AND KNOWLEDGE-INTENSIVE, EXISTING MANAGEMENT MUST CONSTANTLY DEVELOP THEIR COMPETENCIES TO BE ABLE TO MANAGE THE SUPPLY CHAIN FROM STRATEGY THROUGH IMPLEMENTATION TO COMPETITIVE OPERATION

true potential of existing junior and middle supply chain managers remains untapped. As a result, they are prevented from fully contributing to the supply chain change programmes necessary for a company to become, and to remain, competitive. The Executive Development Programme (EDP) provides a broad-based vocational education programme to meet this need. The EDP is primarily a management development programme with an emphasis on logistics and SCM issues. Participants on the EDP do not need formal qualifications to commence the programme, but normally have several years' relevant work experience. They are current or emerging junior or middle managers in every kind and size of business, including manufacturing, process and service industries as well as in logistics service providers and in the public service. Managers from all supply chain functional areas (i.e. purchasing, production, transport and distribution, warehousing and customer service) benefit from the programme. There are currently over 100 participants at various stages in the programme.

Rationale

The EDP recognises that it is generally junior and middle managers who are responsible within companies for the implementation of supply chain strategy and the ongoing operational management of the business. The range of subjects covered by the programme reflects this. The structure of the EDP recognises that it would be impossibly disruptive for most companies to release front-line staff for long periods - the programme is based around intensive 20-hour modules. The EDP also recognises that for learning to be really effective, mechanisms must exist for transfer of knowledge and skills from the classroom environment into the real business environment. There is, therefore, a strong emphasis on work-based assignments and projects. Finally, module design, development, delivery, assessment and continuous improvement are carried out jointly with partner companies in line with the NITL's guiding principle of partnership. This ensures that all programme modules are based on world-class best practice as well as being relevant to the real needs of companies.

Structure and Format

The EDP is a part-time modular programme designed specifically to meet the needs of busy managers. All modules are of 20 hours duration and can be run on weekdays, weekends or evenings. Each subject is delivered as a discrete module and by putting together a set of these modules, the precise content of an individual's programme is tailored according to his/her requirements and/or the company's needs. Participants attend one module every two months on average. All modules are delivered by a mix of professional trainers, academics, consultants and practitioners. Modules are categorised into logistics, technology, management skills and business awareness. There are currently over twenty modules available. The programme was launched in Dublin in 1999 and EDP modules are now run in Galway, Limerick and Belfast, as well as in Dublin. The first Cork module is scheduled to take place in May 2003.

Assessment and Qualifications

Assessment is based on short post-

QUESTION

- Can the programme be fitted into the busy lives of supply chain professionals?
- How can the programme promote active and involving learning experiences?
- Can the programme be run in different modes and in different locations?
- Do the entry requirements recognise the professional and other experience learners bring to the programme?
- Is the programme flexible enough to facilitate individual learning goals and needs?
- Is the programme modular with year-round scheduling?
- Does the programme recognise the services required by learners prior to enrolment?

EDP FEATURE

Part-time and modular, with attendance generally required at weekends. Modules can be chosen in line with work commitments.
A strong emphasis on problem-based learning and practical case studies. Structured group discussion and exercises also used.
Dublin, Cork, Galway, Limerick and Belfast locations. Work currently being undertaken on developing e-learning modules.
There are no formal academic entry requirements. Entry is based on practical experience and the intellectual capability and personal drive to meet the demands of the programme.
By putting together a set of modules, the precise content of an individual's programme is tailored according to his/her requirements.
NITL operates a 12 month year. Modules are scheduled in accordance with participant demand.
The Introduction to SCM module provides guidance on key issues such as study skills, writing skills as well as all administration.

module assignments and in-company projects. As well as providing evidence of participants' understanding of a subject, the assessment process is designed to help them transfer learning back to the workplace, and to provide real benefits to the company. Participants who successfully complete a full 12-module programme and two projects within 24 months are eligible for a Post-Experience Diploma in Supply Chain Management. Alternatively, participants who complete a programme of at least seven modules and one project may be considered for a Post-Experience Certificate. The programme is fully integrated with NITL's other learning programmes.

Lifelong Learning Paradigms and EDP

Earlier a number of questions/challenges in relation to SCM learning programmes were outlined. Table 2 indicates how the EDP addresses each one.

Furthermore, NITL recognises that a robust system of continuous improvement is necessary if any learning programme is to meet its overall objectives. The continuous appraisal of learner feedback is an important input to this process. NITL achieves this through its formal module review process, as well as through less formal ongoing contact with participants through in-company project work and during taught modules. Programme and module improvement teams take this feedback into account in their deliberations.

CONCLUSIONS

SCM is changing rapidly, in particular in the Irish context. Supply Chain Management needs Supply Chain Managers – professionals who can initiate and manage change across the supply chain. The effective supply chain professionals of the future will have the right knowledge, skills, experience and qualifications. Supply chain development programmes must be developed as a partnership between training providers and industry in a spirit of partnership. Furthermore, NITL's EDP experience indicates that if the programmes are to be successful, they must be based on the new model of lifelong learning. If Ireland's potential in this area is to be realised, these lessons need to be embraced as a matter of urgency. LS

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