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Visions of Improvement: A thematic analysis of executive leadership

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Visions of Improvement: A thematic analysis of executive leadership

Abstract

Purpose: This article explores the themes and gaps around the embedding of continuous improvement (CI) methodologies within public sector organisations and in particular the emergency services.

Design: The article is structured around three case studies of national emergency service organisations in Scotland, UK and is based on 23 interviews with executive members of these organisations as well as of their oversight and inspection bodies and staff associations or unions.

Findings: The findings narrow the gaps in the existing literature around the more holistic and organisation wide approaches to CI and evidence internal challenges around shared understanding, explicit commitment to CI through executive leaders and corporate documents as well as a need for a broader organisational culture of trust and empowerment in order to sustain CI.

Originality: While leadership is long established as a critical success factor in the success of CI initiatives, this is the first research to explore and analyse the existing understanding and commitment of executive leaders in emergency services.

Practical implications: The research identifies clear priorities for sustaining CI within the Emergency services as well as the opportunities and challenges to doing so. These inform internal CI activities as well as intra-agency development and external influences such as the role of Government.

Keywords: continuous improvement; leadership; police; fire; ambulance; public sector; strategy.

Paper Type: Research

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Introduction

Leaders in public services have a legal responsibility to provide ‘best value’ which is defined as the effective management of resources with a focus on improvement to deliver the best possible outcomes for the public (Audit Scotland, 2020). The challenge for leaders is also driven by reductions in public funding leading to difficult decisions around the reduction or withdrawal of services (Antony, Rodgers & Gijo, 2016). The fundamental purpose of this paper is therefore to explore the vision of executive level leaders in the case study organisations as it relates to continuous improvement.

Research in the area of continuous improvement methodologies, consistently identifies leadership as a critical success factor in embedding a culture of continuous improvement (Rodgers & Antony, 2019; Laureani & Antony, 2015; Goodridge et al., 2015). This research has focused on the understanding, knowledge and commitment by executive leaders in three national public sector bodies in Scotland, UK. The article draws on the perspectives of executive leaders of the organisations themselves, their oversight and inspection bodies and their unions and staff associations. The intention is to critically analyse these executive leaders approaches to continuous improvement with the aim of understanding where the organisations are on their legally mandated journey of continuous improvement.

Whilst there is no single definition of continuous improvement, Sanchez and Blanco (2014) state that all definitions have the concept of continuous improvement being a cycle rather than a single act and therefore a constant activity that is carried out over time. In considering, this research, perhaps the most aligned definition is that of Imai (1986), where he states that continuous improvement is progressive improvement involving everyone in the company and that this includes both workers and managers.

This paper is structured around an overview of the literature, this has informed the design of the research, it is then followed by the detailed methods undertaken, then the analysis of the twenty-three semi-structured interviews carried out and the associated discussion. The paper concludes with a presentation of the considered limitations, findings and implications for public sector organisations seeking to embed continuous improvement as part of their organisational cultures.

Embedding a Culture of Continuous Improvement

The three national emergency services in Scotland are committed to a joint strategy aimed at increased collaboration and co-production (Scottish Fire and Rescue Service, 2018). The stated purpose of such collaboration between the services is to enhance the safety and wellbeing of the people of Scotland through empowering staff and communities. The purpose of this paper then takes on additional relevance as a shared understanding of perspectives on continuous improvement can be argued to have even greater importance when it comes to collaboration across agencies and co-production.

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3 This research has been drawn from the analysis of a systematic literature review on Lean and
4 Six Sigma Practices in the public sector (Rodgers & Antony, 2019; Rodgers et al, 2021). The
5 review identified a predominance of case studies applying **continuous** improvement
6 methodologies in health (Baril et al, 2016; Bamford et al, 2015; Bouras, 2015), education
7 (LeMahieu, Nordstrum & Greco, 2017; Svensson et al, 2015; Holmes, Jenicke & Hempel,
8 2015), national government departments (Carter et al, 2012; Radnor, 2010; Radnor &
9 Walley, 2008) and in local government functions (Antony, Rodgers & Cudney, 2017a;
10 Kuvveti and Firuzan, 2019; Suarez-Barraza, Smith and Dahlgaard-Park, 2009). However,
11 gaps in published research around the approach to implementing continuous improvement
12 methodologies in the public sector **were identified**.
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16 Austerity measures and their impact on budgets were frequently commented on as drivers for
17 implementing continuous improvement methodologies such as Lean and Six Sigma (Barton,
18 2013; Douglas, Antony & Douglas, 2015; Balzer, Brodke & Thomas-Kizhakethalackal,
19 2015). **The** priority of cost reduction has been assessed as leading to an over focus on tools
20 and techniques (Radnor, Holweg & Waring, 2012) and short term gains (de Souza & Pidd,
21 2011) rather than strategic alignment and wider organisational change to embed CI **within**
22 **the vision of the organisation**.
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25 **These gaps and findings** lead to research questions such as ‘How do public sector
26 organisations select methodologies for continuous improvement?’, ‘Are continuous
27 improvement approaches built into strategies by public sector organisations and through
28 Government oversight?’ (Rodgers & Antony, 2019), and **additionally** whether the focus is
29 on cost reduction or on efficient and effective services from the perspectives of both
30 employees and service users (Hines & Lethbridge, 2008; Heath & Radcliffe, 2010; Radnor
31 & Osborne, 2013). **This** research **explores** these questions and narrow the identified gaps
32 using the perspectives of executive leaders across the case study organisations.
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35 The systematic literature review (Rodgers & Antony, 2019; Rodgers et al., 2021) additionally
36 identified that within public sector deployments of CI methodologies there was frequently a
37 lack of shared understanding of the organisational approach and meaning of terms such as
38 ‘Lean’ (Radnor, Holweg & Waring, 2012; Radnor & Osborne, 2013; Waring & Bishop,
39 2010) and a gap in the assessment and understanding of organisational culture and its impact
40 on the initiative (Rodgers & Antony, 2019).
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43 The research reported in this paper is intended to **identify** the gaps and emerging themes
44 discussed above. The focus is on the three national emergency services within Scotland, UK
45 as there was an additional identified gap in the **systematic literature review around research**
46 **focused on individual emergency service providers in this area**. For police services, only four
47 previous papers were identified (Adler et al. 2012; Barton, 2013, Fryer & Ogden, 2014;
48 Antony, Rodgers & Cudney, 2017b), for ambulance services, only two papers were identified
49 (Heath & Radcliffe, 2010; Fryer & Ogden, 2014) and finally, for fire and rescue services
50 only one paper (Fryer & Ogden, 2014) was identified. It is therefore additionally intended to
51 narrow the research gap on the approaches to CI undertaken in the emergency services.
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Methodology

Case study organisations

This research explores the state of CI settings within real life situations and as such a case study approach has been adopted (Yin, 2014). In further considering the scale of the public sector and the complexity of culture change specifically set against the journey to embed CI within these organisations, a case study has been further considered most suitable research (Collis & Hussey, 2003). In order to ensure a robust depth of research a multiple case study approach (Herriot & Firestone, 2003) has been undertaken across the three related agencies. Aside from a natural affinity between the three organisations and their alignment in the sense of geography and governmental oversight, there is an existing drive towards greater co-production between all three as exemplified by the creation of the 'Scottish Emergency Services National Collaboration Strategy' during 2018 (Scottish Fire & Rescue Service, 2018).

An additional opportunity is the recognition that both the Police Scotland and the Scottish Fire and Rescue services have only been in existence since 2013 (Scottish Government, 2012) whereas the national Scottish Ambulance Service was created in 1947 when it was taken over by the National Health Service and was given the status as a Health Board in its own right in 1995 (St. Andrews First Aid, 2019) and as such while the former two organisations remain on a significant radical change journey through their respective mergers, the Scottish Ambulance Service is a more mature organisation.

While it is generally inappropriate to generalise from case studies (Yin, 2014), a multiple case study approach has been applied in order to support the identification of patterns which can inform both further research and practitioner application more broadly within the UK and wider public services.

Participant selection

A non-probability sampling approach was selected as the potential population for this research is defined in many respects by job role. This is also by definition a small group given the number of executive posts within organisations. Purposive sampling was utilised in order to identify the potential interviewees who were best able to assist in answering the research questions (Etikan, Musa & Alkassim, 2016). The approach supports the identification of individual cases within the relatively small potential sample number where rich data on the research subject could be gathered (Shaw, 1999).

Each organisation was approached to invite executive members to participate in the research. Accordingly, the organisations who agreed to participate were; Police Scotland, Scottish Fire and Rescue Service, Scottish Ambulance Service, Audit Scotland, Her Majesties Inspector of Constabulary Scotland (HMICS), Her Majesties Fire Service Inspectorate in Scotland (HMFSI), Scottish Police Authority (SPA), Scottish Fire & Rescue Service Board, Scottish Ambulance Service Board, UNISON, Fire Brigades Unions, Scottish Police Federation (SPF) and Association of Scottish Police Superintendents (ASPS).

Data collection

In seeking to understand leadership perspectives, a qualitative approach was undertaken and given the research objective semi structured interviews were preferred as a data collection method (Rowley, 2012) given their supportive nature of the case study approach (Silverman, 2010). The key themes drawn from the literature are shown below in table 1 and were used as the structure for the interviews.

INSERT TABLE 1 HERE

Data analysis

Similar to Schulte, Andresen and Koller (2019), as the research was focused on formal and hierarchical organisations, the most senior and most experienced postholders were interviewed in order to understand the organisational thinking. Most of the twenty-three interviewees were affiliated to only one of the case study organisations, and this further broke down to nine interviewees affiliated to policing, eight interviewees affiliated to fire and rescue, four from ambulance services and finally two interviewees whose remit covered more than one of the case study organisations.

In order to additionally provide some context on the roles of interviewees, eight represented 'Oversight & Inspection' which includes Board Membership and Auditing and Inspection roles, ten were in 'Executive Leadership' positions which includes interviewees at Director level and above, and finally five held executive positions within 'Union and Staff Associations'.

The interviews were transcribed and thereafter analysed using NVivo 12. Given the basis of the interviews being themes derived from a related literature review, a directed content analysis approach was utilised (Hsien & Shannon, 2005) Some of the themes were therefore pre-figured, however additional themes emerged from analysis of the data (Rowley, 2012). A total of 23 themes were identified and these were thereafter regrouped into 5 overarching themes as shown in figure 1.

INSERT FIGURE 1 HERE

Findings

The interviews specifically explored themes identified and developed from the literature review (Rodgers & Antony, 2019). In considering the broad use of the term CI within public sector organisations, interviewees explored their own knowledge and understanding of CI, how CI was integrated into the organisations strategy and vision as well as whether their own experience of the culture of the organisation supported CI. The latter particularly links back to employees motivation and feelings of empowerment to make positive improvements. Finally the interviewees were asked to consider external factors from a strategic perspective as well as identify opportunities and challenges for organisational growth in the area of CI.

Individual Experience and understanding of CI

All twenty-three interviewees were asked about their understanding of CI and their experience of improvement methodologies or associated tools and techniques as an introductory question. The responses are summarised in table 2.

INSERT TABLE 2 HERE

An area for the success of CI initiatives is leadership commitment. Facets of this include leading by example, understanding of methodologies and resourcing and supporting such initiatives (Laureani & Antony, 2015; Goodridge et al. 2015). All interviewees placed importance on CI in regard to their respective organisations, however in defining CI, there was no organisational **commonality**. This is suggestive **that** none of the case study organisations having formally defined CI. One of the emerging themes from the literature (Rodgers & Antony, 2019) is the importance of such shared understanding of what is meant by CI or specifically Lean within organisations. There is no evidence from the interview data that any of the three case study organisations have defined CI to ensure common agreement on understanding and application. *“I don’t think we’ve got a lack of tools and methods with which to improve the service. I think it’s all there for us. I just don’t think we pay enough attention to it.” (Interviewee ‘M’)*

All interviewees commented on the importance of CI, but the perspectives on leadership were mixed, for example, Interviewee ‘A’ commented that they were “unclear on leadership buy-in to CI tools and techniques” within the police service. By comparison, Interviewee ‘B’ commented on the employment of a CI expert at executive level to operate as a champion within the ambulance service. More broadly, interviewees commented on the leadership role in culture change, empowerment and communication to support CI but did so in terms of future development rather than current delivery.

From the analysis of the themes raised by interviewees, there is common agreement of the importance of CI, however there is no clear evidence of shared definitions either within or across the three case study organisations. Importantly, there is an apparent gap in either the knowledge of or the training in CI methodologies broadly across the leadership of the three organisations, albeit less so within the ambulance service. Finally, there appears to be agreement in confusion over the roles and application of **continuous and radical improvement**. Interviewee ‘O’ stated in the context of the fire service, and the links and relationships between self-assessment frameworks and CI methodologies; *“I don’t think we’ve ever really worked out what the two mean.”*

Organisational strategy and approach to CI

The interviewees had mixed views on their respective organisational strategies around CI. Within the ambulance services some interviewees felt that CI was very explicit, and quality was a key business strategy (Interviewees ‘B’ and ‘C’) whereas interviewee ‘K’ felt that CI was more implicit within the strategy than explicit. Across the other case study organisations, within fire, interviewees ‘L’, ‘N’ and ‘Q’ felt that CI was explicit within the strategies and was a golden thread through corporate documents, whereas Interviewees ‘M’ and ‘O’ felt it was more implicit and required development. Finally, in policing, all interviewees commented on explicit references to CI within strategies, but all agreed on an apparent

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3 disconnect between strategy and practice. *“The danger is that people will latch on the*
4 *methodologies and try and drive them through as being the end game, rather than having*
5 *that strategic bit around driving forward a culture of continuous improvement.” (Interviewee*
6 *‘A’)*

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9 There were no references during the interviews to any roadmaps for embedding CI or links
10 to performance frameworks and outcomes nor explicit holistic CI plans within the case study
11 organisations which would support successful implementation of the strategies. Interviewee
12 responses are summarised in table 3.

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15 INSERT TABLE 3 HERE

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17 As introduced earlier in the analysis, there are a significant number of references to self-
18 assessment frameworks but apparent gaps in understanding of CI methodologies and
19 similarly training in those methodologies. This is linked to strategies and implementation
20 plans above in terms of the apparent gaps in plans or roadmaps around CI implementation
21 within the case study organisations.

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24 In terms of listening to staff and engaging them in CI, again there are mixed views amongst
25 interviewees. Interviewees ‘A’, ‘B’ and ‘C’ all describe ‘listening activities’ and more
26 interviewees (‘D’, ‘E’, ‘I’ and ‘J’) all comment on the importance of involving and listening
27 to staff. This stated, there are additional comments around such activities being more ‘telling’
28 than ‘listening’ and still being somewhat ‘top-down’ within police and fire. There is a
29 consensus that there is a genuine desire to engage the workforce across the three case study
30 organisations. *“So how do we get people to buy into improvement? I find it really easy. You*
31 *talk to them in language that brings it back to, why are you here? What do you like about*
32 *your job, and how can we make it better? How can you make it better? And empower people*
33 *to make it better.” (Interviewee ‘C’).*

34 35 36 **Understanding of organisational culture**

37 The theme of organisational culture was repeatedly returned to by interviewees. Within the
38 ambulance service, there was comment on an emerging culture of data driven or evidence-
39 based decision making to support CI (interviewee’s ‘C’ and ‘K’) and within that, the
40 importance of a shared language around CI being supportive of culture change (interviewee
41 ‘B’). These views were consistent across executive leadership and oversight and inspection
42 within the ambulance service. Interviewees affiliated to police and fire expressed more
43 diverse legacy cultural impact and perceived issues over the centralisation of policies,
44 practices and associated decision making (interviewees ‘D’, ‘L’, ‘F’ and ‘I’). Beyond this
45 there were elements of shared perceptions that transformation programmes within police and
46 fire focused too heavily on organisational structures and did not tackle culture change
47 effectively. Interviewees ‘F’ and ‘L’ additionally commented on the culture of staff to ‘get
48 things done’ regardless of policy and practices which in their views lessened engagement
49 with CI initiatives as they worked round processes rather than changed them.

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54 A related factor raised by interviewees and linked to the centralisation of policies, practices
55 and functions within police and fire was the perceived lack of empowerment of staff to make
56 decisions and implement improvements at a local level. Interviewees views range from
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3 “empowerment hasn’t happened yet” (interviewee ‘D’) through “it’s probably there, but it
4 doesn’t feel like it yet” (interviewee ‘E’) to “there is no empowerment” (interviewee ‘F’).
5 Interviewees affiliated to the ambulance service tended to give specific examples of
6 empowered staff making improvements, this is summarised by interviewee ‘C’ who stated
7 “...start really small, test in a different environment, adapt and then get local people to use
8 it locally to make the changes, rather than a top-down...”. Whereas within the newer
9 services; “People retreated into their own boundaries. We maybe need to create some kind
10 of catalyst, something that says, it’s probably better carrot than stick, to move that public-
11 sector agenda into a new space, a new paradigm, a new way of working.” (Interviewee ‘F’).
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14 **External influence and factors**

15 This theme explores the interviewees consideration of the role of the government in leading,
16 supporting, encouraging or enabling CI and how well or otherwise this is achieved.
17 Interviewees were split in their views on the role government has had or should have.
18 Interviewees ‘A’, ‘B’, ‘C’, ‘E’, ‘G’ and ‘P’ all expressed positive views about the
19 governments drive towards outcomes and support of Christie Commission recommendations
20 which create a positive environment for CI.
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24 The development of shared leadership approaches was commented on. These views are
25 largely expressed by the oversight and inspection interviewees within the sample. From a
26 contrary perspective, the short term nature of politics and the yearly allocation of individual
27 agency budgets act as inhibitors for improvement (Interviewee’s ‘G’, ‘F’, ‘H’, ‘I’, ‘L’, ‘O’,
28 ‘Q’, ‘S’, ‘T’, ‘U’ and ‘V’). In some respects interviewee’s expressed resignation to the short
29 term nature of politics but also frustration when government stated they would not interfere
30 with operational decisions compared a perceived willingness of government to become
31 involved in operational decisions due to media reporting or politics; “The actual experience
32 of what really matters and what you’re actually held to account for are not how you work in
33 a partnership or the extent to which you’re designing preventative services and all those
34 things. It’s the extent to which you’re hitting the following targets.” (interviewee ‘G’). The
35 key areas of agreement as to the role government should play was around single year and
36 single agency budgeting processes which interviewees felt impeded co-production and
37 breaking down silos; “I think that’s probably the big dilemma at the moment. The more work
38 you do for somebody else, it’s costing you but you’re not getting reimbursement for it in the
39 biggest terms, not just money.” (interviewee ‘D’).
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44 **Opportunities and challenges**

45 The final section of the interviews addressed the long-term potential for developing an
46 embedded culture of CI within the case study organisations. These are summarised for
47 comparative purposes by keywords and presented in table 4.
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51 INSERT TABLE 4 HERE

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53 In considering the opportunities to embed a culture of CI, there is a pattern from interviewees
54 who view the public service motivation of staff to be the key opportunity, this refers to the
55 belief that staff who work in the public sector are disposed to ‘make a difference’
56 (interviewees ‘F’, ‘H’, ‘L’, ‘M’, ‘N’, ‘T’ and ‘V’) these responses cover all three of the
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3 emergency services. This shows the perspectives from both executive leadership and
4 representative associations. It is also considered that the motivation of the leadership will
5 have an impact on the motivation and work experience of the employees. Where the social
6 interests or motivation of the executive leaders are aligned with their role in a social service
7 organisation, it is more likely to deliver a positive experience and a more transformational
8 leadership approach (Gilbert, Myrtle & Sohi, 2015). As such, the motivation of the executive
9 leaders is as important as the motivation of the employees.
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12 Interviewee 'A' viewed the emerging environment of innovation in transformational change
13 programmes as an opportunity within policing, while Interviewees 'J' and 'W' observed that
14 new leaders within the same organisation were more orientated towards embracing
15 improvement. The importance of positive leadership behaviours was also emphasised with
16 the view that negative behaviours by some managers also drove short term transactional
17 decisions. This is reflected on by Haynes, Josefy and Hitt (2015) who argued that managerial
18 greed or extreme self interest drove short term decisions and performance rather than a
19 balance with altruism and greater alignment with corporate goals. Finally, Interviewee 'G'
20 saw the emerging focus of empowering communities to be a key opportunity to further
21 embrace CI.
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25 In terms of challenges and barriers, the main consensus was around the need to empower
26 staff to enable them to contribute to CI (interviewees, 'D', 'G', 'M', and 'U') and this covered
27 all three case study organisations and particularly from an oversight or inspection
28 perspective. Organisational culture was equally commented on (interviewees, 'B', 'E', 'M'
29 and 'W') and overcoming resistance to change as well as weariness of change. As can be
30 viewed in table 4, interviewees also commented on the impact of austerity and the challenge
31 of short-term measures to meet budget reductions, in the same context, how this pushed
32 leaders towards more transactional behaviours and reinforced silo working.
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35 Discussion

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37 While the interviews within the executive of the ambulance service suggested there was a
38 shared understanding of the primarily used approach of the Plan-Do-Study-Act (PDSA)
39 cycle as well as understanding of Lean and Kaizen in particular. In contrast, the executives
40 of the newer national police and fire services expressed less awareness of methodologies and
41 tended only to show an awareness of self-assessment frameworks rather than improvement
42 methodologies. More specifically, there was a consensus that insufficient attention was paid
43 to CI and there was a lack of clarity over leadership commitment to it. This tends to be
44 supportive of the literature where a lack of explicit commitment in strategic documents does
45 not provide a consistent narrative of a coherent approach to CI. Linked to this and as shown
46 in table three, the interviewees of the longer established ambulance service felt consistently
47 that they had a clear and explicit approach to CI whereas there was disagreement between
48 executive members from police and fire who felt in particular that there was no clear
49 approach to CI. There is clear evidence that there is no shared vision within each executive
50 group nor across the executive groups as to what CI is and how it should become part of the
51 DNA of the organisation.
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3 The interviewees all spoke to varying degrees about the importance of engaging with and
4 listening to staff but observed, in particular within police and fire services, that they were
5 not yet very strong at this and there was no specific evidence around how this was achieved
6 nor processes for the ways in which suggestions were implemented and ideas were supported
7 or delivered. Again, there is a clear split between the case study organisations where police
8 and fire felt that the extent of their change programmes and the demand on them was such
9 that some engagement, empowerment and simple listening activities had become more top
10 down ‘telling’ rather than listening. This supports the literature again in the sense that CI is
11 about much more than a methodology and tools and techniques and any initiative or plan
12 needs to touch on all aspects of the organisation and is not simply a process for delivering
13 the improvements themselves. Executive members representing the police and fire services
14 particularly felt that empowerment of staff had significantly reduced during the creation of
15 the new services and had not yet reclaimed its grip in the new services.
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19 These differences between the ambulance service, which is long established in its current
20 format, and the other emergency services created in 2013 ask the question of whether CI can
21 thrive in environments of major change, does it need settled organisations in order to
22 flourish? Or is it simply that when leaders are focused on radical change there is no place for
23 the non-project based activity? Indeed many of the interviewees conflated radical change and
24 CI. The literature does not support the idea that organisations must choose between radical
25 improvement and CI but again this can come back to the understanding, commitment and
26 leadership of executives and more broadly the employees in the organisation.
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29 Interviewees spoke about the negative impact of the public sector budgeting process where
30 year on year reductions were required and budgets were in ‘silo’s’ which limited agencies
31 working together. This reflects the discussion in the literature about year on year savings
32 targets potentially stifling change and improvement activities in these public services.
33 Positively, the interviewees consistently felt that the potential for embedding CI was within
34 each organisation and could be driven by existing commitment, creativity and motivation of
35 the employees albeit this was not fully understood nor harnessed at the current time. They
36 also felt that the lack of leadership in this area and lack of empowerment of staff was most
37 challenging to development but also recognised that the challenges of austerity and some
38 organisational culture issues were an impediment.
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42 **Conclusion**

43 This research uses the three case study organisations to test and explore the themes and
44 perceived gaps from the literature around CI, as well as analyse and contrast three related
45 agencies but which were at different stages of their development in terms of current
46 structures.
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49 In terms of themes, knowledge and understanding of CI is clearly shown to be limited in the
50 case study organisations and where knowledge exists it is mainly within the Ambulance
51 service and reflects the wider dominance of Lean in healthcare in particular. If organisations
52 are to develop strategies and plans for organisational approaches (or even intra-organisational
53 approaches) there is a need to wider understanding of all CI methodologies in order to match
54 improvement opportunities to the tools and techniques best suited to optimise benefit. More
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3 than this, it is core that regardless of which methodologies are included, there is a common
4 understanding and language used in order to embed and sustain CI.
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6 This is however about much more than tools and techniques and exploring some of the gaps
7 suggests that the starting point is strategic alignment and a shared understanding of approach
8 along with explicit reference to CI throughout plans and initiatives. More than this, the
9 holistic nature of a CI approach means that beyond policies and activities the culture of the
10 organisation must be developed to support sustained CI. Staff need to feel empowered and
11 trusted to participate and need to feel listened to and so CI is about more than shared
12 definitions, appropriate methodologies and detailing of approaches about CI within strategy.
13 The complementary aspect is that leaders need to be clear on their commitment and support
14 to CI.
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18 In practical terms, the critical review of the established literature in the field, considered
19 against the vision and knowledge of the executive leadership of the case study organisations,
20 their representative organisations and oversight and inspection bodies evidences the need for
21 an agreed definition of CI. This can then be integrated into organisational strategy and
22 incorporated into action plans through all aspects of the organisation. This consequently
23 requires leaders to consistently champion CI and develop and empower their people to
24 improve public services as a core part of their roles.
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27 This research also identifies some challenges, the solutions for which, are out with the
28 immediate gift of the case study organisations but sit with Government on how they enable
29 organisations to embed a culture of CI in particular through approaches to budget allocation
30 and developing co-production and the resultant decrease in silo working between public
31 sector organisations. However, there is much that leaders can do within their own
32 organisations that would support an embedded culture of CI.
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International Journal of Emergency Services

Emerging Themes	Gaps
Applicability of Lean Six Sigma in the Public Sector	Evidence of Strategic Alignment of continuous improvement initiatives
Dominance of Lean only approaches in the public sector	Evidence of understanding of readiness and organisational culture for continuous improvement
Shared Understanding of Lean and continuous improvement	Role of Government in continuous improvement for public sector services
Disconnect with Human Resource Departments/Functions	Understanding the Voice of the Customer
	The impact of organisational culture on continuous improvement initiatives

Table 1. Key Themes & Gaps from the review of Literature (Rodgers & Antony, 2019)

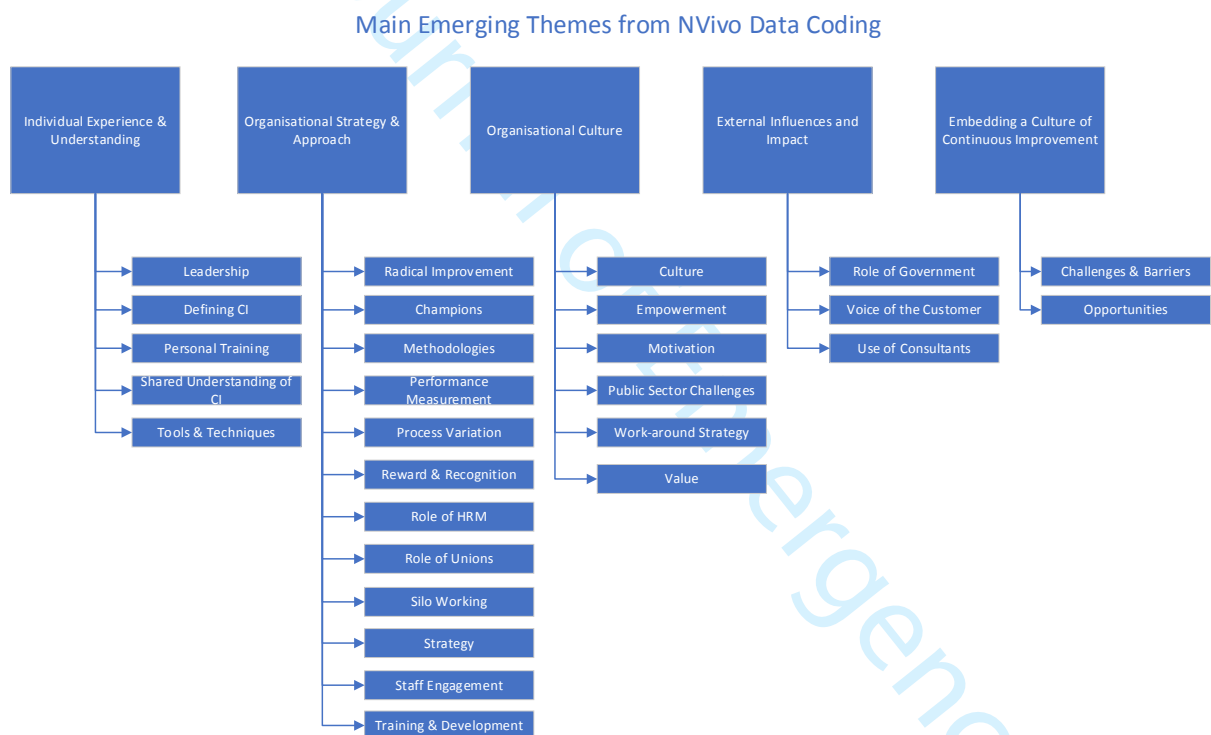


Figure 1. Grouping of emerging themes from NVivo Coding

Interviewee	Affiliation	Methodologies	Interviewee	Affiliation	Methodologies
'A'	Police	EFQM, PSIF	'M'	Fire	EFQM
'B'	Ambulance	Kaizen, Lean, PDSA	'N'	Fire	Lean
'C'	Ambulance	PDSA	'O'	Fire	EFQM, PSIF
'D'	Fire	None	'P'	Fire	EFQM, PSIF
'E'	All	Lean	'Q'	Fire	Kaizen, Lean, PDCA
'F'	Police	TQM, EFQM	'R'	Police	None
'G'	All	EFQM, PSIF	'S'	Fire	None
'H'	Ambulance	Lean, Six Sigma	'T'	Police	None
'I'	Police	None	'U'	Police	None
'J'	Police	EFQM, PSIF	'V'	Police	None
'K'	Ambulance	PDSA	'W'	Police	Lean
'L'	Fire	EFQM, PSIF			

Table 2. Interviewees experience of improvement methodologies

	Ambulance (n4)	Police (n9)	Fire (n8)
Explicit commitment to CI	'B', 'C', 'H', 'K'	'A', 'F', 'U', 'V'	'D', 'L', 'M', 'P', 'Q'
Implicit commitment to CI		'I', 'J', 'R', 'T', 'W'	'N', 'O', 'S'
Clear approach to CI	'B', 'C', 'H', 'K'		'P', 'Q'
No clear approach to CI		'A', 'F', 'I', 'J', 'R', 'T', 'U', 'V', 'W'	'D', 'L', 'M', 'N', 'O', 'S'

Table 3: Executive interviewee perspectives on organisational commitment to CI

Interviewee	Opportunities	Challenges/Barriers	Interviewee	Opportunities	Challenges/Barriers
'A'	Innovation	Understanding	'M'	Motivation	Empowerment
'B'		Culture	'N'	Motivation	Culture
'C'			'O'	Motivation	
'D'		Empowerment	'P'		Austerity
'E'		Culture	'Q'	Leadership	Complex methodologies
'F'	Motivation	Leadership	'R'		
'G'	Community Empowerment	Empowerment, Leadership	'S'		
'H'	Motivation	Understanding Customers	'T'	Motivation	Silo's
'I'		Austerity, Silo's	'U'	Learning Culture	Empowerment, performance management

'J'	Leadership	Radical Improvement	'V'	Motivation	Austerity
'K'		Motivation	'W'	Leadership	Organisation size, culture
'L'	Motivation	Austerity, Engagement			

Table 4. Summary of Opportunities & Challenges/Barriers

Reviewer's comments	Authors' response
Reviewer 1	
<p>Thank you for submitting your paper for consideration in the International Journal of Emergency Services. This is a really useful and important focus and provides a great start to work that could be published. Your paper however just needs some greater depth and critical analysis and consideration of recommendations and implications.</p>	<p>Thank you, we appreciate your time and feedback in reviewing this paper and have sought to respond to your comments in turn.</p>
<p>. In my opinion this paper is a great start but there are a number of improvements required, as detailed in the following sections before it could be published. I hope these suggestions are helpful to you in developing a fuller paper:</p> <p>* The Title of the paper and its claimed focus doesn't seem to reflect its content.</p> <p>* There needs to be a greater focus provided to the paper</p>	<p>This is an area which presents different views from the reviewers and in seeking to respect both views, we have maintained the title but provided an additional sentence in the introduction which further signposts the logic and reason for the title.</p> <p>As part of our review, we have sought to ensure a clear story and consistency of focus through the paper.</p>
<p>There needs to be a greater clarity on the focus of the research in relation to CI methodologies. There is a brief mention to Lean, but it is not clear how this links or what the approach of the researcher was.</p> <p>The impression from this paper is that it is part of a larger report - PhD perhaps? And so the extra depth and content required is there.</p>	<p>This is a debated area between the reviewers for this article and while we respect both views we are limited by the Journal word count in terms of balancing all elements as well as the depth of detail in each section. We would respectfully submit that in agreement with reviewer 2, there is a strong level of detail in the methodology section but also recognise that more detail could be provided if the word count was unlimited.</p> <p>We would confirm that this article was much larger and when initially drafted was over 8000 words given that we are keen to target this at the International Journal of Emergency Services we have edited it significantly in order to comply with the journal word limits for articles. We agree in doing this we may have created some imbalance in the paper or caused some lack of clarity and have thoroughly reviewed the paper in order to address this.</p>
<p>This research focuses on three Scottish emergency service organisations and this needs to be made clearer. The limitations</p>	<p>Thank you, we agree and these points are addressed in the methodology section. The</p>

<p>and implications of this and the applicability and generalisability of these findings to other organisations both within and outside of Scotland need to be critically analysed. The reasons for focusing on Scotland and also on the three organisations selected need to be justified, as does the methodology and sample size selected.</p>	<p>section 'case study organisations' rationalises this selection.</p> <p>The generalisation of case study approaches in general and of qualitative research in particular is much debated and we have added a further reference to Yin to support this debate and clarify that generalisation and theory are not supported but in line with multiple case study approaches this supports the identification of patterns and themes.</p>
<p>The results are clearly presented but need to be analysed and developed more in relation to the points highlighted above.</p>	<p>Please see response above, in support of the evidence on the generalisation of case studies, themes and patterns have been presented, sufficient to allow both further research as well as have clear practical implications for public sector leaders to see the high level themes required for an integrated approach to CI. We would agree that there could be further analyse presented and respect this view but additionally respect the author guidelines of the Journal and as such we have balanced clear findings and evidence from the interviews within the article guidelines and word limitations.</p>
<p>Conclusions are provided and these hint at some very exciting possibilities and a real need in the emergency services in Scotland. However the conclusions are quite general and there are no specific recommendations at the moment. No real consideration of implications.</p>	<p>An additional explicit paragraph stating practical implications has been added. The authors agree more broadly and have developed a framework for CI in the public sector which will be a follow on article further supporting this submission.</p>
Reviewer 2	
<p>I am happy to have the opportunity to review this manuscript for the IJES. Overall, the author addresses a vital research question during a critical time. A robust methods section supports this manuscript. The author's understanding of the case study methodology is apparent, and I most enjoyed reading the methods section. However, overall readability is an issue, as the author frequently uses long sentence structures that are difficult to comprehend. Improving conciseness in sentence structure and increasing the use of transitional words and phrases (ex: therefore, thus, however, etc.)</p>	<p>Thanks for your feedback and comments, they are gratefully received. Taking on board these comments, we have reviewed the entire manuscript for structure and the length of sentences to improve readability.</p>

<p>between sentences will improve readability and flow.</p>	
<p>Consequently, I recommend employing scholarly writing strategies described in "Elements of Style" by Strunk and White to help improve readability. Also, readers may not be familiar with the details of Continuous Improvement (CI) methodologies. Therefore, adding a complete description of CI will help with clarity. Ultimately, this manuscript's structure, organization, and content are strong. Thus, with the general recommendations described above and the specific points addressed below, I would recommend publication.</p>	<p>Again, thank you for your recommendation, we have reviewed this text and incorporated recommendations into our revision.</p>
<p>The title and abstract are excellent, and I recommend no changes.</p> <p>For the most part, the author provides a well-written and precise description of the topic. However, the length of the second sentence in the second paragraph (Page 2, Lines 19-25) interferes with overall readability. Therefore, I recommend breaking the sentence into smaller components.</p>	<p>Thank you, this is noted but in balancing the recommendations of the first reviewer, we have further sought to link the title into the introduction section for clarity and flow.</p> <p>Thank you, the second paragraph has been restructured for readability as suggested.</p>
<p>(Page 2, Line 30): Missing "a" in front of the word "presentation."</p>	<p>This has been added.</p>
<p>*A definition of Continuous Improvement (CI) methodologies should be added to enhance clarity.</p>	<p>Thank you a definition and paragraph has been added in the introduction to address this.</p>
<p>(Page 2, Line 37) First sentence: Explain why the three national emergency services are increasing collaboration; this will bring a greater understanding of the topic's importance.</p>	<p>An additional sentence to explain this is now included.</p>
<p>(Page 3, Lines 10-18): Clear and relevant research questions – nicely done</p>	<p>Thank you, this is greatly appreciated</p>
<p>(Page 3, Lines 29-37): The last paragraph is difficult to understand; breaking the first sentence into smaller ones will assist with clarity.</p>	<p>This has been restructured to provide more clarity.</p>

<p>(Page 3, Line 46): Yin, 2014 is a vital source for case studies – nicely done</p>	<p>Thank you.</p>
<p>(Page 3, Lines 53-55): This sentence clarifies your initial statement on increasing collaboration (Page 2, Line 37). Adding a similar reference to page 2, line 37, will enhance the clarity earlier.</p>	<p>This additional sentence at P2 L37 has been added and the collaborative agreement referenced.</p>
<p>(Page 4, Lines 15-22): Clear and concise description of your sampling approach – well done</p>	<p>Again, this positive feedback is appreciated from the reviewer.</p>
<p>No content changes are recommended. However, as described previously, forming more concise sentences will significantly improve this section's readability and overall flow.</p>	<p>This has been the main focus of our revision based on these comments</p>
<p>(Page 8, Line 55): The acronym SAS is confusing as it has not been previously used.</p>	<p>This has been changed to 'ambulance service'</p>
<p>(Page 8, Line 56): What does PDSA stand for? Be more specific.</p>	<p>This has been changed to 'Plan-Do-Study-Act (PDSA)'</p>
<p>Overall readability is an issue, as the author frequently uses long sentence structures that are difficult to comprehend. Improving conciseness in sentence structure and increasing the use of transitional words and phrases (ex: therefore, thus, however, etc.) between sentences will improve readability and flow. Please see attached file for specifics.</p>	<p>We have extensively reviewed and revised our submission to address this.</p>

Visions of Improvement: A thematic analysis of executive leadership

Abstract

Purpose: This article explores the themes and gaps around the embedding of continuous improvement (CI) methodologies within public sector organisations and in particular the emergency services.

Design: The article is structured around three case studies of national emergency service organisations in Scotland, UK and is based on 23 interviews with executive members of these organisations as well as of their oversight and inspection bodies and staff associations or unions.

Findings: The findings narrow the gaps in the existing literature around the more holistic and organisation wide approaches to CI and evidence internal challenges around shared understanding, explicit commitment to CI through executive leaders and corporate documents as well as a need for a broader organisational culture of trust and empowerment in order to sustain CI.

Originality: While leadership is long established as a critical success factor in the success of CI initiatives, this is the first research to explore and analyse the existing understanding and commitment of executive leaders in emergency services.

Practical implications: The research identifies clear priorities for sustaining CI within the Emergency services as well as the opportunities and challenges to doing so. These inform internal CI activities as well as intra-agency development and external influences such as the role of Government.

Keywords: continuous improvement; leadership; police; fire; ambulance; public sector; strategy.

Paper Type: Research

Visions of Improvement: A thematic analysis of executive leadership

Introduction

Leaders in public services have a legal responsibility to provide ‘best value’ which is defined as the effective management of resources with a focus on improvement to deliver the best possible outcomes for the public (Audit Scotland, 2020). The challenge for leaders is also driven by reductions in public funding leading to difficult decisions around the reduction or withdrawal of services (Antony, Rodgers & Gijo, 2016).

Research in the area of continuous improvement methodologies, additionally consistently identifies leadership as a critical success factor in embedding a culture of continuous improvement (Rodgers & Antony, 2019; Laureani & Antony, 2015; Goodridge et al., 2015). This research has focused on the understanding, knowledge and commitment by executive leaders in three national public sector bodies in Scotland, UK and includes perspectives from executive leaders of the organisations themselves, their oversight and inspection bodies and their unions and staff associations with the intention of critically analysing their approach to continuous improvement and the aim of understanding where the organisations are on their legally mandated journey of continuous improvement.

This paper is structured around an overview of the literature which has informed the design of the research followed by the detailed methods undertaken and the analysis of the twenty-three semi-structured interviews carried out and the associated discussion. The paper concludes with presentation of the considered limitations, findings and implications for public sector organisations seeking to embed continuous improvement as part of their organisational cultures.

Embedding a Culture of Continuous Improvement

At a time when the three national emergency services in Scotland are committed to a joint strategy aimed at increased collaboration and co-production (Scottish Fire and Rescue Service, 2018), a shared understanding of perspectives on continuous improvement can be argued to have a greater importance when it comes to mapping needs, services or processes across agencies.

This research has been drawn from the analysis of a systematic literature review on Lean and Six Sigma Practices in the public sector (Rodgers & Antony, 2019; Rodgers et al, 2021). The review identified a predominance of case studies applying improvement methodologies in health (Baril et al, 2016; Bamford et al, 2015; Bouras, 2015), education (LeMahieu, Nordstrum & Greco, 2017; Svensson et al, 2015; Holmes, Jenicke & Hempel, 2015), national government departments (Carter et al, 2012; Radnor, 2010; Radnor & Walley, 2008) and in local government functions (Antony, Rodgers & Cudney, 2017a; Kuvveti and Firuzan, 2019; Suarez-Barraza, Smith and Dahlgaard-Park, 2009). However, gaps in published research around the approach to implementing continuous improvement methodologies in the public sector were also identified. Austerity measures and their impact on budgets were frequently commented on as drivers for implementing continuous improvement methodologies such as

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3 Lean and Six Sigma (Barton, 2013; Douglas, Antony & Douglas, 2015; Balzer, Brodke &
4 Thomas-Kizhakethalackal, 2015) and this priority of cost reduction has been assessed as
5 leading to an over focus on tools and techniques (Radnor, Holweg & Waring, 2012) and short
6 term gains (de Souza & Pidd, 2011) rather than strategic alignment and wider organisational
7 change to embed CI.
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10 This leads to research questions such as ‘How do public sector organisations select
11 methodologies for continuous improvement?’, ‘Are continuous improvement approaches
12 built into strategies by public sector organisations and through Government oversight?’
13 (Rodgers & Antony, 2019) and whether the focus is on cost reduction or on efficient and
14 effective services from the perspectives of both employees and service users (Hines &
15 Lethbridge, 2008; Heath & Radcliffe, 2010; Radnor & Osborne, 2013). The current research
16 is intended to explore these questions and narrow the identified gaps using the perspectives
17 of executive leaders across the case study organisations.
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20 The systematic literature review (Rodgers & Antony, 2019; Rodgers et al., 2021) additionally
21 identified that within public sector deployments of CI methodologies there was frequently a
22 lack of shared understanding of the organisational approach and meaning of terms such as
23 ‘Lean’ (Radnor, Holweg & Waring, 2012; Radnor & Osborne, 2013; Waring & Bishop,
24 2010) and a gap in the assessment and understanding of organisational culture and its impact
25 on the initiative (Rodgers & Antony, 2019).
26
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28 The research reported in this paper is intended to inform the gaps and emerging themes
29 discussed above and the focus is on the three national emergency services within Scotland,
30 UK as there was an additional identified gap in the systematic literature review around
31 research focused on the police service where only four papers were identified (Adler et al.
32 2012; Barton, 2013, Fryer & Ogden, 2014; Antony, Rodgers & Cudney, 2017b), the
33 ambulance services, where only two papers (Heath & Radcliffe, 2010; Fryer & Ogden, 2014)
34 were identified and the Fire and Rescue Services where only one paper (Fryer & Ogden,
35 2014) was identified. It is additionally intended, to narrow the research gap on the approaches
36 to CI undertaken in the emergency services.
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41 **Methodology**

42 ***Case study organisations***

43 This research explores the state of CI settings within real life situations and as such a case
44 study approach has been adopted (Yin, 2014). In further considering the scale of the public
45 sector and the complexity of culture change specifically set against the journey to embed CI
46 within these organisations, a case study has been further considered most suitable research
47 (Collis & Hussey, 2003). In order to ensure a robust depth of research a multiple case study
48 approach (Herriot & Firestone, 2003) has been undertaken across the three related agencies.
49 Aside from a natural affinity between the three organisations and their alignment in the sense
50 of geography and governmental oversight, there is an existing drive towards greater co-
51 production between all three as exemplified by the creation of the ‘Scottish Emergency Services
52 National Collaboration Strategy’ during 2018 (Scottish Fire & Rescue Service, 2018).
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3 An additional opportunity is a recognition that both the Police Scotland and the Scottish Fire
4 and Rescue services have only been in existence since 2013 (Scottish Government, 2012)
5 whereas the national Scottish Ambulance Service was created in 1947 when it was taken over
6 by the National Health Service and was given the status as a Health Board in its own right in
7 1995 (St. Andrews First Aid, 2019) and as such while the former two organisations remain
8 on a significant radical change journey through their respective mergers, the Scottish
9 Ambulance Service is a more mature organisation.
10
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12 13 ***Participant selection***

14 A non-probability sampling approach was selected as the potential population for this
15 research is defined in many respects by job role and is a small group given the number of
16 executive posts within organisations. Purposive sampling was utilised in order to identify the
17 potential interviewees who were best able to assist in answering the research questions
18 (Etikan, Musa & Alkassim, 2016). The approach supports the identification of individual
19 cases within the relatively small potential sample number where rich data on the research
20 subject could be gathered (Shaw, 1999).
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24 Each organisation was approached to invite executive members to participate in the research.
25 Accordingly, the organisations who agreed to participate were; Police Scotland, Scottish Fire
26 and Rescue Service, Scottish Ambulance Service, Audit Scotland, Her Majesties Inspector
27 of Constabulary Scotland (HMICS), Her Majesties Fire Service Inspectorate in Scotland
28 (HMFSI), Scottish Police Authority (SPA), Scottish Fire & Rescue Service Board, Scottish
29 Ambulance Service Board, UNISON, Fire Brigades Unions, Scottish Police Federation
30 (SPF) and Association of Scottish Police Superintendents (ASPS).
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33 ***Data collection***

34 In seeking to understand leadership perspectives, a qualitative approach was undertaken and
35 given the research objective semi structured interviews were preferred as a data collection
36 method (Rowley, 2012) given their supportive nature of the case study approach (Silverman,
37 2010). The key themes drawn from the literature are shown below in table 1 and were used
38 as the structure for the interviews.
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41 INSERT TABLE 1 HERE
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43 ***Data analysis***

44 Similar to Schulte, Andresen and Koller (2019), as the research was focused on formal and
45 hierarchical organisations, the most senior and most experienced postholders were
46 interviewed in order to understand the organisational thinking. Most of the twenty-three
47 interviewees were affiliated to only one of the case study organisations, and this further broke
48 down to nine interviewees affiliated to policing, eight interviewees affiliated to fire and
49 rescue, four from ambulance services and finally two interviewees whose remit covered more
50 than one of the case study organisations.
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54 In order to additionally provide some context on the roles of interviewees, eight represented
55 'Oversight & Inspection' which includes Board Membership and Auditing and Inspection
56 roles, ten were in 'Executive Leadership' positions which includes interviewees at Director
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3 level and above, and finally five held executive positions within 'Union and Staff
4 Associations'.

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6 The interviews were transcribed and thereafter analysed using NVivo 12. Given the basis of
7 the interviews being themes derived from a related literature review, a directed content
8 analysis approach was utilised (Hsien & Shannon, 2005) Some of the themes were therefore
9 pre-figured, however additional themes emerged from analysis of the data (Rowley, 2012).
10 A total of 23 themes were identified and these were thereafter regrouped into 5 overarching
11 themes as shown in figure 1.
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15 INSERT FIGURE 1 HERE
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17 Findings

18 *Individual Experience and understanding of CI*

19 All twenty-three interviewees were asked about their understanding of CI and their
20 experience of improvement methodologies or associated tools and techniques as an
21 introductory question. The responses are summarised in table 2.
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25 INSERT TABLE 2 HERE
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27 An area for the success of CI initiatives is leadership commitment. Facets of this include
28 leading by example, understanding of methodologies and resourcing and supporting such
29 initiatives (Laureani & Antony, 2015; Goodridge et al. 2015). All interviewees placed
30 importance on CI in regard to their respective organisations, however in defining CI, there
31 was no organisational commonality in those definitions. This is suggestive of none of the
32 case study organisations having formally defined CI. One of the emerging themes from the
33 literature (Rodgers & Antony, 2019) is the importance of such a shared understanding of
34 what is meant by CI or specifically Lean within organisations. There is no evidence from
35 the interview data that any of the three case study organisations have defined CI to ensure
36 common agreement on understanding and application. *"I don't think we've got a lack of tools
37 and methods with which to improve the service. I think it's all there for us. I just don't think
38 we pay enough attention to it."* (Interviewee 'M')
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42 All interviewees commented on the importance of CI, but the perspectives on leadership were
43 mixed, for example, Interviewee 'A' commented that they were "unclear on leadership buy-
44 in to CI tools and techniques" within the police service. By comparison, Interviewee 'B'
45 commented on the employment of a CI expert at executive level to operate as a champion
46 within the ambulance service. More broadly, interviewees commented on the leadership role
47 in culture change, empowerment and communication to support CI but did so in terms of
48 future development rather than current delivery.
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51 From the analysis of the themes raised by interviewees, there is common agreement of the
52 importance of CI, however there is no clear evidence of shared definitions either within or
53 across the three case study organisations. Importantly, there is an apparent gap in either the
54 knowledge of or the training in CI methodologies broadly across the leadership of the three
55 organisations, albeit less so within the ambulance service. Finally, there appears to be
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3 agreement in confusion over the roles and application of continuous and radical
4 improvement, as Interviewee 'O' stated in the context of the fire service, and the links and
5 relationships between self-assessment frameworks and CI methodologies; *"I don't think*
6 *we've ever really worked out what the two mean."*
7

8 9 ***Organisational strategy and approach to CI***

10 The interviewees had mixed views on their respective organisational strategies around CI.
11 Within the ambulance services some interviewees felt that CI was very explicit, and quality
12 was a key business strategy (Interviewees 'B' and 'C') whereas interviewee 'K' felt that CI
13 was more implicit within the strategy than explicit. Across the other case study organisations,
14 within fire, interviewees 'L', 'N' and 'Q' felt that CI was explicit within the strategies and
15 was a golden thread through corporate documents, whereas Interviewees 'M' and 'O' felt it
16 was more implicit and required development. Finally, in policing, all interviewees
17 commented on explicit references to CI within strategies, but all agreed on an apparent
18 disconnect between strategy and practice. *"The danger is that people will latch on the*
19 *methodologies and try and drive them through as being the end game, rather than having*
20 *that strategic bit around driving forward a culture of continuous improvement."* (Interviewee
21 'A')
22
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24
25 There were no references during the interviews to any roadmaps for embedding CI or links
26 to performance frameworks and outcomes nor explicit holistic CI plans within the case study
27 organisations which would support successful implementation of the strategies. Interviewee
28 responses are summarised in table 3.
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31 INSERT TABLE 3 HERE
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33 As introduced earlier in the analysis, there are a significant number of references to self-
34 assessment frameworks but apparent gaps in understanding of CI methodologies and
35 similarly training in those methodologies, this is linked to strategies and implementation
36 plans above in terms of the apparent gaps in plans or roadmaps around CI implementation
37 within the case study organisations.
38

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40 In terms of listening to staff and engaging them in CI, again there are mixed views amongst
41 interviewees. Interviewees 'A', 'B' and 'C' all describe 'listening activities' and more
42 interviewees ('D', 'E', 'I' and 'J') all comment on the importance of involving and listening
43 to staff, however there are additional comments around such activities being more 'telling'
44 than 'listening' and still being somewhat 'top-down' within police and fire. There is a
45 consensus that there is a genuine desire to engage the workforce across the three case study
46 organisations. *"So how do we get people to buy into improvement? I find it really easy. You*
47 *talk to them in language that brings it back to, why are you here? What do you like about*
48 *your job, and how can we make it better? How can you make it better? And empower people*
49 *to make it better."* (Interviewee 'C').
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52 53 ***Understanding of organisational culture***

54 The theme of organisational culture was repeatedly returned to by interviewees. Within the
55 ambulance service, there was comment on an emerging culture of data driven or evidence-
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3 based decision making to support CI (interviewee's 'C' and 'K') and within that, the
4 importance of a shared language around CI being supportive of culture change (interviewee
5 'B'). These views were consistent across executive leadership and oversight and inspection.
6 Interviewees affiliated to police and fire expressed more diverse legacy cultural impact and
7 perceived issues over the centralisation of policies, practices and associated decision making
8 (interviewees 'D', 'L', 'F' and 'I'), beyond this there were elements of shared perceptions
9 that transformation programmes within police and fire focused too heavily on organisational
10 structures and did not tackle culture change effectively. Interviewees 'F' and 'L' additionally
11 commented on the culture of staff to 'get things done' regardless of policy and practices
12 which in their views lessened engagement with CI initiatives as they worked round processes
13 rather than changed them.
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17 A related factor raised by interviewees and linked to the centralisation of policies, practices
18 and functions within police and fire was the perceived lack of empowerment of staff to make
19 decisions and implement improvements at a local level. Interviewees views range from
20 "empowerment hasn't happened yet" (interviewee 'D') through "it's probably there, but it
21 doesn't feel like it yet" (interviewee 'E') to "there is no empowerment" (interviewee 'F').
22 Interviewees affiliated to the ambulance service tended to give specific examples of
23 empowered staff making improvements, this is summarised by interviewee 'C' who stated
24 "...start really small, test in a different environment, adapt and then get local people to use
25 it locally to make the changes, rather than a top-down...". Whereas within the newer
26 services; "People retreated into their own boundaries. We maybe need to create some kind
27 of catalyst, something that says, it's probably better carrot than stick, to move that public-
28 sector agenda into a new space, a new paradigm, a new way of working." (Interviewee 'F').
29
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31 ***External influence and factors***

32 This theme explores the interviewees consideration of the role of the government in leading,
33 supporting, encouraging or enabling CI and how well or otherwise this is achieved.
34 Interviewees were split in their views on the role government has had or should have.
35 Interviewees 'A', 'B', 'C', 'E', 'G' and 'P' all expressed positive views about the
36 governments drive towards outcomes and support of Christie Commission recommendations
37 which create a positive environment for CI.
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41 The development of shared leadership approaches was commented on. These views are
42 largely expressed by the oversight and inspection interviewees within the sample. From a
43 contrary perspective, the short term nature of politics and the yearly allocation of individual
44 agency budgets act as inhibitors for improvement (Interviewee's 'G', 'F', 'H', 'I', 'L', 'O',
45 'Q', 'S', 'T', 'U' and 'V'), in some respects interviewee's expressed resignation to the short
46 term nature of politics but also frustration when government stated they would not interfere
47 with operational decisions compared a perceived willingness of government to become
48 involved in operational decisions due to media reporting or politics; "The actual experience
49 of what really matters and what you're actually held to account for are not how you work in
50 a partnership or the extent to which you're designing preventative services and all those
51 things. It's the extent to which you're hitting the following targets." (interviewee 'G'). The
52 key areas of agreement as to the role government should play was around single year and
53 single agency budgeting processes which interviewees felt impeded co-production and
54 breaking down silos; "I think that's probably the big dilemma at the moment. The more work
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3 *you do for somebody else, it's costing you but you're not getting reimbursement for it in the*
4 *biggest terms, not just money." (interviewee 'D').*
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8 **Opportunities and challenges**

9 The final section of the interviews addressed the long-term potential for developing an
10 embedded culture of CI within the case study organisations. These are summarised for
11 comparative purposes by keywords and presented in table 4.
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INSERT TABLE 4 HERE

In considering the opportunities to embed a culture of CI, there is a pattern from interviewees who view the public service motivation of staff to be the key opportunity, the belief that staff who work in the public sector are disposed to 'make a difference' (interviewees 'F', 'H', 'L', 'M', 'N', 'T' and 'V') these responses cover all three of the emergency services and show perspectives from both executive leadership and representative associations. It is also considered that the motivation of the leadership will have an impact on the motivation and work experience of the employees so that where the social interests or motivation of the executive leaders are aligned with their role in a social service organisation, it is more likely to deliver a positive experience and a more transformational leadership approach (Gilbert, Myrtle & Sohi, 2015). As such, the motivation of the executive leaders is as important as the motivation of the employees.

Interviewee 'A' viewed the emerging environment of innovation in transformational change programmes as an opportunity within policing, while Interviewees 'J' and 'W' observed that new leaders within the same organisation were more orientated towards embracing improvement. The importance of positive leadership behaviours was also emphasised with the view that negative behaviours by some managers also drove short term transactional decisions. This is reflected on by Haynes, Josefy and Hitt (2015) who argued that managerial greed or extreme self interest drove short term decisions and performance rather than a balance with altruism and greater alignment with corporate goals. Finally, Interviewee 'G' saw the emerging focus of empowering communities to be a key opportunity to further embrace CI.

In terms of challenges and barriers, the main consensus was around the need to empower staff to enable them to contribute to CI (interviewees, 'D', 'G', 'M', and 'U') and this covered all three case study organisations and particularly from an oversight or inspection perspective. organisational culture was equally commented on (interviewees, 'B', 'E', 'M' and 'W') and overcoming resistance to change as well as weariness of change. As can be viewed in table 4, interviewees also commented on the impact of austerity and the challenge of short-term measures to meet budget reductions, in the same context, how this pushed leaders towards more transactional behaviours and reinforced silo working.

53 **Discussion**

54 While the interviews within the executive of the SAS suggested there was a shared
55 understanding of the primarily used approached of the PDSA cycle as well as understanding
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3 of Lean and Kaizen in particular. In contrast, the newer national police and fire services
4 executives expressed less awareness of methodologies and tended only to show an awareness
5 of self-assessment frameworks rather than improvement methodologies more specifically
6 there was a consensus that insufficient attention was paid to CI and there was a lack of clarity
7 over leadership commitment to it. This tends to be supportive of the literature where a lack
8 of explicit commitment in strategic documents does not provide a consistent narrative of a
9 coherent approach to CI. Linked to this and as shown in table three, the interviews of the
10 longer established ambulance service felt consistently that they had a clear and explicit
11 approach to CI whereas there was disagreement between executive members from police and
12 fire who felt in particular that there was no clear approach to CI. There is clear evidence that
13 there is no shared vision within each executive group nor across the executive groups as to
14 what CI is and how it should become part of the DNA of the organisation.
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18 The interviewees all spoke to varying degrees about the importance of engaging with and
19 listening to staff but observed in particular in police and fire that they were not yet very strong
20 at this and there was no specific evidence around how this was achieved, how suggestions
21 were implemented and ideas were supported or delivered. Again, there is a clear split between
22 the case study organisations where police and fire felt that the extent of their change
23 programmes and the demand on them was such that some engagement, empowerment and
24 simple listening activities had become more top down 'telling' rather than listening. This
25 supports the literature again in the sense that CI is about much more than a methodology and
26 tools and techniques and any initiative or plan needs to touch on all aspects of the organisation
27 and is not simply a process for delivering the improvements themselves. Executive members
28 representing the Police and Fire services particularly felt that empowerment of staff had
29 significantly reduced during the creation of the new services and had not yet reclaimed its
30 grip in the new services.
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34 These differences between the Ambulance Service, which is long established in its current
35 format and the other emergency services created in 2013 ask the question of whether CI can
36 thrive in environments of major change, does it need settled organisations in order to
37 flourish? Or is it simply that when leaders are focused on radical change there is no place for
38 the non-project based activity? Indeed many of the interviewees conflated radical change and
39 CI. The literature does not support the idea that organisations must choose between radical
40 improvement and CI but again this can come back to the understanding, commitment and
41 leadership of executives and more broadly the employees in the organisation.
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45 Interviewees spoke about the negative impact of the budgeting process in Scotland where
46 year on year reductions were required and budgets were in 'silo's' which limited agencies
47 working together. This reflects the discussion in the literature about year on year savings
48 targets potentially stifling change and improvement activities in these public services.
49 Positively, the interviewees consistently felt that the potential for embedding CI was within
50 each organisation and could be driven by existing commitment, creativity and motivation of
51 the employees, was not fully understood nor harnessed. They also felt that the lack of
52 leadership in this area and lack of empowerment of staff was most challenging to
53 development but also recognised that the challenges of austerity and some organisational
54 culture issues were an impediment.
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Conclusion

This research uses the three case study organisations to test and explore the themes and perceived gaps from the literature around CI, as well as analyse and contrast three related agencies but which were at different stages of their development in terms of current structures.

In terms of themes, knowledge and understanding of CI is clearly shown to be limited in the case study organisations and where knowledge exists it is mainly within the Ambulance service and reflects the wider dominance of Lean in healthcare in particular. If organisations are to develop strategies and plans for organisational approaches (or even intra-organisational approaches) there is a need to wider understanding of all CI methodologies in order to match improvement opportunities to the tools and techniques best suited to optimise benefit. More than this, it is core that regardless of which methodologies are included, there is a common understanding and language used in order to embed and sustain CI.

This is however about much more than tools and techniques and exploring some of the gaps suggests that the starting point is strategic alignment and a shared understanding of approach along with explicit reference to CI throughout plans and initiatives. More than this, the holistic nature of a CI approach means that beyond policies and activities the culture of the organisation must be developed to support sustained CI. Staff need to feel empowered and trusted to participate and need to feel listened to and so CI is about more than shared definitions, appropriate methodologies and detailing of approaches about CI within strategy. The complementary aspect is that leaders need to be clear on their commitment and support to CI.

This research also identifies some challenges, the solutions for which, are out with the immediate gift of the case study organisations but sit with Government on how they enable organisations to embed a culture of CI in particular through approaches to budget allocation and developing co-production and the resultant decrease in silo working between public sector organisations. However, there is much that leaders can do within their own organisations that would support an embedded culture of CI.

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Emerging Themes	Gaps
Applicability of Lean Six Sigma in the Public Sector	Evidence of Strategic Alignment of continuous improvement initiatives
Dominance of Lean only approaches in the public sector	Evidence of understanding of readiness and organisational culture for continuous improvement
Shared Understanding of Lean and continuous improvement	Role of Government in continuous improvement for public sector services
Disconnect with Human Resource Departments/Functions	Understanding the Voice of the Customer
	The impact of organisational culture on continuous improvement initiatives

Table 1. Key Themes & Gaps from the review of Literature (Rodgers & Antony, 2019)

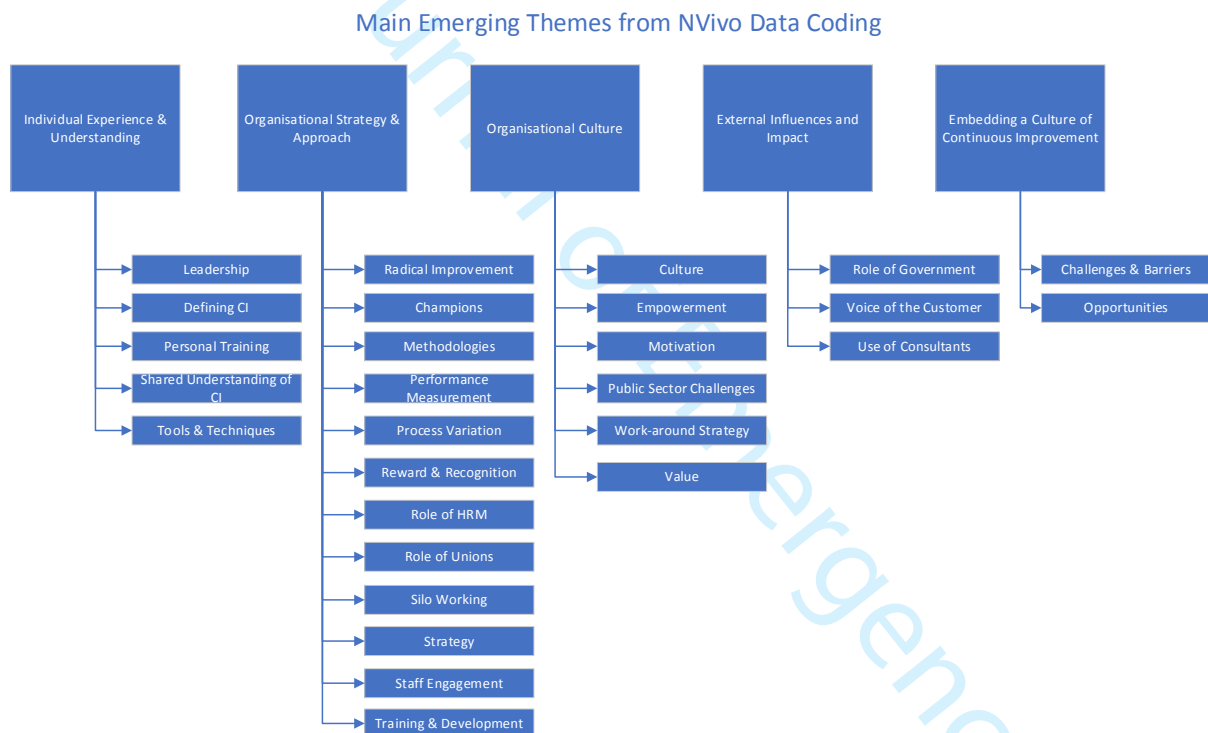


Figure 1. Grouping of emerging themes from NVivo Coding

Interviewee	Affiliation	Methodologies	Interviewee	Affiliation	Methodologies
'A'	Police	EFQM, PSIF	'M'	Fire	EFQM
'B'	Ambulance	Kaizen, Lean, PDSA	'N'	Fire	Lean
'C'	Ambulance	PDSA	'O'	Fire	EFQM, PSIF
'D'	Fire	None	'P'	Fire	EFQM, PSIF
'E'	All	Lean	'Q'	Fire	Kaizen, Lean, PDCA
'F'	Police	TQM, EFQM	'R'	Police	None
'G'	All	EFQM, PSIF	'S'	Fire	None
'H'	Ambulance	Lean, Six Sigma	'T'	Police	None
'I'	Police	None	'U'	Police	None
'J'	Police	EFQM, PSIF	'V'	Police	None
'K'	Ambulance	PDSA	'W'	Police	Lean
'L'	Fire	EFQM, PSIF			

Table 2. Interviewees experience of improvement methodologies

	Ambulance (n4)	Police (n9)	Fire (n8)
Explicit commitment to CI	'B', 'C', 'H', 'K'	'A', 'F', 'U', 'V'	'D', 'L', 'M', 'P', 'Q'
Implicit commitment to CI		'I', 'J', 'R', 'T', 'W'	'N', 'O', 'S'
Clear approach to CI	'B', 'C', 'H', 'K'		'P', 'Q'
No clear approach to CI		'A', 'F', 'I', 'J', 'R', 'T', 'U', 'V', 'W'	'D', 'L', 'M', 'N', 'O', 'S'

Table 3: Executive interviewee perspectives on organisational commitment to CI

Interviewee	Opportunities	Challenges/Barriers	Interviewee	Opportunities	Challenges/Barriers
'A'	Innovation	Understanding	'M'	Motivation	Empowerment
'B'		Culture	'N'	Motivation	Culture
'C'			'O'	Motivation	
'D'		Empowerment	'P'		Austerity
'E'		Culture	'Q'	Leadership	Complex methodologies
'F'	Motivation	Leadership	'R'		
'G'	Community Empowerment	Empowerment, Leadership	'S'		
'H'	Motivation	Understanding Customers	'T'	Motivation	Silo's
'I'		Austerity, Silo's	'U'	Learning Culture	Empowerment, performance management

'J'	Leadership	Radical Improvement	'V'	Motivation	Austerity
'K'		Motivation	'W'	Leadership	Organisation size, culture
'L'	Motivation	Austerity, Engagement			

Table 4. Summary of Opportunities & Challenges/Barriers

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