Quality management in the South African CPI

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with Lekau Ranoto and Princess Tlholoe
How important is quality?

- **Remember, quality is our top priority.**
- **Question:** Is it more important than safety?
- **Ooh... I forgot about that one.**
- **Question:** Is quality more important than obeying the law?

- Well, probably not.
- If we could maximize shareholder value by selling lower quality items...
- ...wouldn't we have a fiduciary responsibility to do it?
- Hmm

- I'm sure it's in the top four.
- What if we had to lie to achieve quality?
Contents

• Defining the terminology

• Understanding the quality management system

• Challenges facing the system
Terminology

• *Quality Control (QC)* - regular checking activities to measure and control the quality collected data.

• Provides checks to ensure correctness and completeness and to identify and address errors.

• Physical checking of actual questionnaires and data editing are forms of quality control.
Terminology

• **Quality Assurance (QA)** aims to test the veracity of the processes - not the immediate correctness of data.

• Provides confidence in the quality of the product by assessing the performance of a process according to certain criteria.

• Examples - quality audits and reviewing of performance measures after the survey.
Quality management

Holistic process

- Planning
- Performance
- People
- Process

Culture
Communication
Commitment

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Five pillars of quality management

1. Quality control
2. Quality assurance
3. People management
4. International benchmarking
5. Measurement
Quality control processes

Originally….

• Supervisor checked each form for correctness
• Allocated errors…captured on a form
• H/O quality controllers….checked again
Quality control processes

Now…

- Supervisor checks, verifies and corrects forms
- Sent to HO for capturing and editing
- Errors allocated during editing process
  - Unit codes (quantity, volume etc)
  - Logical edits
  - Range edits
  - Status code allocation
Quality assurance

- Independent audits (2x year)
- Includes respondent interview
- Corrective actions process:
  - Identified in audit report
  - Query opportunity
  - Implementation
  - Verification
People management

• Most important aspect of the TQM system
• Processes link to HR performance management process
• Training: CPI methodology and general skills
• Starts with team quality improvement plan
• Developed a computer system to guide teams and individuals to reflect on achievements, objectives and plan future actions
Capturing of challenges and causes
Capturing of root causes

<table>
<thead>
<tr>
<th>Problem ID</th>
<th>Root Cause Description</th>
<th>Root Cause Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rental agents don't have time and are never prepared when we visit them for the rental prices.</td>
<td>1-Outlets/Users/Respondents</td>
</tr>
<tr>
<td>2</td>
<td>When we initiate a item within two months the item is not carried and this leads to zero links.</td>
<td>1-Outlets/Users/Respondents</td>
</tr>
<tr>
<td>3</td>
<td>We have to change our collection schedule if more than one price collector is absent or if there's road closures on our routes.</td>
<td>2-Planning and Resources</td>
</tr>
<tr>
<td>4</td>
<td>Not updating brand and product names as they change during collection.</td>
<td>3-Methodology/Price Collection</td>
</tr>
<tr>
<td>5</td>
<td>Wrong calculations on price changes and completing the field message area.</td>
<td>4-Quality</td>
</tr>
<tr>
<td>6</td>
<td>No privacy to have one on one meetings within the team.</td>
<td>5-Team</td>
</tr>
</tbody>
</table>

View Root Cause Analysis Graph

Save Problems
Delete Problem
Save Root Causes
Delete Root Cause

Statistics South Africa

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Root cause analysis

The root causes of the challenges according to category

- Methodology/Price Collection
- Outlets/Users/Respondents
- Planning and Resources
- Quality
- Team

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Capturing of objectives with actions
Allocation of actions to individuals with timelines
People management

• Annual performance appraisal process – based key performance areas.
• All except one measured quantitatively
• Trophies and certificates awarded to best performers
International benchmarks

• International peer review
  – International CPI expert
  – Using CPI handbook’s check list
  – Published findings and results
International benchmarks

• Quality assessment
  – SASQAF – based on IMF’s DQAF
    – Pre-requisite of quality
    – Relevance
    – Accuracy
    – Timeliness
    – Accessibility
    – Interpretability
    – Comparability and Coherence
    – Methodological Soundness
    – Integrity

• First Stats SA series to be assessed
  – Organisational requirements also scored
  – Good rating
Measuring quality

• Aim to measure each part of the process
• Identify problems and reflect improvements
• Used for performance management
• Identify interventions (quick and sustained)
• Top level measure – imputation rate
• Preventative measures: <3; <5
Imputation rate

Imputations as percentage of elementary indices - all urban areas
Challenges

• Soft elements: communication, culture and commitment
• Lack of on-the-ground management – depend on local management
• Most problems in small areas – team work issues
• Getting indicators right
• Avoid complacency – continuously improve
Thank you