

The Centre of Excellence

The term Centre of Excellence (CoE) is becoming a popular way of focusing attention in many organizations, but what exactly is a CoE? How does it work and why? Moreover, is it just another 'excellence' fad?

Kerrine Bryan and Ian Herbert answer some typical questions.

What is a 'Centre of Excellence'?

A CoE can be described as a department that, in addition to performing its own routine work, has an additional role in improving its own expertise and knowledge resources, so that in turn it can help other activity centres throughout the organisation to improve. The CoE may comprise a functional or cross-functional team looking both inside and outside the organisation to capture new knowledge and practices. It may be set up as a physical or virtual team, but it will have a permanent rather than just a project status. The defining feature of a CoE is knowledge management.

What does this say about 'other' centres?

We mean that it is easy to overuse the 'excellence' label. We are using it to signify a sense of being *different* rather than (necessarily) *better* than operational units, but of course the objective is to help everyone to improve. Say, there are ten customer service departments, then nine may be 'routine' (non-excellent) and one might operate as a CoE. This should not mean that workers in the non-excellent centres are somehow less worthy, or are offering a sub-standard level of service, rather that the CoE will have a further role in developing its methods and techniques to establish best practice and disseminate this to the other teams.

But in practice 'excellence', does seem to be a wide ranging term

It does have different meanings to different people in different contexts, hence the need to define the CoE in terms of both its structure and the way that it relates to the rest of the organization. Let's do this with an example.

Case study - Washco

Washco was established in the mid 1990s to import and sell high quality domestic washing machines via the internet to retail customers. In recent years, it has created a central sales team to sell a larger version of the basic machines to laundrettes (multi-site) as well as a range of specialist laundry machines, mainly to the hotel trade. All the machines are relatively expensive in comparison to competitors' products because they are made by a top European manufacturer and should have working lives approximately three times longer than normal.

From the outset, Washco's business model was to offer good after-sales service using their own technicians. Initially, service calls were straightforward but, over time, the number of model variations in the field has grown significantly.

As the number of field service technicians increased to around 1,000 a number of different structures have been tried.

1. At first single central base worked fine, but eventually travelling time, per visit increased. Moreover, training and personal supervision by the Director of Service became strained, especially when the range of machines increased.

2. Next, three regional service divisions were set up, each relatively self-contained and able to service all machines (*South, North and East*). This worked well, but proved costly, moreover, the smaller *North* division had relatively few commercial machines and its technicians did not have the opportunity to get familiar with a sufficient range of the common problems. In the *South* division a higher proportion of launderettes created problems as these customers demanded fast response times (24 hours 7 days a week) and more 'first-time' fixes. Technicians were spending more time on launderette machine servicing at the expense of the domestic customers, some of whom were quick to complain about what they saw as a deteriorating service even though it was mostly still within the four working days in the service agreement.

3. In response there was a move from geographical division and three divisions based on customer type were created; home, launderette, and hotels. First time fixes and launderette response times improved but travelling time rose significantly and overall there were no cost saving.

4. In 2005 the structure was changed again. This time a matrix style was adopted with three line managers based on the former regional bases (*South, North and East*) plus three sector managers, (*home, launderette and hotels*). Initially, service levels improved but, over time, there were 'priority' misunderstandings between the technicians and managers which developed into full scale boundary disputes between the managers. Eventually, the response times rose again and the first-time fixes fell due to the range of machines each technician was attending.

5. The present approach based on the CoE model was recommended by another field service company (non-competing) who Washco's founding director Lucy Garner met at a trade dinner. At first she was skeptical. Although, the CoE can be clearly shown in the organization chart, the idea of technicians working in a co-operative way and sharing knowledge for the benefit of all, is to her a 'soft' rather than a 'hard' approach to organisation design. Past experience told her that most people are like her, driven and competitive. If they are not then they need to be told what to do and closely supervised. In her opinion, people have a reluctance to 'give up' what they know, unless it is worth their while. However, she accepted that something needed to be done as the other approaches had all proved to have some drawbacks and there were opportunities to expand if a better standard of service could be guaranteed.

The new organisation structure is shown in Figure 1.

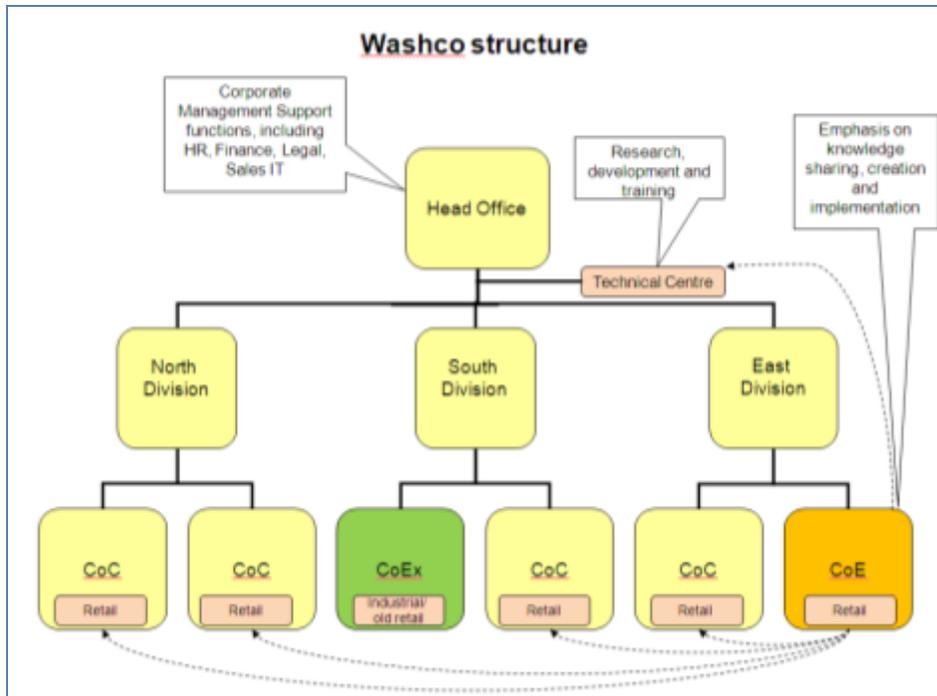


Figure 1 - Washco Structure

In response to Lucy's insistence that any change should be based on clear objectives and an understanding of **how** things will work in practice the Service Director prepared the following commentary.

New Structure

From an analysis of one month's service calls it is clear that as a company we are not learning fast enough from new situations that we are encountering as the customer base and the range of the machines expands. The objectives of the new structure are;

1. To diagnose faults quicker and more reliably on site,
2. Achieve more first time fixes and order the correct parts when a repeat visit is necessary.
3. Reduce travelling time through better matching of skills with service calls and reduce technician training times.

A specialist *Technical* centre which does not undertake service calls will be formed to look at recurrent reliability issues with manufacturers, design better training courses and improve technical support documentation especially as new machines are introduced. To better focus our expertise and create an environment of learning and co-operative working, a Centre of Excellence (CoE) will be created in the East division with a Centre of Expertise (CoEx) in the South Division as follows.

Centre of Excellence (CoE)

The CoE technicians will attend regular service calls but they will have wider experience, greater technical knowledge and some specialist tools and testing equipment. It is expected that they will be able to diagnose a higher percentage of faults on the first visit, and they will also be tasked with problematic jobs, say, those with recurring faults in any region at the discretion of the Service Director.

In addition to service visits they will have a further role in identifying the root cause(s) of problems (perhaps in consultation with the *Technical* centre and the manufacturer) and capturing that experience for the future. This emerging knowledge will need to be made explicit wherever possible and disseminated across the firm, by suggesting amendments to manuals through the *Technical* centre or through 'frequently asked questions' on the corporate intranet. However, some knowledge will be informal or tacit by nature and will be communicated verbally to other technicians through training workshops, telephone calls from service sites and interdivisional secondments. The CoE workers will be given a time allowance each week to look at recurring problems afresh.

Being effective is about having a different outlook together with a strong ability to explain and communicate.

Centres of Competence (CoC)

Washco, technicians have traditionally diagnosed around 85% of faults correctly on the first visit and been able to fix around 70%, although this has varied dependent on the structural imperatives at the time. The majority of technicians will be grouped into four CoCs with a target of diagnosing 95% of faults first time and repairing 80% of the diagnosed problems on the first visit (not all spares are carried by technicians). In the remaining cases, maybe because the machine model is new or the problem unusual or major spares are required, the technician should consult the CoE.

Centre of Expertise (CoEx)

In addition to expected core competencies expert technicians will have additional experience, knowledge, equipment and resources. For example, individual technicians might specialise in certain types of visits or equipment, for example, hotel (as opposed to domestic) customers or older machines. A better understanding of individual expertise will enable more efficient call dispatching and enable specialists to further their own knowledge with the specialist division. Travelling time for these technicians may increase but time will be saved by sending the right person first time.

These technicians will have specialist knowledge but their main focus is to fix the machines that are referred to them, and build up specialist knowledge *within* the team.

The results so far

Over the past six months service levels have improved. Problems and solutions are shared between divisions and the COE and new knowledge is being disseminated back to the other centres from the COE. The general competence of technicians has improved, and the number of first time fixes is slowly increasing.

-----End of Case study-----

A theoretical take on things

There is a lot of detail in the case example. Life is complicated, especially in field service situations and over simplification can leave important holes in one's understanding. The final section looks at how Wasco's new structure can be understood from a knowledge management perspective and as a community of practice.

What is the role of each part of the new structure?

The matrix Figure 2 shows how the four groups of technicians can be thought of in terms of having a future or present outlook and the type of knowledge they use in their work. This helps us to understand the training and support individual technicians might need, and the aptitudes and skills to look for in recruitment and promotion decisions, for example;

1. Field technicians in the *CoCs* need mainly to be able to follow a training course based on a 'right-way' of doing things. In the field, they need to be able to follow manuals and wiring diagrams to diagnose and fix problems fast. In other words, competent technicians will be focused on the present and use mainly explicit knowledge. As they develop they will be encouraged to attempt new or unusual faults by talking to co-workers and the technicians in the *CoE* and feed back into the system recurring issues that need to be sorted for the future but this aspect is likely to remain a small part of their overall role. These technicians will be very practical and process driven in nature.

2. In the *Technical* centre, workers will need to absorb verbal (tacit) knowledge from the field and then by amending the field documentation codify this into explicit knowledge for the future. These technicians will be able to think in more abstract ways and be comfortable in dealing with large volumes of detailed explicit data.

3. In the *CoEx*, engineers will be focused on solving more complex and often situational problems (perhaps higher than normal humidity affecting the machines). They will be able to follow the manual but will have a deeper understanding of the underlying mechanics and electronics of the machines that will allow them to effect 'work-arounds' on the machines. They will also have higher people skills to placate irate customers and sometimes to instruct operators in the correct/alternative way to operate the machines.

4. The CoE technicians will have a broad range of technical skills, significant experience in the field and be comfortable with both practical and abstract aspects of the task. They will be able to fix machines efficiently in the normal course of events but will also be on the look-out for underlying problems that need to be fed back to the Technical centre and/or the manufacturers for correction in the future. They will be keen to share their experiences with colleagues in the CoE and with technicians in the CoCs and the CoEx. They will understand the nature of knowledge in field service and be able to make judgments about when to codify a problem/solution in the service manuals and/or technical updates and when such information is best left to be explained verbally as the need arises or on training courses. For example, it may be an intermittent type of noise that a certain type of machine makes sometimes. It sounds abnormal mechanically but is only of consequence in domestic and launderette situations when customers might be worried by it. In the hotel environment customers need not be concerned once they are aware of the issue.

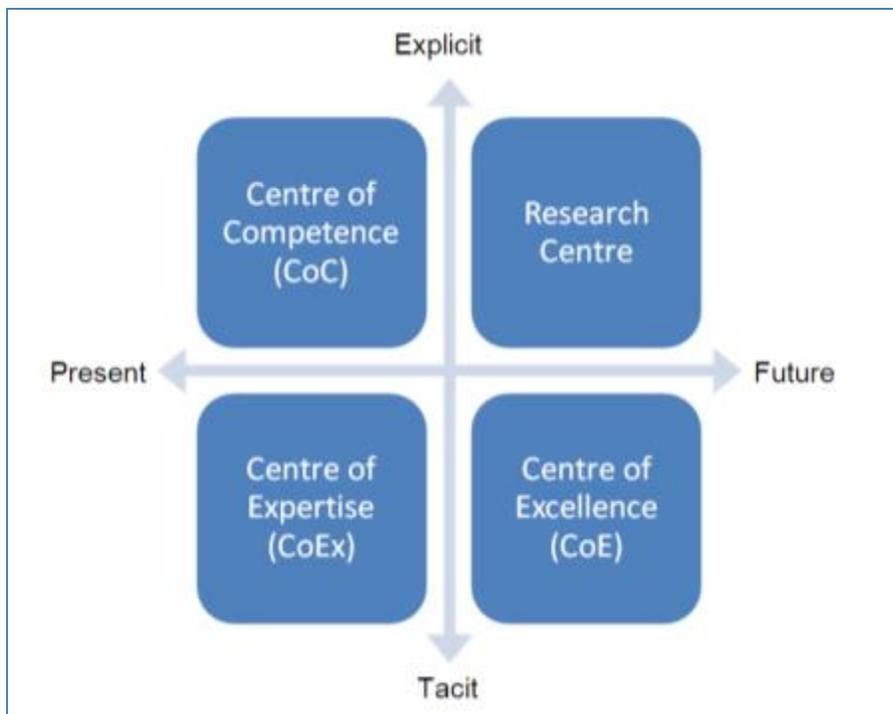


Figure 2 - The Centre of Excellence Matrix

How does the CoE benefit the whole firm?

The CoE strategy is to implement structures, systems and a way of working that:

1. Promotes communication and the sharing of problems.
2. Helps to locate or generate solutions – thus creating new knowledge.
3. Shares and disseminates new tacit and explicit knowledge.

How does it work?

Through the process of sharing problems, information and experiences, employees learn from each other, and have an opportunity to develop themselves and the organization. This is what Wenger (1998) describes as a community of practice (CoP). The CoE should operate as a CoP, encouraging communication and effective exchange of knowledge in solving difficult problems.

Walker and Christenson (2005) argue that as people interact and share insights (such as within a CoP), they gain wisdom as well as redefine existing knowledge into new knowledge.

Disseminating new knowledge will involve, ensuring that this knowledge is used in the correct way to improve products/services and company success. A means of knowledge storage must be provided by the organization. This is usually in the form of databases, libraries or other internal systems.

Conclusion

It is easy to overuse the 'excellence' label, however the case study and frameworks in this article help us to identify the main characteristics of a CoE, the main feature being knowledge management.

Non-excellent centres are not less worthy, nor are they offering a sub-standard level of service, rather that the COEs will have a role in developing their methods and techniques so that best practice can be disseminated to other teams.

References and Further Reading

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		Centre of Competence	Centre of Expertise	Centre of Excellence	Technical Centre
Strategy	<i>Problem Sharing</i>	Problems and experiences are shared on an ad hoc basis	Problems and experiences are shared (often tacitly) within the centre.	Problems and experiences are shared and collected from other parts of the organization through means such as Communities of Practice .	Problems are formally recorded. There is mainly sharing of explicit knowledge.
	<i>Knowledge Creation</i>	Creativity occurs on an Ad hoc basis. New knowledge is not generally created within the centre.	Creativity is encouraged. Tacit knowledge is created through experience.	Willingness, freedom and exploring new avenues.	Structured research in existing areas of work + 'blue sky' thinking
	<i>Knowledge Dissemination</i>	Working practices and procedures largely explicit – changed by official revisions but some 'work- arounds'	Knowledge is available and accessible within the centre. New knowledge and ideas are used but not articulated.	Knowledge is available, accessible and disseminated. Tacit knowledge is articulated.	Existing and new knowledge from external sources is articulated.
Structure	Embedding	Competence and knowledge is used external to the centre on an ad hoc basis	Clear product or service focus. Expertise is mainly utilised by the specialists only and may sometimes be shared outside the specialist division as required.	Frequent communication between divisions or departments Expertise is mainly utilised by and shared with other divisions within the organization or by clients external to the organisation.	Services are used by other divisions/ 'centers' or externally by clients
Systems	Processes and procedures	Routinised procedures only explain the processes of work – the 'what' not necessarily the 'why'	Procedures explain processes of work with specialized detail and systems in place.	There are successful knowledge management systems in place. Processes and procedures are changed accordingly, as soon as new knowledge is uncovered. Workforce can easily adapt to the new systems through excellent transition processes.	Processes and procedures are updated in line with existing industry practices and requirements
Staff	Workforce	Not specialist. Can work in various fields. Subcontractors may be part of work force	There is a physical or virtual team of experts.	There is a physical or virtual team of experts with a Centre of Excellence coordinator.	Employees are dedicated to future focused, time limited projects.
Skills & behaviours	Skill Level	Employees have the competence to carry out work successfully. Training on a 'good enough basis'.	There are specialists within the workforce and specialist training as required.	There are specialists within the workforce and specialist training is encouraged. There is an emphasis on increasing skills and knowledge in the specialist area.	Employees are able to change focus based on the project assigned to.
Style	Working Culture	The focus is on the future with a standard goal and a standard direction.	There is a focus on stability and continuity. There is generally an open culture, with a focus on the present.	A bias toward teamwork, information sharing and participative decision making. There is an emphasis on innovation, creativity and making improvements for the future.	There is a focus on a standard direction and information sharing.

Figure 3 - The Centre of Excellence Framework