Article

Title: The Dali Model in Risk Management Practice: The Case on Financial Services Firms

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Abstract: Purpose – In this article we lay out the change management practices adopted by financial firms in small states within the Eurozone. We determine whether these organisations have the ability to identify triggers for change (Red Flags) and subject them to eight thematic elements to understand whether management practices can continue to exist and support operational environments, even when unexpected circumstances affect their day to day operations and processes. In doing this we examine the extent to which the eight thematic elements from the model designed by Dalli Gonzi, (2019) (The Dali Model) can assist organisations in risk identification and business continuity planning.

Design/methodology/approach – A self-administered questionnaire purposely designed for this study was administered to personnel working in internal controls within financial institutions of small Eurozone states. The participants were asked to grade statements using a 5-point Likert scale, ‘1’ being ‘totally disagree’ and ‘5’ being totally agree’ to the statement posed under the thematic elements forming the basis of the Dali Model.

Findings – Factor analysis provided support for the eight hypothesised dimensions of the decision-making model: connection, capacity, governance, network, policy, training, process improvement, standards.

Originality/value – The study provides a better understanding and support of “best practice” in change management through an understanding and assessment of the eight factors that are the basis of this model. It addresses practical recommendations to ensure application to a wider frame of use.

Keywords: Change management; Decision-making model, Risk management, Resource management, Process improvement, Good governance.

1. Introduction

In general, organisational problems that call for large scale change, happen under hard or unexpected circumstances that require a rapid recourse to action. Yet, in such cases protocol for
operational standards in crisis are set in motion only when the department or organisation concerned is under extreme strain. In this paper the authors sustain that in many instances, a department is under strain much before anyone in the organisation acknowledges it, thus causing undesired impact on staff and other resources, making it difficult for any change to happen in response to what is required. The reasons for this could be many, ranging from bureaucracy to a ‘lassaiz-faire’ attitude, to authorities demanding expectations which are beyond the department’s capacity to achieve the change.

The eight factors presented here were developed to assist an organisation in recognising that a response to identify the strain to be equipped to cope with change is what current management practice should aim towards. In supporting operational environments, authors examine and discuss how the 8 elements support the system by providing a) a just-in-time response; b) identifying the strain under which the organisation is subject to; c) and the tangible outputs to operations. Case studies, books, publications, journals, online material including online interviews and their transcripts and literature were reviewed, together with interviews, and surveys to build the model otherwise referred to as the Dali Model (Dalli Gonzi, 2019)

### 2. Aim of the study

With this study, the authors’ aim is to test the ‘Dali Model on Financial Services Firms to determine whether there is a relationship with better understanding and management of risk by the company.

In doing this the authors also examines whether the profile of the participants with respect to these Eight themes varies as a function of the demographic characteristics of these financial services firms. The resultant findings are critically discussed and practical recommendations aimed at ensuring that the true values and qualities of this model emerge.

### 3. Literature Review

A growth in complexity, scale and nature of change is what we face. We are currently in a time zone best described as a serious threat to the basic structures of fundamental values or norms of a social system, which under time pressure and highly uncertain circumstances necessitates critical decisions (Rosenthal U. & Hart, 1989). The crisis can be defined as the organisation’s lack of ability to respond to a heightened situation. Heightened turbulence causes management teams to focus inwards, responding with tactics that include cutting costs and re-organising. However, these are strategies that happen in a crisis frame of mind. Key authors in change management literature sustain that when decision-making time is characterised by limited time, ambiguity and uncertainty and when the need to learn is at its peak, the institutional capacity/ ability may be disapprovingly low. An organisation may undergo a) mixed change, b) separate change c) changes and parts that work together without the need for a long chain of command d) diverse expertise, e) shift from normal tactics f) acting in one’s own self-interest, g) forgetting to adhere to normal practice behaviour h) failing to make use of underutilised resources, or i) unclear situational awareness. A solution building strategy is one, which is built to withstand change while accommodating the realisation that all change comes with a manifestation of difference that requires real-time response. Response depends on how the organisational team can push past a false sense of complacency, initiate well-timed strategies or policies, which address the situation with foresight.

If a situation is changing rapidly one needs to see what the delivery of a service actually means; (i) what the ‘real time’ response is; (ii) what methodical way of response is suitable to meet the requirements of the organisation as the event unfolds; (iii) what minimum standard of operations can be delivered at the time of response. In this case it is crucial for the organisation to undergo the strategic fit with its environment, termed positioning. It is essential for the organisation to take note of the resources and competence to explore the strategic capacity of the organisation. These tie in with the importance of viewing citizens as customers. Citizens know when they are truly being given security and service, and when they are not (Cole, 2000). As we start to look for signs that an organisation is doing well, so do citizens look for signs that they will receive adequate support. The use of the DALI model is to provide strategic agility in a rapid response situation. It presents the opportunity to address the value expectations of actors in society through the re-examining of organisational resources and
competences valid at a point in time. Managing requires prioritisation and like resource analysis, understanding the patterns of provision and how capacity is distributed is an integral part of the model.

3.1 Basis for tool development

With a diverse range of demographic and economic pressures, resources required to deliver services is not as effective as the demands being placed on the service providers. A slow response to any external change is not acceptable or financially tolerable because of a reliance on undesirable and burdensome rules, regulations and the overload of paperwork. A method to overcome the stagnation in decision-making circles is to (a) break down traditional top-down approaches; (b) verbally address stagnation in staff circles; (c) set limits on the possible project outcomes that are possible from the organisation; (d) set new barriers for innovation; (e) address difficulties in the organisational capacity to change; (f) network with a diverse range of stakeholders; (g) be aware of the reliance on elected politicians to provide resources for investment; (h) address the difficulty for professionals to make change; and (i) overcome hierarchical management structures (Dalli Gonzi, 2019). The DALI model is built upon thematic elements extracted from change management literature used to develop a set of questions tested through a case study approach. The effects of response, resources, structures, output and network were present as foundational themes. Supporting the initial set of thematic elements were key knowledge contributors in the field of business continuity management (CMI Institute, 2012), emergency response management (Cabinet, 2011), and pandemic management. Common to all areas was the setting of expectations for crisis response services so a consistent and evidence-based practice was set in place (Carnall, 2007). Emergency management plans described above were generally active when critical situations were reached, and protocol required the activation of such plans. However, the threshold between crisis and an arising unexpected circumstance left a gap in planning which included the ability of an organisation to identify a red flag situation and to activate the eight areas for response. Additionally, new areas during the data collection phases emerged and findings showed that a reliance on process improvement, training, and policy feedback ensured a real-time response.

3.2 8 thematic elements

The theoretical framework developed from the literature constitutes 5 factors; mainly the resource capacity within which an organisation is expected to operate; the organisational structure to facilitate response; the operating environment characterised by elements of complexity; maintaining service continuity and ‘business as usual’. A tool for analysis NVIVO™ was used for data management. The theoretical framework was then followed by collating case characterisation from three case studies to explore further each element. A combination of approaches to collect data was utilised: semi-structured interviews, policy documents and reports. The in-depth nature of the interview process across different policy areas provided an indication that for increased operational efficiency to begin, challenges to the structural capacity of the organisations needs to be addressed. Nodes emerging from literature themes collected and grouped using NVIVO™:

- Crisis
- Front-line service
- Intense environment
- Organisational structure
- Public service resources
- Resilience

The thematic elements were supported by key areas discussed in the literature centred around: areas of timely response (Boin, 2004); broadening resource capacity (Cohen & Brand, 1993); specialist expertise (Joyce, 1999); structural planning and formation for command and control (Deloitte, 2009); networking structures (Levy & Lovegrove, 2009) and output services (Public Service Commission, 2011; Carnall 2007).

Timely response was built upon an indication that organisational impact, which has serious implications on capacity, response and timing, happens at a limit, which is not necessarily ‘catastrophic’. Recognition of that point of impact is deemed necessary if any resources or specialist
expertise is to be brought in. With that recognition ability in place, having a model for decision-making avoids the element of surprise presenting itself as a threat to response teams (Hosseini & Izadkhah, 2010). Following a recognised critical point, dealing with the provision would mean; (i) postponing a decision; (ii) waiting for new data or information, or (iii) following through with uncertainty about a possible outcome. The Resource allocation and capacity distribution thematic element is built upon the required strategic decision for outward distribution of people resources at a time of urgent need and through network channels made available to access resources. This is based upon an understanding that specialisation is always necessary, as rotas become unsuitable for loads that result from drastic changes in capacity. This theme was built upon an understanding that critical to response is the knowledge of by-processes in place for rapid deployment together with the prioritization of those processes. Authors argue for a process in place for supplies to be moved from supplier to end-user along a multiple layer of stakeholders (Boin, et al., 2010). In addition, defining the limitations of the selected processes and identifying which day to day operations require additional support is necessary for continuity. The objective behind the theme Structural formation was the facilitation of a structure to cope with the critical response needed. The proximity of hubs and networks helped overall response strategies. Key leaders bringing in specialist knowledge of departmental capacity they had, could be discussed on the spot and in real-time. Networks proved to be a better form of governance than hierarchy especially in conditions of uncertainty and complexity. Self-organising networks is a concept which has been developed by Johnson and Scholes (2001). Studies show that network teams converge very early on towards a decision whilst hierarchical teams take more time due to decision-taking by a single leader (Schraagen, et al., 2000). This, together with the design and formation of a central unit of strategic thinking, ensures the exchange of practices, staff, resources and management thinking. The nature of scale and proximity of each management layer meant networks work faster and communicate effectively. Working as a response unit means defining boundaries and communicating strategy as effectively and simply as possible, with a predisposition to work with others. Predisposition meaning tendencies to work with key players prior to building up working relations.

Meeting public expectations is critical to any response strategy. As Dalli Gonzi, (2019) shows in data collated for case study design, the thematic element Output standard service is essential to response. When objectives change, decision-makers need to bridge between what is happening at strategy level and what is happening at the scene. This means that policies need to be made adaptable to the situation at hand to meet requirements. In this case, attaining a standard for service means having key policies in place to ensure the required changes can happen, thus establishing a feedback loop between strategy and reality as a solution to bridging the gap. ‘Failure to answer people’, is the performance indicator, which should be overcome if the organisational impact has serious implications on capacity, response and timing but not yet termed ‘catastrophic’. Tomkins, (1987) sustains that one must establish what an effective service is during a period of radical change before establishing its strategic objectives and goals. Thinking strategically requires incorporating the expected output that a service can reach, particularly during the organisational impact.

The fifth thematic element which is Network and supporting structures is preparatory work for a co-ordinated approach to any response strategy. The movement of resources through pre-established networks and supporting agencies while working closely with strategic partners including unions, government, local authorities, private enterprise and the workforce is the major scope. As discussed in multiple guiding documents in the field of pandemic studies and business continuity management (McConnell & Drennan, 2006), a multidisciplinary group comprising ethics, medical, legal, public health, emergency management. In liability protection is appointed to establish indicators following on regional and state levels to assist in monitoring when crisis occurs. The UK (NHS, 2008 ) ensures that when faced with disruptive challenges, resilience principles are applied to maintain operational delivery. Pre-established roles for co-ordination with international agencies is critical to speed up transactions. This together with a central system for response enables networking to proceed faster, which works better when nodes and hubs are simplified by size.

3.3 Emergent Themes: - process improvement, training, policy feedback
Throughout the course of the data collection three thematic elements were extracted from the data (Dalli Gonzi, 2019) and included: (i) Training - the ability to integrate training mechanisms as part of an on-going resource provision for preparedness; (ii) Policy feedback - integrating policy and guidelines into a crisis standard guideline of response; (iii) Process Improvement - integrating performance and output feedback mechanisms directly into front-line response to show that needs are being met.

The sixth thematic element Policy Feedback showed that it was critical for leaders to know what was happening at all time and to document all changes being made. It was also necessary to formulate related policy changes with the necessary feedback. Temporary guidance issued was feeding straight into policy. As part of the ongoing document collating exercise, all events were recorded, and any changes were fed back into standard operating procedures. As part of the change-over strategy, service operational guidance (CFRA, Fire and Rescue Operational Guidance, 2012) was designed to provide robust yet flexible guidance. Feedback was fed directly to top strategic levels, constantly updated, allowed for gathering risk information and presented results straight to the Minister without the need for added bureaucracy.

The seventh thematic element titled Training Procedures, research showed that there was clear indication that in order to access appropriate resources for improved capacity management, trained personnel were needed. In most cases the requirement was specialist trained personnel. Managing resource demands could be possible only if the required training to facilitate rapid deployment of staff. Training as part of a response strategy means staff is aware and directly involved in on-the-spot training programs when needed. Data collated showed that in some case, personnel when required could not be rapidly called in since they required specialisation. So highly specialised roles could not be taken over by employees from other departments (Dalli Gonzi, 2019). During a rapid response strategy training is dependent on the time available for the required training to occur.

In formulating Process Improvement as the eight thematic element, data collected (Dalli Gonzi, 2019) showed that response teams required ‘fast-track processes’ or ‘continuity procedures’ which would be designed specifically to enhance processes between service output at front-line and policy-making. A ‘fast track process’ would ensure that it was possible to override specific protocols in times of rapid response. In this case, running processes in parallel was key to a successful strategy. Changes reported at front line had to be directly fed into top management with a resulting change in policy to be followed through. Setting up a temporary structure was noted to improve processes or access routes for continuity of service without disruption. The scale and nature of this temporary structure would depend on the organisational function and leading roles.

3.4 Understanding and Managing Risk

Identification of risk is the most important step in risk management. If this fails, then all the risk process will fail and managing risk cannot be effective. Therefore, it is imperative for a company to understand what is risk before actually attempting to address it. Accordingly, as Dr. Hillson (2004), explains, in his paper ‘when is a risk not a risk’, that risk in a ‘nutshell’, is defined as “uncertainty that matters because it can affect one or more objectives”. Once this is understood, the management process can start. That is effective strategies and controls to ensure that objectives that matter are achieved and that any residual risks are either hedged by transferring it away or other methods (completely or partially) or accepted.

4. Methodology

The research instrument

A self-administered questionnaire was purposely designed by the authors for the present study. In the process, we discussed with consultants and experts in the field. The introduction page outlined the objectives of the study, while the 10 sections that followed contained statements/questions with closed-ended statements, the first section with 4 questions containing the possibility to answer any of 2 questions, related to demographics of the participants’ firms. Such information could not have revealed the identity of firm or respondent and we informed the respondents that such data would be presented.
in aggregate form and that confidentiality was guaranteed. The next 8 sections held 40 statements reacting to the following themes explained in the literature above:

- Connection to the System
- Resource allocation and capacity
- Governance and structural formation
- Service output (Standards)
- Network team
- Process Improvement
- Policy Feedback
- Training

Each theme of the ‘Dali Model’ (which consisted of 40 statements in total) was explained by 5 statements, where participants were asked to respond to a seven-point Likert scale ranging from “strongly disagree” (coded as “1”) to “strongly agree” (coded as “7”).

The 10th section related to the participants reaction to the statement on the level of success of their company in understanding and managing risk. Here again participants were asked to respond to a seven-point Likert scale ranging from “strongly disagree” (coded as “7”) to “strongly agree” (coded as “1”).

Statements Q7, Q8, Q9, Q10, Q12, Q13, Q15, Q16, Q17, Q18 and Q19, were not in the same direction as others, meaning that if participants answered ‘strongly agree’, this would mean an ‘unsatisfactory result’ contrary to the other results which would mean ‘satisfactory results’. Therefore, for these statements, before analysing further, the answers were revised as follows: 1 was changed to 7, 2 was changed to 6, 3 was changed to 5 and vice versa.

Research questions

The questionnaire responses were used to investigate the following research questions empirically:

RQ1: Is there a relationship between the Dali Model on Financial Services Firms and better understanding and management of risk in Financial Services Firms?

RQ2: Does this relationship change as an effect of different demographics?

Sampling procedure

The authors targeted the whole population of banks (credit institutions), investment services firms, insurance firms and financial institutions. At a confidence level of 95 per cent, a worst-case true sample proportion of 5 per cent (for categorical data), the minimum sample size required with these pre-set criteria was 384 (Lenth, 2012). We used social network systems such as LinkedIn and Facebook and email to invite prospective participants to respond to our survey via a web-link or QR code available on the social media or contained in the e-mail. The participants had the option to opt out if they felt they should not participate in the survey. Between January 2019 and August 2019, we received 2343 completed surveys – which met the minimum sample size requirement of 384 (Lenth, 2012).

Sample characteristics

16.5% were of the participants worked in Credit Institution (Banks) and 83.5% worked in other institutions. 30.3% of the firms in which participants worked had 200 and above employees and 69.7% of these had 199 and below employees. Moreover, these firms had 32.2% had 10 and over employees working in, and 67.8% had 9 and under employees working in, internal controls – (i.e. legal, Risk Management, Internal Audit, Compliance). Also 81.8% of these firms were in the EU and 18.2% in other continents.

Data analysis procedures

The respondents’ data was inputted into SPSS (Version 20) and subjected to statistical analysis. Since the items used the ordinal scale of measurement, we used the median (Md) as measure of central tendency and the inter-quartile range (IQR) as measure of spread. Where a group of items could be grouped into a construct (or theme), we assessed the internal consistency reliability of the measures via...
the Cronbach alpha. After the items were combined into a single Likert scale, we computed the mean (M) as measure of central tendency and the standard deviation (SD) as measure of spread.

Exploratory factor analysis, via principal components extraction with Direct Oblimin and with Kaiser Normalization, was assessed by computing the Cronbach alpha coefficients.

< Insert Table 1 here>

The Kaiser-Meyer-Olkin (KMO) statistic, which is a measure of sampling adequacy for the appropriateness of applying factor analysis, fell within the acceptable range (above 0.6), with a value of 0.63.

This further supported continuance of factor analysis and so the analysis proceeded. Factor analysis loaded best on 4 factors and 34 statements. Some statements were omitted (i.e. statements Q12 – ‘Resource allocation and capacity: Temporary operational guidance should be designed for the use of such resources’, Q14 – ‘Resource allocation and capacity: Additional resource stocks are available on demand’, Q25 – ‘Network team: There is a network of supporting stakeholders to assist in a time of crisis’, Q29 – ‘Network team: Working with external providers is easy’, Q30 – ‘Process Improvement: We know what is happening at front-line service delivery’ and Q34 – ‘Process Improvement: Data collected at front-line operations is processed and used for improving operations’). This was both because they explain little variance and because they fell under factors which were defined by one or two variables, making them unstable and generally unreliable (Tabachnick and Fideli, 2001). The factors were interpreted or omitted cautiously with scientific utility. Therefore, variables that give a low level of association with several factors at the same time are neglected in the analysis.

Principal component analysis (PCA) was conducted on the remaining 34 items with Direct Oblimin and with Kaiser Normalization and four components had eigenvalues greater than Kaiser’s criterion of one and in combination the factors explained 71.4% of the variance.

The Dali Model on Financial Services Firms using factor analysis was reduced to four factors and 34 statements. Table 1 shows which statements are grouped under each of the four factors. The pattern of items loading onto factors after rotation was clear and interpretable. Factor 1, which has now been termed “Network and Policy Feedback”, explained 24.83% of the variance and comprised 11 items. Factor 2, which has now been termed “Service and Process Improvement” explained 22.37% of the total variance and comprised 11 items. Factor 3, which has now been termed “Resource and Governance” explained 15.58% of the total variance and comprised of 7 items. Factor 4, which has now been termed “Connection to the system” explained 8.62% of the total variance and comprised 5 items (Hair et al., 1998).

The Cronbach alpha revealed that the measures of the factors were internally consistent with scale reliability (Cronbach’s $\alpha = 0.76$).

< Insert Table 2 Here>

The Cronbach’s alpha coefficients of this scale were between 0.84-0.98. Therefore, we can conclude that this scale is reliable as part of our statistical analysis.

We then computed the Dali Model measure from these 4 factors and 34 statements and carried out multiple linear regression to determine how the Dali Model measure varies with: 1) (Q45) the company’s ability to identify the appropriate risks and effectively manage them to reach objectives 2) (Q1) the type of financial services firms, 3) (Q2) the number of employees, 4) (Q3) the number of personnel in Internal Controls (i.e. Legal, Risk Management, Internal Audit, Compliance), and 5) (Q4) whether the financial services firm is in the EU or not.
5. Findings

The computed Dali Model measure shows a mean of 5.53 (SD = 0.388). All the Factors (1,2,3, 4) produced means that were close to the computed Dali Model -Table 3.

The multiple regression analysis \[ F (5,2337) = 449.88, p<0.01 \] and the variables explained 49% of the variability in the Dali Model. The regression coefficients in Table 6 yield some interesting findings. Firstly, financial services firms who are better able to identify the appropriate risks and effectively manage them to reach objectives (Q45) score higher in their Dali Model score (β = 0.051, t=3.46, p < 0.01). The Dali Model results are also lower for credit institutions than for other firms (Q1) (β = -0.59, t=27.14, p < 0.01) and for firms with larger number of employees (Q2) (β = -0.293, t=8.55, p < 0.01). Therefore, if you are not credit institutions and have less than 200 employees the Dali Model score is higher. However, if the number of employees in internal controls (Q3) (i.e. Legal, Risk Management, Internal Audit, Compliance) is 10 and larger and the financial services firm operates in the European Union, then the Dali Model score is higher (Q4) (β = 0.47, t=14.24, p < 0.01; and β = 0.34, t=20.18, p < 0.01, respectively).

6. Discussion and Significance of findings

The results have significant implications for the use of the Dali Model and more broadly for risk management and internal controls within financial services firms. Firstly, the regression estimates suggest that the Dali model score is closely associated with a firm’s ability to identify and manage risks. Hence, this provides empirical support to the use of the Dali framework in order to assist businesses as part of their risk management and compliance activities. The quantitative yet intuitive nature of the model means that financial services operators may utilize this model is yet another tool in order to track their risk preparedness and responsiveness over time, by computing and observing their scores. Secondly, credit institutions appear to perform worse when it comes to their ability to identify and manage risks relative to other financial services institutions. This underscores the need for such institutions to strengthen and enhance their risk management functions, perhaps beyond the scope of existing regulations, since they are currently lagging behind other types of organizations within the industry. Once again, the Dali model may assist in this regard by providing a simple yet objective metric with which to assess their progress within this field over time. Similarly, larger firms on average score worse on the Dali metric relative to smaller firms, suggesting that smaller organizations are better able to mobilize resources in order to identify and successfully tackle risks as they emerge, with larger firms potentially hampered by inertia and/or lack of coordination. Thus, it is imperative that larger firms become nimbler in terms of their risk management processes and functions, and maximize coordination across functions while also potentially benefitting from economies of scale in this regard. Predictably, the results also suggest that the size of the compliance team within a financial services firm is positively-related with risk preparedness as captured by the Dali score, which suggests that firms must seek to invest more in this important business function. Finally, our results also indicate that financial services firms based on the EU generally score better on the Dali model, which may in part reflect EU Directives and regulations in this regard.

7. Conclusion

The Dali model is explained in this paper together with its use as a tool for financial institutions and credit firms to be able to identify the appropriate risks and effectively manage them to reach their company objectives. Four out of the eight thematic elements were termed as follows: ‘Network and Policy Feedback’, ‘Service and Process Improvement’, ‘Resource and Governance’ and ‘Connection to the system’. The development of these factors is critical for organisations in recognising the response required to identify their strain and to be equipped to cope with change. Building upon lessons learned from emergency and pandemic management, the call for action is for organisations to have the capacity
to manage situations of risk. The consequence of failing to respond would be falling under multiple pressures without the pre-determined support structures for a rapid counter strategy.

**Author Contributions:** For research articles with several authors, a short paragraph specifying their individual contributions must be provided. All Authors contributed equally to the paper

**Conflicts of Interest:** "The authors declare no conflict of interest"

### Appendix A

**Table 1: Factors**

<table>
<thead>
<tr>
<th>Factors</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q5 Connection to the System: I can connect with the change my department is experiencing</td>
<td>.979</td>
<td></td>
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<tr>
<td>Q6 Connection to the system: We are aware of the impact of change on our department</td>
<td>.859</td>
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<tr>
<td>Q7 Connection to the system: We are currently experiencing a crisis</td>
<td>.801</td>
<td></td>
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<tr>
<td>Q8 Connection to the system: The crisis requires a re-thinking of our organisation</td>
<td>.903</td>
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<tr>
<td>Q9 Connection to the system: The crisis requires new operational guidelines for the department to cope</td>
<td>.890</td>
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<tr>
<td>Q10 Resource allocation and capacity: Resources are being used at maximum capacity</td>
<td>.550</td>
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<td></td>
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<tr>
<td>Q11 Resource allocation and capacity: Fast-track additional resources can be easily mobilised</td>
<td>.588</td>
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<tr>
<td>Q13 Resource allocation and capacity: Staff coping capacity is at a maximum</td>
<td>-.512</td>
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<td>Q15 Governance and structural formation: Current governance set-up is not functioning well</td>
<td>.890</td>
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<td>Q16 Governance and structural formation: A temporary team is required to be set up to respond to the crisis</td>
<td>.794</td>
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<tr>
<td>Q17 Governance and structural formation: A new team leader is needed</td>
<td>.633</td>
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<td>Q18 Governance and structural formation: Current responsibility roles are not defined well enough</td>
<td>.952</td>
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<tr>
<td>Q19 Governance and structural formation: Management is not effectively carrying out decisions</td>
<td>.903</td>
<td></td>
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<tr>
<td>Q20 Service output (Standards): We know what is expected of our customer service strategy</td>
<td>.906</td>
<td></td>
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<tr>
<td>Q21 Service output (Standards): We easily identify the vital (critical) needs of our customers</td>
<td>.929</td>
<td></td>
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<tr>
<td>Q22 Service output (Standards): We know what dissatisfies our customer</td>
<td>.906</td>
<td></td>
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<tr>
<td>Q23 Service output (Standards): We carry out operations improvement to ensure any mistakes are mitigated</td>
<td>.933</td>
<td></td>
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<tr>
<td>Q24 Service output (Standards): We have a consistent service output standard</td>
<td>.836</td>
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<tr>
<td>Q26 Network team: When a response is required from all stakeholders a centralised system communicates all information two-way</td>
<td>-.785</td>
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<tr>
<td>Q27 Network team: Business continuity management exists for the organisation</td>
<td>-.812</td>
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<tr>
<td>Q28 Network team: Strong communication exchange exists to all networks, two-way</td>
<td>-.807</td>
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</table>
Q31 Process Improvement: When a crisis occurs, top management are immediately informed of any changes to operational processes

Q32 Process Improvement: The department can handle normal day to day operations alongside a crisis, efficiently

Q33 Process Improvement: Data collected at front-line operations is communicated to top management immediately

Q35 Policy Feedback: All changes to processes are directly fed into departmental policy during a crisis

Q36 Policy Feedback: A specialised group of advisors handle the process of policy preparation A specialised group of advisors handle the process of policy preparation

Q37 Policy Feedback: When policy-makers are not experiencing the situation as is, someone in the department gets directly involved to takeover

Q38 Policy Feedback: A leader is visible and accountable to any changes during a crisis

Q39 Policy Feedback: A leader is contactable for policy feedback and improvement during the entire changeover

Q40 Training: Specialists handle crisis situations

Q41 Training: There is a rapid deployment for staff training when crisis happens

Q42 Training: Training is an integral part of any business continuity plan

Q43 Training: Training needs are always identified before any response strategy

Q44 Training: Resources from other departments are easily deployed when staff requirements fall short

Extraction Method Principal Component Analysis
Rotation Method Oblimin with Kriser Normalisation
Rotation Convergence in 5 Iterations

Table 2 Cronbach’s Alpha Values (n=2343)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Item</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11</td>
<td>5.06</td>
<td>0.95</td>
<td>0.84</td>
</tr>
<tr>
<td>2</td>
<td>11</td>
<td>6.78</td>
<td>0.47</td>
<td>0.94</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>6.11</td>
<td>0.56</td>
<td>0.93</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>4.13</td>
<td>1.00</td>
<td>0.84</td>
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</table>

Table 3: Dali Model

<table>
<thead>
<tr>
<th>Factor 1</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>2343</td>
<td>5.0669</td>
<td>.95351</td>
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Table 4

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>.700a</td>
<td>.490</td>
<td>.489</td>
<td>.27766</td>
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</table>

a. Predictors: (Constant), Q4 Continent in which the Financial Services Firm Operates, Q45 Identifying and Managing Risk: The company is able to identify the appropriate risks and effectively manage them to reach objectives, Q3 Number of Personnel in Internal Controls, Legal) (Risk Management, Internal Audit, Compliance), Q1 Type of Financial Services Firms, Q2 Number of Employees

Table 5

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>173.414</td>
<td>5</td>
<td>34.683</td>
<td>449.876</td>
<td>.000a</td>
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<tr>
<td>1 Residual</td>
<td>180.169</td>
<td>2337</td>
<td>.077</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>353.583</td>
<td>2342</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: DaliModel
b. Predictors: (Constant), Q4 Continent in which the Financial Services Firm Operates, Q45 Identifying and Managing Risk: The company is able to identify the appropriate risks and effectively manage them to reach objectives, Q3 Number of Personnel in Internal Controls, Legal) (Risk Management, Internal Audit, Compliance), Q1 Type of Financial Services Firms, Q2 Number of Employees

Table 6

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
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</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.879</td>
<td>.051</td>
<td>114.694</td>
<td>.000</td>
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</table>

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doi:10.20944/preprints201910.0047.v1
Identifying and Managing Risk: The company is able to identify the appropriate risks and effectively manage them to reach objectives.

<table>
<thead>
<tr>
<th>Q1 Type of Financial Services Firms</th>
<th>0.16</th>
<th>0.05</th>
<th>0.51</th>
<th>3.461</th>
<th>0.01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2 Number of Employees</td>
<td>-0.584</td>
<td>0.22</td>
<td>-0.558</td>
<td>-27.137</td>
<td>0.00</td>
</tr>
<tr>
<td>Q3 Number of Personnel in Internal Controls (Legal Risk Management, Internal Audit, Compliance)</td>
<td>0.390</td>
<td>0.027</td>
<td>0.469</td>
<td>14.240</td>
<td>0.00</td>
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<tr>
<td>Q4 Continent in which the Financial Services Firm Operates</td>
<td>0.342</td>
<td>0.017</td>
<td>0.339</td>
<td>20.181</td>
<td>0.00</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Dali Model

References


General survey (MBI)GS) across occupation groups and surveys. Journal of Occupational and organisational psychology, 73(1), pp. 53-67


Miller, R.G. (1991), Simultaneous Statistical Inference, Springer-Verlag, New York, NY


