

Avanulo White Paper #446

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Relentless Achievement, an Effective Defense against External Failure



the
Avanulo
way

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To the reader:

We hope you find this Avanulo White Paper valuable. We know that your time is precious, so we have structured the format of this document to accommodate your needs.

For a quick read, refer to the “in a Nutshell column” on the left.

For more detail, read the right hand column



Avanulo is a group of organizational troubleshooters who help their clients navigate through tough times by extending their operational reach. Our partners all have at least 20 years of experience guiding businesses through change & crises. We focus on three strategic arenas, Optimization, Crisis Resolution, and Talent Enhancement.

This white paper is not a report on current conditions within any one company – on the contrary, it is an academic review of the state of the industry and is intended to help our clients determine strategies to better address the realities of their unique situations.

Abstract

- The Cost of External Failure is higher than ever because media pervasiveness has created a highly fickle consumer base that will abandon a product quickly.
- The old risk management models are no longer effective and new models are required.
- An overreliance on technology-based solutions can leave organizations exposed.
- Often executives do not see the actual level of risk in the system, which can impair strategic decision-making.
- A comprehensive approach that effectively addresses the Human Factor in Quality is imperative.
- The most effective organizations will require a holistic approach that; focuses on the production unit, but pushes quality up and downstream, sets criteria for success, and provides business unit leaders the support needed to develop unique solutions that are aligned within their processes.
- There are four initial things you can do to get the ball rolling.
- There are 16 essential elements for implementing an employee engagement approach for quality or implementing - a Relentless Achievement Organization.

In a Nutshell . . .



What is it?

The Perfect Storm

- A continuous media stream that condemns a brand even before the facts are known is now a constant threat to consumer goods companies.

Why is it important?

It can ravage market share

- Consumers take media reports as gospel and quickly abandon a “tagged” brand.

What can be done about it?

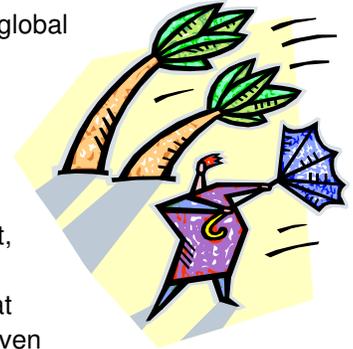
Respond to the new risk horizon

Supporting Reference

- Nestlé: Quality on the Boardroom Agenda (A)
– IMD021 – v.21.02.2003 – Petri Lehtrivaara
 - Coca-Cola Health Scare, Belgium & France, 1999
 - Bridgestone/Firestone Tire Recall, 2000
 - Snow Brand Milk Products Food Poisoning, Japan, 2000

The cost of External Failure is expanding geometrically, and is often more perception than reality based

- In the last decade a global “Perfect Storm” has occurred for consumer goods companies. The Internet has made news delivery so fast, and competition for ratings so frantic, that stories often break even before the facts are fully known.
- The media’s ability to launch a story that casts doubt on a brand is so rapid, that company executives frequently learn of the issue from the media itself.
- Consumers, made increasingly distrustful by these immature reports of risky quality, often take the first report as gospel and adopt a “better-safe-than-sorry” position even if a recantation soon follows.
- The result has immediate and lasting impact on market share as consumers quickly jump from the brand that was “tagged” to a brand that is viewed as safe because it has no active media hits.
- This fast-to-jump-but-slow-to-return attitude on the part of consumers can play havoc with the balance sheet of any consumer goods organization.



In a Nutshell . . .



What is it?

The New Risk Equation

- The traditional risks for consumer companies have been largely addressed with sustainable solutions, but the risk of external failure has taken a new twist and many companies are unprepared.

Why is it important?

Even small scale, External Failure can be disastrous in today's global market

- For most industries, quality at 4-6 Sigma is required to prevent an external failure that results in brand tagging and consumer abandonment.

What can be done about it?

Reapportion the risk budget

- Make a substantial investment in employee engagement in quality.

Supporting Reference

- Nestlé: Quality on the Boardroom Agenda (B) – IMD022 (POM 228) – v.21.02.2003 - Petri Lehtrivaara
 1. "Complacency is our enemy. If we rely too much on having quality systems. We will become complacent and then disaster will strike. We need to constantly upgrade our awareness of the quality issues across the supply chain." – René Louis Jaccoud, vice president of quality management at Nestlé.

The Risk Equation has changed, and many companies have not modified their risk resourcing

- Over the last 30 years most consumer products organizations have spent a significant portion of their revenue, on risk management.
- The three largest focus areas have been EHS, Quality, and Employee Compliance/Relations.
- Technology advancement in the areas of real-time and near-time testing and detection has enabled companies to dramatically reduce environmental risk and external quality failures.
- Employment regulations have stabilized, and the threat of sudden and adverse labor actions has dropped significantly in most developed markets.
- At the same time, society's quality expectations have increased dramatically.
- Because even small scale external failure can now have immediate, dramatic, and long-lasting impact on market share, quality performance at 4-6 Sigmaⁱ is required to prevent brand-damaging failure.
- It is virtually impossible to achieve 4-6 Sigma with technology and systems alone – an engaged workforce is a key part of the solution.
- The good news is that the optimization that has occurred in environmental and quality systems, and the stabilization that has occurred in employment issues allows companies to redistribute their risk budgets to less well-funded areas, thereby partially funding the next level of risk protection.
- Many companies have not reassessed their risk, neither reallocating proportionally nor adjusting upward their budgets, to optimize impact as the landscape of risk has changed. Simply put, they have not substantially invested in employee engagement for quality.
- The result is that many companies today deploy their risk assets against an outdated archetype.
- An analogy to this phenomenon lies in the recent history of the US Military. 10 years after the Soviet Union ceased to exist, the doctrine and budget of the military remained proportionately focused on the containment of communism, largely ignoring the new, seemingly smaller, and less predictable threats that emerged – with disastrous results.



In a Nutshell . . .



What is it?

False Security and Dimmed Senses

- We often come to believe that our technology and our system of safeguards will protect us from external failure.
- We also get used to living with risk which causes us to ignore warning signs (near misses).

Why is it important?

- **The systems and technologies we have in place may never be enough**
- **We may be blind to imminent failure**
- **We need to consider other options for full prevention**

What is to be done about it?

- **Accept that the current approach will not likely yield the 4-6 sigma required**
- **Acknowledge that we may have blind spots in our system**

Supporting References

- Nestlé: Quality on the Boardroom Agenda (B) – IMD022 (POM 228) – v.21.02.2003 - Petri Lehtrivaara
 1. "We have to give people permission to follow their intuition." – a top manager at Nestlé.
- How to Avoid a Catastrophe – Harvard Business Review – April 2011 - reprint R1104G - *Catherine H. Tinsley, Robin L. Dillon, and Peter M. Madsen*
 1. For the past seven years, we have studied near misses in dozens of companies across industries from telecommunications to automobiles, at NASA, and in lab simulations. Our research reveals a pattern: Multiple near misses preceded (and foreshadowed) every disaster and business crisis we studied and most of the misses were ignored or misread.

The current reliance on technology-based solutions often provides false security



- The finest technology is of little value, if operated incorrectly, maintained poorly, or ignored when an alarm is triggered.
- Highly sensitive technology is often defeated by operators as the triggers become annoying and are silenced and ignored. Also, repeated near misses dull our senses and make us incautious.
- Broad spectrum technology often allows unpredicted or "first-time-ever" contamination to pass through the system without alarm.
- These two technology positions require a "Goldilocks Equation", and finding the technology sweet spot that will deliver 4-6 Sigma and fully prevent external failure is elusive to say the least.
- The widely held expectation that the technology in place offers a safeguard against external failure creates a quality disconnect at the operator and manager levels, which deadens our quality senses, and reduces the passionate connection to quality required of those who make the product.
- The technologies of detection are often subject to diminished performance over time because;
 - the onsite maintenance staff often lacks the ability to keep the equipment tuned,
 - strained budgets in successive years can result in the diversion of maintenance dollars to production equipment,
 - pressure for throughput frequently results in higher and higher incidence of operator override and we become "used" to the risk,
 - the aging of equipment invariably reduces overall system effectiveness.
- The devolution of the technology dedicated to control risk usually happens unbeknownst to executives, who feel safe in the belief that the technology and systems installed years ago continue to provide a high hurdle of defense.
- Like the Doctors of the early 80s who were surprised when the defense line created by antibiotics began to crack due to the development of resistant bacteria, we can all become entrenched in the belief that safety lies in the application of the same solution, but enhanced, rather than a more holistic approach.

In a Nutshell . . .



What is it?

The system may deceive us

- Our system for investing hard and soft capital is often wired to productivity benefits
- Very necessary investments to prevent the “what-ifs” can’t clear the feasibility hurdle.

Why is it important?

Recent case history shows us that we have to dedicate more of our risk budget based on the potential harm to brand rather than just on the value of the predicted write-offs

How is to be done?

Revise the risk calculation and budgeting process so that it takes the “what-ifs” into account

Supporting References

- [Nestlé: Quality on the Boardroom Agenda \(A\)](#)
– IMD021 – v.21.02.2003 – Petri Lehtrivaara
- [Nestlé: Quality on the Boardroom Agenda \(B\)](#)
– IMD021 – v.21.02.2003 – Petri Lehtrivaara

Part of the Perfect Storm is caused by Policies that Deceive

- Of course the effective, technology based systems already in place must remain. They must be kept at peak operating condition, and new technology must be applied as it becomes reliable, but more is needed. What is needed is a reapportionment and even an increase of the funds dedicated to risk management. A higher portion of the funds must be dedicated to so-called “soft solutions” and “what-if” scenarios.
- As the price of external failure continues to escalate, the correlation that existed between the monetary value of rejected material and harm to the brand is being upended. Today a relatively inexpensive external failure in terms of write-off can result in brand degradation that is worth many hundreds or thousands of times the value of the tangible loss.
- The inversion of the cost of failure from the tangible to the intangible aspect makes valuation challenging and creates a Catch 22 for operational managers who find it extremely difficult get approval for prevention that is not linked to productivity benefits. These managers eventually give up, and adopt an “I told you so” attitude when external failure occurs, or they create “clever” proposals that “fool” the system by burying their holistic approach deep in the bowels of a technological solution.
- Either approach creates a missed opportunity to educate executives and reinforces the executives’ belief that technology will save the day.
- An organization’s insistence upon a tangible link that uses the actual cost of the waste in the system as a means to prioritize the use of its risk budgets is akin to fiddling while Rome burns. Organizations that successfully address this issue will adopt a risk model that estimates the cost of the damage to the brand, if external failure were to occur (what-if scenarios), and use that model, in addition to their current approach, to allocate funds from the risk management budget.



In a Nutshell . . .



What is it?

The Elephant in the Room

- Even though results can be elusive, and implementation is demanding, organizations must establish an effective holistic approach that engages people in quality.

Why is it important?

There is no way to achieve 4-6 Sigma without engaging your workforce, your suppliers, and in some cases, your customers.

What is to be done?

Design a continuous improvement effort specifically for your organization and give divisional local leaders permission to tailor it to their processes.

Supporting References

- Lean, take two! Reflections from the second attempt at lean implementation - Kelley School of Business - Maik Scherrer-Rathje, Todd A. Boyle, Patricia Deflorin
 - Despite the significant benefits lean offers in terms of waste reduction and increased organizational and supply chain communication and integration, implementing lean and achieving the levels of organizational commitment, employee autonomy, and information transparency needed to ensure its success is a daunting task. Not every company will be successful in its first attempt to get lean.
 - Lean promises significant benefits in terms of waste reduction, and increased organizational and supply chain communication and integration. Implementing lean, however, and achieving the levels of organizational commitment, employee autonomy, and information transparency needed to ensure its success is a daunting task.

The Elusive Key to Achieving 4-6 Sigma – Harnessing The Human Factor

- Most organizations have tried a more holistic approach, and all invest somewhat in soft technology, but the returns from a soft approach to quality are elusive, and for that reason funding is often inconsistent, and it ebbs and flows with the changes in leadership and economic reality.
- Off the shelf systems like Six Sigma, Lean, and TQM often fail to take root. They deliver only limited results because they are neither fully understood nor embraced, but mostly because they are solutions that require you to wrap your process around them instead of enabling you to wrap them around your process. The energy needed to sustain this “false alignment” is so draining that the programs quickly fail – usually in less than 18 months.
- To get the most out of the soft approach, executives have to embrace the idea that a people centered solution is needed while resisting the temptation to select one and implement it uniformly across the board, which, according to the literature, would have a 60-96% chance of failure within 18 months.
- Executives must create a compelling and relentless requirement to have a soft solution as part of the whole solution set and must fund it, but must leave its style, design, implementation, and maintenance up to individual business unit leaders at the division or facility levels.
- In any event, we must address the elephant in the



room, push past the elusive nature of it all, and arrive at genuine and sustained engagement.

- Executives should be like the math teacher who;
 - provides her students the theory and support,
 - gives them room to creatively work the problem,
 - reviews their work,
 - but ultimately grades them based on their arrival at the right answer within a given time frame.

In a Nutshell . . .



What is it?

Executive support for the human factor in quality

- A continuous agenda for employee engagement in quality in the boardroom that is pushed deeply into the organization.

Why is it important?

The evidence indicates that such an approach is needed to prevent or weather the perfect storm that results from external failure.

What is to be done about it?

Take the four initiating actions

1. Develop 3-6 quality imperatives
2. Fund employee engagement
3. Impose corporate governance
4. Create criteria for success

Supporting Concepts

- Nestlé: Quality on the Boardroom Agenda (A)
– IMD021 – v.21.02.2003 – Petri Lehtrivaara
- Nestlé: Quality on the Boardroom Agenda (B)
– IMD021 – v.21.02.2003 – Petri Lehtrivaara
- Lean, take two! Reflections from the second attempt at lean implementation - Kelley School of Business - Maike Scherrer-Rathje, Todd A. Boyle, Patricia Deflorin
- How to Avoid a Catastrophe – Harvard Business Review – April 2011 - reprint R1104G - Catherine H. Tinsley, Robin L. Dillon, and Peter M. Madsen

What can executives do to implement a holistic approach that can prevent or weather the perfect storm?

- Organizations that respond well to this perfect storm and that achieve world-class (4-6 Sigma) levels of prevention will be those organizations whose executives answer this question thoughtfully and thoroughly, and then go on to design an holistic quality approach that places appropriate emphasis on the soft solutions – the human interface to the quality process.
- Adopting methods that have already proven successful will provide a good starting point. To that end, many elements of the various continuous improvement models now in vogue offer a leg up on the design needed to build an effective set of soft solutions.
- The list of Essential Elements contained in this document can be used by executives to set the criteria for a successful approach while giving business unit leaders the flexibility needed to build a system that will work with their unique processes.
- A summary of the major initiating actions is below and the Essential Elements follow on successive pages.

1. Create a highly animated quality strategy with 4-6 imperatives

– Identify those few strategic imperatives that will ensure a quality system that can prevent external failure and drill on them relentlessly.

2. Address the elephant in the room, and push through to engagement

– Place real money in the budget (1.5-3% of payroll) to achieve true employee engagement in quality; hire experts, train employees, build people-based quality systems, and give people the duty and freedom to ensure quality.

3. Impose Corporate Governance

– Define it, require it, and police it. Commission a team that evaluates the effectiveness of each division's or facility's approach and make an effective approach a leadership imperative.

4. Create specific criteria for success

- and a unique evaluative process, using a point scale, that scores effectiveness, maturity, and rigor, and that provides a CAPA process.



In a Nutshell . . .



What is it?

The 16 Essential Elements

- The universal and critical factors needed to engage employees in the quality effort regardless of what model is adopted or what system is designed.

Why are they important?

They provide the recipe for success and the flexibility to align your approach with your process

- Ensuring effective inclusion of the 16 essential elements provides an effective archetype for success while allowing for alignment to the unique processes in any business

What can be done about it?

Use them to build your Evaluative Success Criteria

Supporting Reference

- Lean, take two! Reflections from the second attempt at lean implementation - Kelley School of Business - Maïke Scherrer-Rathje, Todd A. Boyle, Patricia Deflorin
- Improving Working Conditions in a Global Supply Chain – MIT Sloan Management Review - WINT ER 2 0 0 7 VOL . 4 8 NO. 2 RE Print Number 4 8 2 1 2 - Richard Locke and Monica Romis
- Linking quality and Pay - *HR Magazine*, December 1992, pages 55-59 - Patricia K. Zingheim and Jay R. Schuster
- Avanulo Blue Paper 033 – Baseline Criteria for Establishing a Continuous Improvement Culture – July 2011

The 16 Essential Elements of engagement and a point-based evaluation – a good place to start

- Evaluate effectiveness, maturity, and rigor, for each element and link it to a CAPA process.
- The criteria below are the essentials required.



The 16 Essential Elements for Engaging Employees in the Quality Effort fall into four main clusters and are fully defined in a separate Avanulo criteria sheet.

Commit to leverage the human factor

1. Make it a sustained top-down imperativeⁱⁱ
2. Link it tightly to your business goals
3. Weave it into to your critical plans

Deploy to ensure engagement

4. Create compelling and permanent motivationⁱⁱⁱ
5. Be principal-centered in your approach^{iv}
6. Remove organizational barriers^v
7. Smooth out the work^{vi}
8. Hold all accountable to participate & perform^{vii}
9. Develop a deep team spirit
10. Demand maturity (professionalism + Rigor + Robustness)

Understand & ensure understanding

11. Have a process-centered view of the customer
12. Make really good, open decisions all the time
13. Be transparent, visual, and numbers oriented

Optimize quality in every process

14. Declare war on waste
15. Use a few great tools
16. Simplify to sustain after gaining understanding



Continuous Improvement,
an Effective Defense
against External Failure



External Failure and the
Media – a Perfect Storm of
Brand Destruction



A New Risk Model is Needed



Over-Reliance on Technology
could lead to False sense of
Security



Some current decision-making
models could deceive leaders



We have to address the
Elephant in the room
and pursue the elusive
benefit from Employee
Engagement



Leaders can use the 4
Initiating actions and the 16
Essential Elements to design
an effective Engagement
Approach for Quality



About the Author

Dave Cahill is the Managing Partner of Avanulo, a unique embedded consulting firm working in the North America, Europe, the Middle East, and Latin America. Dave is a senior manufacturing professional who has his roots in cost control and continuous improvement. He has worked for world-class organizations like Tenneco, Sappi, and Groupe Danone. He has served in general, line, and staff positions and has led large teams to excellence. Dave is the inventor of several effective business tools, like Kuplo, the 1440 Management System, and the Opportunity Tree. He has taught continuous improvement and revenue enhancement to thousands of people in 10 countries. Dave has also overseen the successful resolution of several large-scale, business crises. Prior to his work in the private sector, Dave taught college level Spanish, Russian, and German, and served in the US military as both an enlisted person and a commissioned officer.

Summary

- The evidence is clear, the Cost of External Failure is higher than ever, and media pervasiveness has created a highly fickle consumer base that will abandon a product quickly.
- The old risk management models are no longer effective, and overreliance on technology-based solutions can leave organizations exposed.
- A new risk management model that ensures organizations achieve and sustain quality levels of 4-6 Sigma is required to prevent brand-damaging external failure.
- Solutions whose effectiveness has waned over the years; a dulling of the quality senses caused by over-reliance on technology; the numbing effect of exposure to repeated near-misses; and obsolete decision-making systems such as capital investment based too heavily on productivity ROI; can create a falsely positive impression of the real level of risk in the system
- A comprehensive approach that effectively addresses the Human Factor and engages employees, suppliers and customers in Quality is imperative.
- The most effective organizations will require a holistic approach that; focuses on the production unit, but pushes quality up and downstream, sets criteria for success, and provides business unit leaders the support needed to develop unique solutions that are aligned within their processes.
- There are four initial things executives can do to get the ball rolling; Create a highly animated quality strategy with 4-6 imperatives; fund the soft technologies; impose corporate governance; and create specific criteria for success.
- There are 16 essential elements for implementing an employee engagement approach for quality that serve well as guidelines for success while they provide flexibility to design a solution what will work for any unique process.



References

1. Nestlé: Quality on the Boardroom Agenda (A) – IMD021 – v.21.02.2003 – Petri Lehtrivaara
2. Nestlé: Quality on the Boardroom Agenda (B) – IMD022 (POM 228) – v.21.02.2003 - Petri Lehtrivaara
3. Medical Errors and Quality of Control from Control to Commitment – California Management Review – Spring 2006 – Vol. 48 – No. 3 - Naresh Khatri, Alok Baveja, Suzanne A. Boren, Abate Mammo
4. Toyota: The Accelerator Crisis – Thunderbird School of Management – TB0243 (2011) - Michael Greto, Andreas Schotter, Mary Teagarden - *Business Horizons* (2009) 52, 79–88
5. Lean, take two! Reflections from the second attempt at lean implementation - Kelley School of Business - Maïke Scherrer-Rathje, Todd A. Boyle, Patricia Deflorin
6. How to Avoid a Catastrophe – Harvard Business Review – April 2011 - reprint R1104G - *Catherine H. Tinsley, Robin L. Dillon, and Peter M. Madsen*
7. Improving Working Conditions in a Global Supply Chain – MIT Sloan Management Review - WINTER 2007 VOL . 48 NO. 2 RE Print Number 48212 - Richard Locke and Monica Romis
8. Linking quality and Pay - *HR Magazine*, December 1992, pages 55-59 - Patricia K. Zingheim and Jay R. Schuster
9. Avanulo Blue Paper 033 – Baseline Criteria for Establishing a Continuous Improvement Culture – July 2011
10. Why does LEAN have a 96% Failure Rate? – Auburn Works Blog by [Henry Burd](#) on August 14, 2010 at 10:30pm; address at end note^{viii}.
11. Leading Lean: Forging Your Help Chain - by *Jamie Flinchbaugh* - April 19, 2007 - http://www.assemblymag.com/Articles/Column/BNP_GUID_9-5-2006_A_100000000000091114
12. The Black Swan by Nassim Nicholas Taleb, Random House, 2007 – revised in 2010
13. Majority of American Workers Not Engaged in Their Jobs - by Nikki Blacksmith and Jim Harter- Gallup Poll - October 28, 2011 - http://www.linkedin.com/share?viewLink=&sid=s700183507&url=http%3A%2F%2Flinkd%2Ein%2FCSh6JW&urlhash=AalC&uid=5541974984550789120&trk=EML_nus_share-F7&ut=1176Rfiw82R01
14. The Surprising Truth about What Motivates Us – Daniel H. Pink – Penguin Books - 2009



End Notes

ⁱ Four Sigma is a defect rate of 0.62%; Five Sigma is a failure rate of 0.0235; Six Sigma is a failure rate of 0.00034%. See Table Below

Sigma level	DPMO	Percent defective	Percentage yield	Short-term C _{pk}	Long-term C _{pk}
1	691,462	69%	31%	0.33	-0.17
2	308,538	31%	69%	0.67	0.17
3	66,807	6.7%	93.3%	1.00	0.5
4	6,210	0.62%	99.38%	1.33	0.83
5	233	0.023%	99.977%	1.67	1.17
6	3.4	0.00034%	99.99966%	2.00	1.5
7	0.019	0.000019%	99.999981%	2.33	1.83

ⁱⁱ **Drive Quality from the top.** Make quality a Board Room Agenda and take steps to ensure that conformance to the corporate quality culture is not optional.

1. Fund quality at the technology, process, and human levels of interface.
2. Develop strategies and tactics to ensure that the Quality culture is not diluted due to expansion, or growth.
3. Push your quality culture upstream to supplies and downstream to customers to enable the entire supply chain to be engaged in quality.

http://en.wikipedia.org/wiki/Six_Sigma

ⁱⁱⁱ **Create an At-Risk (Variable) Compensation System that promotes Quality Engagement** – Quality Engagement defined as; an awareness of and a passion for quality is the last and best line of defense against external failure.

Because leadership skill and employee engagement derived from HR Practice are human factors with a high variation, neither can be relied upon to ensure Quality Engagement.

1. Although respect for workers is critically important, and respect and many other issues must be addressed, a level of at-risk compensation that is equal to or greater than 15% of annual pay provides a powerful and ongoing incentive for Quality Engagement when well designed and well executed.
2. Any employee performing mostly algorithmic tasks who faces the instant loss of 15% or more of pay, if quality is not achieved, assuming the lost pay cannot be made up with overtime, will place quality at the highest level of priority.
 - a. Experience has shown that attempting to obtain Quality Engagement with 12% or less is ineffective.
 - b. Because most companies attempt to place 5% or less of annual pay at risk for Quality Engagement, there is the widely held, erroneous belief that linking compensation to pay is ineffective.
 - c. Dedicating 15-35% of annual pay to an at-risk plan focused on Quality Engagement can be achieved without extraordinary increase in payroll over a several year period by freezing base pay until it falls to about 45% of the market for hourly employees and 50% for salaried employees, and by diverting COLA increases partially or entirely to an at-risk plan over a several year period.

- d. As often as possible set variable pay at the natural work team level rather than at an individual level to promote teamwork.
- e. It is essential to make the at-risk pay subject to very clear and doable criteria. Making the pay unachievable or having unclear criteria, or having criteria over which employees have no control can cause more harm than good.
- f. At risk pay for employees performing mostly heuristic tasks must be delivered with other carefully designed rewards and must be “now that” and not “if, then”.

^{iv} **Quality-centric Leadership** – Good leadership can have a tremendously favorable impact on the Quality Engagement of employees and on Quality Performance, but the variation caused by turnover and the differences in individual talent and personality create a vexing problem for organizations that rely too heavily on leadership to ensure Quality and Quality Engagement. Minimizing variation of management is essential to get the most out of a leadership corps’ ability to bring about Quality Engagement.

1. Having a strong set of behavioral principles against which leaders are regularly assessed is an essential element to reducing the variation of management so that it can promote Quality Engagement. Linking those behaviors to compensation, promotion, and even continued employment, if necessary, is a key aspect to ensuring Quality-centric Leadership.
2. Training Training Training of the leadership corps by superiors, and experts, and training by the leadership corps of subordinates and suppliers is another key element. A well-established Quality Training Curriculum should be in place that creates a common language and common understanding of:
 - a. the specific importance of quality in the processes of the organization,
 - b. the technical aspects of quality in the organization,
 - c. the continuous improvement model employed to achieve and maintain quality,
 - d. and the specific responsibility and duty to quality each employee has.
 - i. 80 hours a year of training for each employee on quality focused topics is not unreasonable and 40 hours is the bare minimum.
 - ii. Training go beyond informing and should establish specific behavioral, procedural, and performance requirements.
3. Promote slowly and promote only those that deeply understand the work processes and the quality issues that they contain.
4. Develop and promote people internally so that the quality expertise is not lost, or worse, disregarded by newcomers in positions of authority who do not understand fully the quality process.

- a. Develop HR systems that tease out internal talent and then vet that talent and develop it.
 - b. Take advantage of the location-locked hourly populations and develop the most talented of them into lifelong, front-line and mid-level leaders who will remain engaged in Quality because continued employment in the organization is a powerful force in the stability of their lives.
5. Practice the management technique of “Go and See for Yourself” so that leaders at every level really understand what is going on.

^v **Remove Organizational Barriers** - Facilitate engagement by assuring organizational hygiene and fostering innovation.

1. A well-animated, annual improvement plan for the improvement of organizational hygiene is present at every level in the organization.
 - a. A key aspect of Evenness is Organizational Hygiene – that is to say, the elimination of distractions caused by perceived or actual inconsistencies and injustices in the workplace and by employee mistrust and disgruntlement when Organizational Hygiene issues are pervasive.
 - b. In the annual plans items identified are categorized as:
 - i. Unsafe
 - ii. Inconsistent
 - iii. Illogical
 - iv. Unjust or contrary to company values
 - v. Distracting – limiting quality result, evenness, or efficiency
 - vi. Other
 - c. As often as possible, issues identified are addressed immediately.
 - d. A CAPA is in place.
2. Every unit meets at least monthly to progress the plan, consider newly surfaced issues and review impact of improvements to organizational hygiene
3. Managers, Supervisors, and Employees can cite in common what has been addressed and what remains to be addressed.
4. A healthy balance is apparent that provides employees the security to discuss organizational hygiene issues while preserving managerial control for leaders. Innovation while adhering to Quality Standards is encouraged.

^{vi} **Work Flow Evenness** – As often as possible JIT methodologies should be employed to create a smoothness of work.

1. At all levels of the organization, from the boardroom to the plant floor, an approach to work that is like the tortoise must be encouraged and the rapid starts and stops of the hare must be discouraged.
2. In order for people to truly safeguard quality and prevent external failure, they must work in an environment that is free from surprises, distraction, illogical requirements, and busy work.

3. Creating work flow evenness frees people up to think about and work on quality and improvement.
4. A key aspect of Evenness is Organizational Hygiene – that is to say, the elimination of distractions caused by perceived or actual inconsistencies and injustices in the workplace and by employee mistrust and disgruntlement when Organizational Hygiene issues are pervasive.
5. A key aspect of Evenness is Organizational Hygiene – that is to say, the elimination of distractions caused by perceived or actual inconsistencies and injustices in the workplace and by employee mistrust and disgruntlement when Organizational Hygiene issues are pervasive.
 - a. In the annual plans items identified are categorized as:
 - Unsafe
 - Inconsistent
 - Illogical
 - Unjust or contrary to company values
 - Distracting – limiting quality result, evenness, or efficiency
 - Other
 - b. As often as possible, issues identified are addressed immediately.
 - c. A CAPA is in place.
 - d. Innovation
 - All Quality standards contain the “why” not just the “what” and the “how”.
 - When a new “what” or “how” is devised, it must be tested, subject to consensus and approved. Only then can it be implemented.
 - Innovation on the floor must be a fluid yet well-defined process in which everyone is trained and micro innovation is encouraged so that continuous improvement can occur.
 - Once an innovation is tested, subjected to consensus and approved, it is implemented and it becomes the new, expected standard.

^{vii} **Ensure Real Accountability in the moment, and at the process level**

1. Help chains are established,
 - a. *Definition – Help Chains or “Andon” is a well-established Lean tool for escalating accountability for a problem that cannot be addressed at the present level. A help chain has crisp, pre-established triggers, defined escalation point by title or individual name, and defined limits for triggering and responding.*
 - b. Help Chains exist in every area, are well-animated, visibly displayed, and adhered to.
 - c. All have had training in how to activate and respond to the help chains to which they belong.

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2. In addition to a variable pay scheme that rewards conformance to quality standards and quality performance, an animated, mature, consistent and effective performance management systems is in place.
 - a. A consequence system that gives the benefit of the doubt and second chances is in place. The system starts with expectation setting, escalates to coaching, and finally moves to progressive disciplinary action.
 - b. All supervisors and managers receive training on the system and managerial training on how to set expectations, coach, investigate and document performance, administer discipline, and recognize positive results.
 - c. Supervisors administer the majority of the expectation setting and discipline up to the point of loss of pay, demotion, or loss of employment.
 - d. Managers administer discipline involving loss of pay, demotion, and loss of employment.
 - e. HR provides training, acts as steward of the process to ensure appropriate application, consistency, and conformance to legal requirements and labor agreements.
 - f. The discipline that employees receive is the minimum required to prevent recurrence and remain consistent.
 - g. Employees are not surprised by performance feedback or consequences.
 - h. The majority of feedback employees receive is positive.
 3. Zoning systems are in place to clearly delineate ownership and accountability.

viii Address for blog posting - Why does LEAN have a 96% Failure Rate?
http://virtual.auburnworks.org/profiles/blog/show?id=3307508%3ABlogPost%3A3706&commentId=3307508%3AComment%3A3724&xg_source=activity