# GUIDELINES for KMAX

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Annexure:

a. **Annexure I**: On-site Assessment Framework
b. **Annexure II**: Confidentiality Agreement Draft (will be sent on request)
Introduction

Most enlightened organizations adopt some kind of ‘Operational Excellence’ practice, be it Lean, TPM®, Six Sigma, Kaizen™, TOC or a mix of them. However, they soon hit a plateau. That is because there is no standard blueprint to World Class.

‘Operational Excellence’ is not a destination; but a journey of continual improvement towards a moving target. You never arrive; you just develop capabilities and cross newer milestones.

Therefore, managements periodically need to know where they stand vis-à-vis contemporary practices so that they can steer their ‘Operational Excellence’ journey towards global competitiveness. In order to meet this need, Kaizen Institute has evolved a model of assessment, which provides answers to the following questions:

- Is our manufacturing operation globally competitive?
- If not, what are the gaps? What do we need to do to bridge those gaps?

KMAX (Kaizen Institute’s Maturity Assessment for Excellence) is the model, which evaluates Operational Excellence maturity over 5 levels – from 1 to 5. Although there is a recognition and award associated with each level, your real prize is the exciting journey in quest of excellence, not the award itself.

Objective

- Providing a globally benchmarked framework for assessing manufacturing organizations in their journey to global competitiveness in operations; and recognizing their achievements by awards/ medals.
- Providing action guidelines to interested organizations for progressing to the next stage in their journey of excellence.

Eligibility Criteria

A. FIRST TIME:
   When a manufacturing unit applies for KMAX for the 1st time, it must be practising any Operational Excellence system (Lean/ TPM®/ Six Sigma/ TOC/ Kaizen™ or a combination) for at least 2 years before applying for assessment.

   For 1st time applicants, KMAX jury will assess and recognize the organization at any of the five levels of maturity.

   A KMAX award/ medal will have a validity of three years.

B. SUBSEQUENTLY:
   When any unit applies for KMAX for re-assessment towards the same or a higher level, the unit must practise Operational Excellence at least for 1 more year after qualifying for the previous level of maturity.
### Process of Application & Assessment

#### ACTIVITY

1. **Inform Kaizen Institute**
2. **Raise Invoice for Application Fee**
3. **Make Payment**
4. **Submit Application**
5. **Off-site Data Analysis**
6. **Accepted?**
   - YES: Go to **Raise Invoice for On-site Assessment**
   - NO: Go to **Feedback**
7. **Make Payment**
8. **On-site Assessment**
9. **Evaluation by KMAX Jury**
10. **Qualified for Award?**
    - YES: Go to **Award Announcement**
    - NO: Go to **Inform Kaizen Institute**

#### WHO

<table>
<thead>
<tr>
<th>Activity</th>
<th>Who</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inform Kaizen Institute</td>
<td>Applicant</td>
</tr>
<tr>
<td>Raise Invoice for Application Fee</td>
<td>Kaizen Institute</td>
</tr>
<tr>
<td>Make Payment</td>
<td>Applicant</td>
</tr>
<tr>
<td>Submit Application</td>
<td>Applicant</td>
</tr>
<tr>
<td>Off-site Data Analysis</td>
<td>Kaizen Institute</td>
</tr>
<tr>
<td>Accepted?</td>
<td>Kaizen Institute</td>
</tr>
<tr>
<td>Raise Invoice for On-site Assessment</td>
<td>Applicant</td>
</tr>
<tr>
<td>Make Payment</td>
<td>Applicant</td>
</tr>
<tr>
<td>On-site Assessment</td>
<td>Kaizen Institute</td>
</tr>
<tr>
<td>Evaluation by KMAX Jury</td>
<td>KMAX Jury</td>
</tr>
<tr>
<td>Qualified for Award?</td>
<td>Kaizen Institute</td>
</tr>
<tr>
<td>Award Announcement</td>
<td>Kaizen Institute</td>
</tr>
</tbody>
</table>

#### HOW

<table>
<thead>
<tr>
<th>Activity</th>
<th>How</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inform Kaizen Institute</td>
<td>Click here to download KMAX Entry Form, fill it and email to <a href="mailto:kmaxafrica@kaizen.com">kmaxafrica@kaizen.com</a></td>
</tr>
<tr>
<td>Raise Invoice for Application Fee</td>
<td>Email &amp; Courier</td>
</tr>
<tr>
<td>Make Payment</td>
<td>Cheque/ Online</td>
</tr>
<tr>
<td>Submit Application</td>
<td>Submit KMAX Entry Form downloaded from here</td>
</tr>
<tr>
<td>Off-site Data Analysis</td>
<td>As per KMAX standard</td>
</tr>
<tr>
<td>Accepted?</td>
<td>Email</td>
</tr>
<tr>
<td>YES: Raise Invoice for On-site Assessment</td>
<td>Email &amp; Courier</td>
</tr>
<tr>
<td>NO: Feedback</td>
<td>Cheque/ Online</td>
</tr>
<tr>
<td>Make Payment</td>
<td>As per KMAX Standard</td>
</tr>
<tr>
<td>On-site Assessment</td>
<td>Jury Meeting</td>
</tr>
<tr>
<td>Evaluation by KMAX Jury</td>
<td>Email</td>
</tr>
<tr>
<td>Qualified for Award?</td>
<td>Email/ Website/ Public announcement/ Press release</td>
</tr>
<tr>
<td>Award Announcement</td>
<td>Award Event</td>
</tr>
</tbody>
</table>

**Registration fee is waived for KI Africa Consulting clients**
Key Points

a. **Confidentiality Agreement**

A NDA (Non-disclosure Agreement) will be entered into between the applicant organization & Kaizen Institute Africa. Ltd. A sample is provided as Annexure II.

b. **On-site Assessment Days**

The number of on-site assessment days & the number of assessors depend on turnover of the applicant unit, as per the table below:

<table>
<thead>
<tr>
<th>Turnover million USD →</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Man Days Off-site</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>No. of Man Days On-site</td>
<td>3</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Total Man Days</td>
<td>6</td>
<td>9</td>
<td>13</td>
</tr>
</tbody>
</table>

c. **Assessment Team**

Assessment team members are highly experienced professionals in the field of Operational Excellence practices. The assessment team will include one Lead Assessor; and would be supported by one or more Assistant Assessors depending on the size & complexity of the applicant unit.

There may be cases in which a trainee (observer) or a member of the secretariat will attend the assessment. This will be with the permission of the applicant company.

**Fees & Expenses**

<table>
<thead>
<tr>
<th>Turnover (for the applicant unit) Million USD →</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fees in USD →</td>
<td>6000</td>
<td>9000</td>
<td>12000</td>
</tr>
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</table>

**Registration Fee: USD 1000**

6.1 The above fee is valid for all KMAX applicants. However, for the present, no 'Registration Fee' is payable by our Consulting Clients (past or present).

6.2 A 'Registration Fee' of USD 1000 is common for all - Small, Medium, & Large KMAX applicants.

6.3 **Other Expenses**

Following expenses are reimbursable by the applicant unit:

- Return Air Fare
- A.C. Taxi fare
- Executive class full boarding and lodging
Application Mailing Address

KMAX Secretariat,
Kaizen Institute Africa

Email:

kmaxafrica@kaizen.com
Annexure

Annexure 1
On-site Assessment Framework

1.1 Introduction:
As the world’s oldest Operations consulting firm; with Japanese parentage; presence in over 50 countries; experience in a wide variety of Manufacturing, Service, Agricultural & Govt. organizations - Kaizen Institute has evolved a globally validated framework for evaluating the status of the Operations Excellence journey of any continually improving organization– encapsulated as KMAX.

Not only does the KMAX framework evaluate the current status of OE (Operational Excellence) leadership, people practices, culture, processes, systems & structure with reference to the current state-of-the-art; but also provides gaps & possible next steps in your on-going quest for excellence.

1.2 Assessment Criteria:
The assessment criteria can be seen in the following picture:
1.3 Weightage of Assessment criteria in different stages of maturity

- The early stage of OE practise should seek to build leadership, culture & people capabilities for long-term competitiveness.
- As these capabilities get built, and processes are improved reactively, performance measures should start showing a positive trend.
- In the maturity stage of OE, leadership & culture are well entrenched. These organizational capabilities show up in world-class QCD results achieved through pro-active direction setting by leaders.

Keeping the above in mind, the weightage of the assessment criteria keeps changing from enablers & drivers, to use of these capabilities for driving pro-active change & achieving world-class performance, as shown in the chart below:

1.4 Scoring

KMAX framework will assess the current state of maturity within the applicant unit through a pre decided set of questions under each criterion. OE experts carry out the assessment through actual on-site observations in the workplace. Each question scores between 0 & 4 points as explained below:

0 - Characteristic is not present
1 - Characteristic is present in isolated cases (pilot areas)
2 - Characteristic is fully present in some areas (>25% of the area evaluated)
3 - Characteristic is present & implemented (>60% of the areas evaluated)
4 - Characteristic is completely & exemplarily present & implemented

There are different numbers of questions under every criterion. For example, for evaluating ‘Customer Orientation’, there are 7 questions; & for evaluating ‘Planned Maintenance’ pillar of TPM®, there are 14 questions.
As each question is evaluated, the evaluation scores from all questions add up for every criterion into a % w.r.t. maximum score possible. Apart from providing a score, these numbers also appear as color coded bars on the summary page as illustrated below:

1.5 Outline for Each Criterion:

1) **Enablers:**

**Values & Principles**

**VALUES:** are the concepts that drive our choices. They also govern our judgement of what is important for us.

KMAX seeks to assess how the following 5 values are lived by an applicant organization:

1. Customer Orientation
2. People Orientation
3. GEMBA (Workplace) Orientation
4. Process Orientation
5. Scientific Orientation

**PRINCIPLES:** are beliefs that govern organizational behavior. They define the manner in which organizational values are carried out.

Principles refer to people’s ways of thinking. They are the starting point for OE and form the foundation on which organizational excellence is built.

All the 5 values are represented by 4 principles each, as shown in the following table:
### Operational Excellence - 5 X 4 Principles

<table>
<thead>
<tr>
<th>1. Customer Orientation</th>
<th>Market In, Next Operation is Customer (Stop to fix problems), Pull at customer demand, Partnering</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. People Orientation</td>
<td>People Involvement – as teams, No Blaming, Develop people as root cause problem solver's, Leaders as coaches</td>
</tr>
<tr>
<td>3. Genga Orientation</td>
<td>Genchi Gembutsu, Speak with Data, Organized Genga, Manage visually</td>
</tr>
<tr>
<td>4. Process Orientation</td>
<td>Focus on Processes and results, Total system optimization, Make process flow, Standardized work &amp; processes</td>
</tr>
<tr>
<td>5. Scientific Orientation</td>
<td>Reduce 3MU's Muda Mura Muri, PDCA/SDCA approach, Go Upstream to solve problem, Hansei – Learning organisation</td>
</tr>
</tbody>
</table>

2) **Drivers:**
- Leadership
- People Development
- Structure
- Systems

### KAIZEN™ Change Model (KCM)

[Image of the KAIZEN™ Change Model (KCM)]
As per Kaizen Institute’s “**Kaizen™ Change Model (KCM)**” pictured above, if a company
1. Works every day to improve shop floor & people capabilities **(Daily KAIZEN™)**:
2. Has the right targets & strategies to follow **(Leaders KAIZEN™)**:
3. Has established the right support structure **(Support KAIZEN™)**:
4. Implements projects to achieve breakthrough results **(Project KAIZEN™)**,

This company is genuinely on its journey to global excellence.

The model has the following elements:

**2.1 Daily KAIZEN™**

These set of activities are designed to institutionalize daily routines that build people capabilities for following standard work, for maintaining their workplace/ equipment and for day-to-day problem solving.

A set of questions shall evaluate these practices.

**2.2 Leaders KAIZEN™**

These set of activities are designed to develop supervisory/ managerial routines that promote OE Values & Principles; deploy, measure & monitor the right KPIs through Visual Management & Gemba Walks; and coach the desired set of behaviors through ‘walking the talk’.

Another set of questions shall evaluate these practices.

**2.3 Support KAIZEN™**

These set of activities are designed to develop internal expertise to

- Provide training, guidance & audits for the OE initiative
- Run the secretariat that promotes OE initiatives unit-wide through communications, contests, publications, reward & recognition etc
- Maintain unit level performance dash-boards, OE roadmaps & coordinate managerial reviews

A set of questions has been designed to evaluate these practices.

**2.4 Project KAIZEN™**

In order to make real progress from current state to the desired future state, several cross-functional & local improvement projects (also called KAIZEN™ bursts) are required to be implemented. These projects are identified by several means:

- From Customer complaints/ needs
- From Hoshin Kanri (Policy Deployment)
- From Value Stream Mapping
- From Loss-tree Analysis
They are prioritized & put together in a roadmap - typically yearly, but sometimes as half yearly sprints. They are the means to achieve significant process improvement breakthroughs.

KMAX framework seeks to evaluate how effectively does the applicant unit identify & carry out such improvement projects.

Drivers’ score, as a sub-set, is also represented by radar as shown below:

![Radar Chart](image)

3) **Process Excellence:**

A journey of Operational Excellence manifests itself through Process Excellence. It is eventually a journey towards creating ‘perfect processes’. A ‘perfect process’ is one (definition courtesy Jim Womack) in which

Every step is

- Completely **Valuable** (Value Adding) – objective of Lean
- Perfectly **Capable** – objective of Six Sigma
- Perfectly **Available** – objective of TPM®
- Exactly **Adequate** – objective of TOC
- **Carbon & Water Neutral** – objective of the ‘Green’ movement
Every step in connected by
✓ Continuous Flow
✓ Noiseless Pull
✓ Maximal Leveling – all objectives of Lean

Using this understanding, the KMAX framework evaluates the current state of applicant unit’s processes with reference to the following:
1. Total Flow Management (Lean) practices
2. Total Productive Maintenance (TPM®) practices
3. Total Quality Management (including Six Sigma) practices
4. Total Service Management practices (applicable to office processes)
5. Total Environment Management (‘Green’) practices

Process Excellence scores are also represented as visual radar as follows:

4) **Direction Setting:**

Deployment& Alignment

The OE journey in every enlightened organization is driven top-down, but implemented bottom-up. The strategic direction & prioritization is determined by the Leadership team; it is deployed & cascaded down through the organizational hierarchy to become improvement actions/ projects aligned to the direction set; measured through interlinked KPIs and implemented bottom-up.
This structured process is Hoshin Kanri (Policy Deployment). It is application of PDCA at the strategy level & needs to be controlled through periodic reviews & updates. The KMAX framework seeks to evaluate the effectiveness of this process in the applicant unit.

5) **Results:**

An effective journey rewards practitioners with gratifying results. In terms of quality, cost, delivery & productivity performance impacting customers; & in terms of safety & morale impacting employees.

Competitiveness of the organization is enhanced & accelerated growth is enabled. Motivation & job satisfaction are very much a function of individual success & growth. These are the rewards to be reaped by excellent organizations.

Special attention is paid to the kind of measures deployed. This is because some of the traditional measures are known to drive anti excellence behaviors!

KMAX framework uses 3-year performance trend charts of appropriate performance parameters to evaluate whether the drive to excellence is actually providing the desired results.