Edyta Oborka, Kevin Kibble, and Mark Stanford

Culture Failure Mode Effect Analysis: Resistance to Change in Contemporary HRM

Competitive economic conditions drive Continuous Improvement (CI) processes within organisations. CI systems and practices are easily accessible. However, questions have to be asked: Is the organization ready for necessary CI changes and is resistance to change an issue in the business? In the change management process the maturity of the organizational culture plays the key role. A significant set of requirements has to be fulfilled to facilitate transformation of the changes into constructive results. In order to assess the level of business advancement, and the maturity of those requirements, the Culture Failure Mode Effect Analysis Tool (CFMEA) has been created. CFMEA provides a practical system for assessing long–term changes, and, in the short term, will make the company fully aware of the critical cultural aspects that have to be developed. CFMEA is an original technique for identifying effects and causes of potential failures during the change implementation process and an organization’s readiness for change.

Keywords: Resistance, Change Management, Organizational Culture, Failure Mode Effect Analysis (FMEA).

Where Are We Now?

When an “economy” slows down a “creative” in an organization, Human Resource Management (HRM) is required even more than ever. Changes are often seen as a response to a tough and difficult time. A need to increase productivity (or “efficiency”) and, at the same time boost morale, has to be prioritized. The organization has to consider: Is it a good time for changes to be made that transform the business and are the “people” ready for the changes required?

The need for change and, for some organisations, evaluation of readiness for change has to be a part of business strategy, especially in the current global economic climate, as both internal and external demands increase. Equally, a need to reduce non–value
added operations stays as a priority. Continuous Improvement (CI) techniques, such as “Lean Manufacturing,” “Six–Sigma,” and “Total Productive Maintenance” offer a significant number of “tools” to support improvement changes. However, this does not guarantee success.

**People**

People are often the most valuable of company assets. The success or the failure of the business strategy depends on them. Their commitment, ability to adapt to new situations, and reaction to change define the dynamics of the business and the change process. Change is not just about tools and techniques, but about people; it is not about delegating, but about contribution. Finally, change is not about an individual, but about teamwork. In order to work, change management has to be an integral part of a company’s strategy. It is not any one individual employee that makes it successful, but a journey in which everybody from top management to shop floor has to take part. A company’s transformation process is not about changing the way that people think, but the way that they behave. The convergence of experience, knowledge of tools, and techniques can allow companies to become successful.

In what maybe a “typical” scenario of a “big push from the top” meeting resistance from “the bottom,” where regardless of the type of change or its character, people can be pushed out of their comfort zone, which makes them feel insecure. The level of resistance to change depends of the number of variables: type of change, character of the change, scale of the change, communication prior to change, and people involvement. Five ways on how to influence people and how to convince them to follow changes have been identified [Ballé, 2009] in order to achieve goals and overcome resistance. They are:

1. **To find out oneself by doing.** To make people be an active part of change activities. To set up objectives for the changes and make the people responsible for them.
2. **To be influenced by one’s peer group.** To show and prove a change application example in a similar kind of activity group, etc.
3. **Seeing and understanding.** Clear demonstration of a powerful example, benchmark, etc.
4. **To reason it out.** To make sense of change and talk about change in audience terms, use arguments that they will be interested in and understand.
5. **Convince oneself beyond reason – coming to believe something that flows from a deeply held principle.**
Organizational Environment…

Organisations operate in multiple environments where the strength of the forces for change and resistance to change itself are related to the degree of turbulence in the environment. Change in organisations can be thought of as winds that vary from “warm summer breezes” to “hurricanes.” Overcoming people’s resistance and understanding change have become one of the biggest preoccupations for management theory. This reflects the situation now that change and changing exercises the minds of most managers most of the time [Senior and Swailes, 2010]. Despite the wide availability of new technologies, business tools, and solutions, a need for a successfully built platform for change is required. People, available processes, and existing culture create the base for change. Their strengths and flexibility determine the success of the change management process and continuous improvement strategy [Cummings and Worley, 2008; Cook et al., 2004].

A comprehensive change program may be a fundamental part of an organizational transformation program, but the effectiveness of culture change programs largely depends on the quality of the change management process [Armstrong, 2006]. Changes may be implemented without an accurate understanding of the organizational culture and knowledge gaps within it. Thus, the benefits may be comparatively proportional, i.e. short–term and not fully utilized.

Global corporations often deploy large–scale improvement strategies without considering their level of cultural readiness. Small and medium enterprises are, on the one hand, fascinated by examples of successful lean implementation worldwide, and overwhelmed on the other [Oborka, 2011]. As reported by Anderson and Ackerman [2010], the vast majority of change efforts do not generate intended business results. One of the reasons could be that any changes implemented without a well prepared and appropriate cultural background consume more resources than they should, cause people resistance, and in most cases do not offer “payback” as expected.

Organizational Culture…

Neither systems nor processes play the key role during the change implementation process. Instead, it is the people involved and their view of the changes. Employees in any organization significantly influence the nature of entire processes within organisations, including change implementation processes. They are the spirit and the main “motor” of an organization. They form the business culture through their own behavior, assumptions, attitudes, values, norms, and experience. They influence the success or failure of the change implementation process. People’s resistance to change is the opposing factor
in limiting a successful and quick change implementation process. Much of the challenge, in successfully managing change, lies in helping people overcome their resistance to it [Ward, 1995]. Defining people’s perceptions of the systems, processes, and problems that they deal with provides a starting point in the change implementation process.

A strong organizational culture represents organizational readiness for change. Green’s [2007] research on change management highlights the two key factors that contribute to the failure of the change implementation process, i.e. employee and staff resistance and middle management resistance. Hiatt and Creasey [2003] also underscored the importance of both factors, but added the importance of the communication element to them. Other authors, e.g. Anderson and Ackerman–Anderson [2010], Cameron et al. [2008], and Armstrong [2006] added other elements to the list, e.g. commitment, teamwork, knowledge, motivation, support, and required vision. People’s commitment, their level of adaptability, and their reaction to change are determinants of the organizational culture and a reflection of the organization as a system. An operational structure that supports leadership, teamwork, effective communication systems, and conflict resolution creates the right surroundings for day–to–day people management. Clarity of the mission and vision, the existing motivation system, available business processes, and support for innovation establish a company’s strategic profile.

Change, by its very nature, brings uncertainty to processes and outcomes. “What works in one particular set of circumstances will not necessarily work in others,” as stated by Naylor [1996]. Values, beliefs, and norms built on past experiences differentiate and highlight the uniqueness and “culture individuality” of each organization. Understanding of the “organizational cultural gap” is a starting point for successful change management.

**Where Do We Want to Be? – Culture Failure Mode Effect Analysis (CFMEA) – Are You Ready for Change?**

CFMEA offers a systematic, proactive approach for evaluating a company’s readiness for improvement changes, taking into account the current level of a company’s culture. It provides a method for assessing the cultural weaknesses and potential effects of a change implementation process failure. Emphasis is placed on the importance of actions that can be taken to eliminate or reduce the potential causes leading to change implementation process failure. CFMEA is based on the same core principle of failure prevention as the well–known FMEA. Defining people’s perceptions of the systems, processes, and problems that they deal with, provide a starting point in the change implementation process. The Culture Failure Mode Effect Analysis (CFMEA) tool, explained below, has been designed with this in mind and offers a new, unique approach.
CFMEA addresses three key questions:
1. In global terms, is the company ready for changes and will the company get the full benefits of the changes?
2. What aspects of organizational culture cause a potential failure in change implementation?
3. What steps are necessary to prevent future failure?

**CFMEA STEP 1 – Cultural Assessment**

The strength of the CFMEA is rooted in its own systematic approach and starts from assessment of the existing culture and organizational readiness for change through the use of a cultural assessment questionnaire.

In the CFMEA process, eleven parameters are taken into account, analyzed, and improvement actions prioritized within them. They directly or indirectly influence the organizational culture and at the same time address the success or a failure of the change implementation process.

The parameters have been chosen in order to assess the employee, operational, and strategic profiles for an identified company. They are:

Level of commitment, level of adaptability, reaction to changes, level of leadership, level of communication, level of teamwork, level of conflict resolution, level of mission vision clarity, level of current systems and processes, level of support for innovation, and level of motivation to work.

**CFMEA STEP 2 – Analysis of Results and the Benchmark**

A consistent approach is taken in assigning weight to each of the answers. Answers that contribute to strengthening the organizational culture are allocated one point, answers that do not contribute are allocated zero. Answers that partially contribute are allocated one-half point. This initial assessment considers employee, operational, and strategic profiles. A “gap” analysis is undertaken on the basis of this initial assessment, while identification of key focus areas constitutes a final stage of this step. Clear understanding of the current state of the existing culture and a defining of the culture gap give clear direction to the improvement plan.

In order to define how far the business is from the desired state, the company’s gap analysis is compared to the standard, mature model of organizational culture. The model was created on the basis of research performed across a number of the worldwide organisations identified as successful in change management. The results of the research are presented below in Figure No. 1.
**CFMEA STEP 3 – Team Creation**

People play a key role in the CFMEA. A cross-departmental CFMEA Team should represent the employment structure of the company. Team members should be characterized by openness in expressing their own view and have an open mind for new ideas. People with a range of skills, experience, and different points of view are required to support the creation of the action plan. Diversity of views will extend the problem overview. Diversity of experience will allow for problem analysis from different perspectives and additionally will bring more solutions to the table. Length of service could be a key factor in prevailing attitude and opinion as well.

**CFMEA STEP 4 – Brainstorming and the CFMEA Process**

The CFMEA process starts with the identification of individual and process failures. CFMEA is based on a team approach. Throughout its implementation employees identify problem areas and the solution for them. Each of the failures is examined taking into account its failure effects, the severity of the effects, the failure cause, malfunction control systems, and failure detection systems (Table No. 1). The following culture elements have to be considered: Communication system, commitment, motivation, adaptability, reaction to changes, current systems and processes, mission and vision, teamwork, conflict resolution, support for innovation, and leadership.
Calculation of the Risk Priority Number constitutes the essential part of CFMEA. A calculation summarizes the scale of the problem and the order for tackling problems to provide solutions. It highlights the significance of the problem and risk of failure because of particular parameters and the priority of the improvements. The employees involved directly in the CFMEA define the parameter values to calculate the RPN, i.e.

$$RPN = Severity \times Occurrence \times Detection$$

What follows next is formalization of a CFMEA action plan based on the RPN ranking. Senior management approval of the action plan is essential at this stage of the CFMEA process. The action plan, with the assigned responsibilities and deadlines for successful improvement processes, is then initiated.

Following implementation of the plan, a CFMEA progress review is necessary and should include, primarily, the scheduled reviews of the agreed action plan with the owners of the actions. The completion of the action plan indicates a further step for reassessment of the cultural gap. If required, the process should be repeated. The length of the CFMEA process depends on the size of the identified gaps and the organization’s determination for effective cultural change.

The CFMEA cycle ends with the reassessment of the organizational culture six months from the final implementation of the action plan.

<table>
<thead>
<tr>
<th>Recom-mended Actions</th>
<th>What solution is there to manage this failure?</th>
</tr>
</thead>
<tbody>
<tr>
<td>RPN</td>
<td>$S \times O \times D$</td>
</tr>
<tr>
<td>D</td>
<td>Is it difficult to highlight, prove this failure?</td>
</tr>
<tr>
<td></td>
<td>1 – easy to highlight; 10 – very difficult to highlight.</td>
</tr>
<tr>
<td>Current Control</td>
<td>Is it any control system to stop this failure to happening?</td>
</tr>
<tr>
<td>O</td>
<td>On a scale from 1 to 10, how often does this issue occurs?</td>
</tr>
<tr>
<td></td>
<td>1 – very seldom; 10 – all the time.</td>
</tr>
<tr>
<td>Failure Cause</td>
<td>What do you think causes this issue?</td>
</tr>
<tr>
<td>S</td>
<td>On a scale from 1 to 10 how serious is a failure’s effect?</td>
</tr>
<tr>
<td></td>
<td>1 – not serious; 10 – very serious.</td>
</tr>
<tr>
<td>Failure Effect</td>
<td>How do the above failures impact individuals and the change implementation process?</td>
</tr>
<tr>
<td>Failure Mode</td>
<td>What do you see as the main problem?</td>
</tr>
</tbody>
</table>
Conclusions

Improvement activities need a well-prepared background, a low level of resistance, a strong culture, and strong alignment between employees and company organizational values. Evaluating organizational readiness for changes can be assessed by a CFMEA. CFMEA applied in a business can undoubtedly provide an important mechanism for measuring the effectiveness of short- and long-term changes. Expected strengths of this innovative tool can make the process for a “Change Agent” more predictable. CFMEA can help to create better ways of working and, in the long term, a more constructive culture inside organisations.

In summary, the CFMEA promotes the following benefits:

- Employee involvement; full involvement of the employees who are an integral part of the process; they specify problems and make suggestion for improvements; shared ownership and responsibility for cultural change.
- Quantitative analysis instead of a qualitative approach;
- Straightforward methodology with a systematic approach, based on the background of the well–known FMEA tool.
- Prioritization of the improvement activities; prioritization based on severity, occurrence, and detection of the problem.
- Clear summary of the problems with measurable objectives.

References

Edyta Oborka (MBA) is an Industrial Performance Specialist responsible for Change Management at Schneider Electric. In addition to this, she is a 3rd year research student at the University of Wolverhampton, U.K. Her research interests include Change Management, Organizational Culture, and Lean Manufacturing.

Kevin Kibble (Ph.D.) is a Professor of Materials Engineering and Director of the Research Center of Engineering and Computer Sciences in the School of Technology (STech) at the University of Wolverhampton, U.K. He is a Chartered Engineer specializing in optimizing the properties of materials and Quality Assurance Systems with twenty years experience in Quality Management in materials industries prior to joining the University.

Mark Stanford (Ph.D.) is a Reader at the Department of Engineering in the School of Technology (STech) at the University of Wolverhampton, U.K. He has successfully managed several industrial research projects, mainly concerned with Rapid Manufacturing. He has assisted in delivering Advantage West Midlands, U.K. and European Regional Development Funding programs of a value of £12M through the management of technology support.