Organizational Improvements Guided by a Holistic Transformation in Telekom Malaysia

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# Table of Contents

Table of Contents ........................................................................................................................................... 2

Organizational Improvements Guided by a Holistic Transformation in Telekom Malaysia .......................................................... 3

Objectives of the Case ............................................................................................................................................ 3

Introduction ............................................................................................................................................................ 3

Background on the Company, Industry, and Competitors ........................................................................................... 4

Business Issues/Challenges ........................................................................................................................................ 8

Case Analysis ............................................................................................................................................................ 10

Conclusion .............................................................................................................................................................. 18

References .............................................................................................................................................................. 19

Exhibit 1: Organizational Structure of Group IT & Technology of Telekom Malaysia .............................................................. 20
Organizational Improvements Guided by a Holistic Transformation in Telekom Malaysia

Objectives of the Case

The case takes place in Telekom Malaysia Berhad (TM), the biggest telecom company in Malaysia. The industry is changing complicated environment with a fast growing number of technology savvy generations. There is a dire need for TM to buck up and improve their service.

After discussing this case, students will be able to:

1. Examine transfer of knowledge of problem analysis, system integration and process reengineering to a case situation
2. Differentiate between organizational structure, process or individual problem
3. Develop competency base and multiskilling program to increase productivity of staff

Introduction

Mr. Fadhil is the leader of transformation team which is created by the top management of Telekom Malaysia (TM) to resolve the organizational issues regarding of the company’s operation. The transformation team is dedicatedly assigned by the TM’s top management to make a transformation in the organization internally. They also had known as change agent in TM and supposed to make change to the way of working culture in TM in order to be a competitive and effective organization. On December 2012, Mr. Fadhil has been called by the Mr. George, the Chief of Technology and IT Officer of Telekom Malaysia. Mr. George has assigned Mr. Fadhil a special task to address high fault rate issues in the Operational and Maintenance Department under his supervision.
First project that Mr. Fadhil and his team are assigned is to tackle the issue of high fault rate in External Plant Unit. External Plant Zone Unit (ENZ) is one of unit under Operation and Maintenance Department in TM. The external plant unit seems like lost, no focus and in disarray without a proper guide from a strong leadership. Mr. Fadhil and team must analyse the problem and take a holistic action plan to resolve this issue and transform the organization to be effective and competitive.

Mr. Fadhil is given one year time frame and their pilot project to implement the transformation program is at External Plant Zone Unit (ENZ). Within the one year time frame, Mr. Fadhil must address the issues and increase the productivity and staff competency. This means the year 2013 to 2014 is very important year to Mr. Fadhil and his team to help and bring their company to the greatness.

**Background on the Company, Industry, and Competitors**

Telekom Malaysia Berhad, an integrated telecommunications company, provides broadband, data, and fixed-line solutions in Malaysia. The company offers voice services, value-added, prepaid, broadband, and geomatics services; managed account solutions comprising Internet, Internet value-added services (VAS), voice, and voice VAS, as well as integrated information and communications technology, and integrated business process outsourcing services; content, VAS, and advertising services; and voice, multimedia, data, and backhaul services. It also provides various online products and solutions comprising HyppMe, a smart mobile application offering voice, instant messaging and SMS over Internet protocol, and call functionality; My1Content, a content portal; and TM World, a mobile application for information, as well as HyppTV, an Internet protocol television service. The company serves has 2.3 million phone customers and 1.8 million broadband customers; 345,597 small and medium enterprise broadband clients and 10 hotels. It also operates 133 channels for HyppTV, including 50 premium channels, 16 video-on demand genres, 20 interactive channels, and 27 free live TV channels, such as radio channels. The company was incorporated in 1984 and is headquartered in Kuala Lumpur, Malaysia.
Strong market position

TM has a strong market position in the fixed line and broadband markets in Malaysia. It is the largest integrated communications solutions provider in Malaysia, and one of Asia’s leading communications companies, with market capitalization of MYR11 billion ($3.1 billion). In FY20013, the group had a market share of 90% in the fixed-line market. TM is also Malaysia’s leading broadband service provider with 2.2 million customer base at the end of FY2013. In addition, the group is a leading provider of wholesale services in Malaysia.

The group’s strong market position has enabled it to enter into a public-private partnership agreement initiated by the Ministry of Energy, Water and Communications (MEWC) in 2008, to launch the national High-Speed Broadband (HSBB) initiative.

Strong market position, while providing a competitive advantage to the group, also allowed it to gain flagship contracts like the HSBB.

Diverse customer base

The group’s revenues are diversified across different customer segments. It serves six principal customer segments: consumer, small medium enterprise (SME), enterprise, government, wholesale and global. Wholesale focuses on bandwidth and other infrastructure to telcos, internet service providers, managed network service providers, application service providers, global operators and data centre providers. Global provides satellite, terrestrial and submarine fibre optic connectivity across Asia, Europe, the Americas, Oceania, the Middle East and Africa.

The group’s diverse customer base increases the asset utilization as well as allows it to diversify the business risk associated with operating in a specific customer segment.

Market recognition

TM has strong market recognition. In 2013, TM was honored with Frost & Sullivan Asia Pacific ICT Award in recognition of its stable of successful brands that have strengthened
the group’s brand identity, while also contributing to Malaysia’s equity. The Frost & Sullivan Asia Pacific ICT Award is the highly regarded branding awards in Asia-Pacific.

TM was awarded with the Trusted Brand (Gold) award for its product Streamyx and Unifi broadband service by Reader’s Digest in 2013. TM was presented with the Managed Connectivity award by Computerworld Malaysia Readers Choice Awards 2013. During October 2009, the company also received the Industry Excellence Award – Trading & Services awards by National Annual Corporate Report Awards (NACRA). Strong market recognition enhances the brand image of the group, thereby bringing more business to the company.

Concentrated operations

The group's majority of the operations are concentrated around fixed-line and related services. Following the spin-off of the mobile operations, including domestic operations and international investments as a separate public company to its shareholders, the group's operations are mainly concentrated around fixed line and related services in Malaysia. In tandem with the global trend of continuing migration to cellular and internet-based communications, the group’s voice revenue registered a decline of 9.3% to MYR4,000.7 million ($1,139.4 million) in FY2009, compared to the voice revenue of MYR4,412.1 million ($1,256.6 million) in FY2008. Resulting from the decline, voice revenue’s contribution to the group’s total revenue reduced to 46.5% in FY2009 from 50.9% in FY2008.

Although, the group retained its information and communications technology (ICT) service business, and other businesses; these businesses may not provide significant diversification. Concentrated operations will affect the operating performance of the group in coming years.

Growing broadband market

The broadband market in Malaysia is forecast to grow in the future. According to Malaysian Communications and Multimedia Commission (MCMC), in 2013, Malaysia
recorded higher broadband penetration rate at 67.1%, which is well above the target set by Broadband Commission for digital development under the ITU and UNESCO.

The target set for the developing countries by 2015 is to achieve 40% household penetration. The growth of broadband take-up is expected to continue. This is in view of the fact that 84% of the populated areas in Malaysia are within the coverage of broadband services. Malaysia will focus on improving quality of service and strive to achieve broadband penetration of 75% by 2015 through various initiatives. This is as targeted in the 10th Malaysia Plan (2011 – 2015).

The broadband market in the country is expected to grow to MYR2.8 billion ($0.8 billion) in 2010. TM is Malaysia’s leading broadband service provider as at end 2013, TM broadband subscribers reached 2.2 million, driven mainly by UniFi. UniFi grew by 31.5% with close to 635,000 subscribers. TM continued to expand its broadband reach holistically across urban, suburban and rural areas by forming strategic partnerships with housing developers and continuing to deploy High-Speed Broadband (HSBB) infrastructure. TM has reached 103 exchange areas (2012: 97 exchange areas) and achieved 1.489 million premises passed in 2013 (2012: 1.377 million premises passed).

High Speed Broadband (HSBB) initiative

A total of RM3.4 billion had been allocated for the HSBB Phase 2 project, which aims to expand coverage mainly in urban and suburban areas, to benefit approximately 4.8 million households. The Government also intends to undertake an in-depth study on measures to raise broadband speeds across Malaysia by the year 2020.

The best model will be explored to ensure similar speeds are made available to rural areas. In an effort to improve services for customers, MCMC further announced the possible allocation of the 700 MHz spectrum (currently being utilized by broadcasting services) to telcos by 2018. In 2013, MCMC reported the Malaysian household broadband penetration rate has reached 67.1%, an increase from 66.0% in 2012.
Business Issues/Challenges

Network disruptions

The group witnessed network disruptions in the recent times. In January 2010, the group announced a disruption of its internet services due to circuit faults on the Asian American Gateway (AAG) submarine cable network at Lantau in China and at the domestic international link at Genting Sempah, Pahang, linking Malaysia to the US and Hong Kong.

TM is committed to ensuring network and service availability to uphold its quality of service. However, some factors that affect service availability are beyond its control, such as cable theft, cable damage during road works, and natural calamities such as lightning. The group has put in resources to control such risks with programs like I-Watch for cable theft, road patrols to reduce cable cut risk, and flood mitigation programs. TM has also set up a Service Assurance Centre (SAC) and put in place a comprehensive Business Continuity Management (BCM) program to ensure minimum disruption to service.

Network disruptions will have an adverse effect on the quality of services, which in turn may lead to loss of customers.

Efficiency Issues

In recent years, TM has experienced new pressures from shifts in the global telecommunications industry. For example, the constant decrease demand in fix telephone services and discount long-distance service providers has led telecommunications providers like TM to push for innovation within their own organizations, finding ways to offer customers new high-quality products and services—all while minimizing operating costs.

However, the same direction of the top management is not come down to the lower staff, as statistic show a high Fault Rate in the network line especially in the External Plant Zone Unit (ENZ) which is under the Operation and Maintenance Department. Diagnostics conducted by their management on the External Plant Unit reveals common pain points:
1. Weak Organization Alignment
2. Unclear demarcation of tasks
3. Nonstandard processes
4. Specific narrow skill set of field team

Figure 1: Cause-Effect Analysis using Fishbone Method

Weak Organization Alignment

There is no good practice manpower arrangement and physical placement of the staff in the External Plant Zone unit (ENZ). The structure of the organization is not efficient to execute a good work. There is also some communication breakdown between the management and staff. These problems result the organization not functioning as it should be as an efficient operational team.

Unclear demarcation of tasks

There also some unclear demarcation of tasks between the units. There is a grey area of job demarcation as some staff not aware of whom the responsibility of the task is assigned to. This issue resulted in some case of unattended fault corrective job.
Nonstandard Process

There is no standard process in address any fault in the network. There is no dedicated team to do the preventive maintenance on the ground. This resulted the company has to pay extra cost for the something that can be avoided by doing a periodically preventive maintenance.

Specific narrow skill set of field team

The technical in External Plant Zone Unit (ENZ) seems to be very narrow skill set. They only expert in particular job that they are responsible to. Some of them have work in the same department for more than 20 years and they just know that specific particular job. This culture is very bad for the productivity of the staff and has affected the company competitiveness too.

The company realized that, inefficient organization and the unskilled and incompetence staff in their operation line could easily dampen TM vision and mission to be Malaysia’s leading new generation communications provider. The company will experience declining sales if dissatisfied customers choose competitors who can provide quality products and appropriate service.

Case Analysis

Mr. Fadhil and team take no time; they take the big challenge with big heart. He and his team are in very high spirit and morale to make sure the project can be realized. He set four objectives of the transformation program:

1. To introduce a centralized monitoring & tracking system in ENZ
2. To align the processes & focus to better assist in ENZ fault rate / restoration cycle time
3. Ensure multiskilling and retain valuable skills internally.
4. To increase productivity of team in ENZ
After a various discussion, meeting and brainstorming, he and his team comes out with comprehensive and holistic solution to cater the above problems. They have outlined 7 Lean Operating Model for the improvement works of External Plant Zone Unit. The comprehensive solutions are explained below.

Figure 2: 7 Lean Operating Model for External Plant

To ensure a smooth transformation program, Mr. Fadhil has also set up the steering committee of transformation. Mr. Fadhil divides his team into five work team. Each team focuses into a specific task to address the specific issues.
Table 1: System Integration by forming 5 teams to enforce the transformation program

<table>
<thead>
<tr>
<th>No.</th>
<th>Work Team</th>
<th>Description Of Work Team</th>
</tr>
</thead>
</table>
| 1   | Organization Realignment | • Manpower arrangement & Physical Placement of ENZ Field Team  
• Ensure Smooth Implementation of New ENZ Structure to Nationwide  
• Ensure Continuous Communication to Union & Local Management |
| 2   | Workforce Development    | • Establishing a Structured Training & Competency Assessment Program for ENZ  
• Establishing a Tracking Mechanism for Multi skilled On Job Training Execution |
| 3   | Operating Model          | • Derive KPI, Function & JTOR of ENZ  
• Establishing Clear Demarcation within Units  
• Establishing a Tactical Implementation Plan to Run ENZ Operating Model (CM & PM) supporting implementation of New ENZ Structure. |
| 4   | Vendor Management        | • Derive Contractor Requirement to Support ENZ Operating Model  
• Establishing Contractor Governance to Ensure Quality of Work |
| 5   | Tools & Testgears        | • Ensuring Sufficient Nationwide Tools, Testgears, PPE. & Vehicle to Support ENZ Operating Model.  
• Ensure ENZ Tools, Testgear , PPE & Vehicle is properly tagged & inventorized. |

He plans his project by two phases. First phase is to implement a pilot project that focus in Selangor Barat. Second phase will be a nationwide rollout of transformation program. The Project must be well communicated throughout implementation to ensure clarity of initiative objectives amongst target user scope.
7 Lean Operating Model for the improvement works of External Plant Unit

1. Raising Competencies

Pilot field team has been put on a holistic Upskilling Development Program ensuring on par skillset amongst field team. This program is the core of the project as the company leadership team realized that their main competitive advantage was the skill, knowledge, and mindset (culture) of its employees and the relationships with its customers and suppliers.

Team competency is a key to advocating excellence operational performance. This task is divided into 4 phase as shown in Figure 3 below:

**Figure 3: 4 phase of upskilling and competency program**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1: Pre Competency Assessment</td>
<td>Pre competency assessment is done to investigate what the competencies to be developed for the external plant staff</td>
</tr>
<tr>
<td>Phase 2: Classroom Blended Training</td>
<td>Classroom Training is held for the staff according to the competencies need that has been identified during the pre-competency assessment</td>
</tr>
<tr>
<td>Phase 3: On Job Training</td>
<td>On job training for every staff who has attended the classroom training. This OJT is focus on the practical of the competencies that had been learned in class training</td>
</tr>
<tr>
<td>Phase 4: Post Competency Assessment</td>
<td>Post competency assessment is held to know the effectiveness of the training program</td>
</tr>
</tbody>
</table>
Pre competency Assessment has been held on 2-4 Feb 2014. The Post Assessment has been held on 26-28th August 2014. While the Classroom training was held between the two, on 29th April- 12th June 2014. On Job Training 16th June- 11th July 2014.

2. Streamlining Processes

The purpose of standardization and streamlining processes is to establish clear demarcation within units and to establish a tactical implementation plan to run ENZ Operating Model supporting implementation of New ENZ Structure. The demarcation roles and responsibility are finalized between individual positions, units and also between the vendor/contractor. The process is done by matching the ENZ team task with the vendor or contractor requirement. Then the tasks are divided clearly within each party responsibility to avoid any confusion or grey area. The team also benchmarks the task duration to make sure the productivity of the team. They also work out to standardize every Work Instruction (WI) and Procedure (QP). This standardization is important to make sure every staff is guided by standard instruction and procedure to maintain the quality of the job.

3. New Preventive Maintenance Modus Operandi

New preventive operating model has dedicated preventive maintenance operation team working on holistic network initiatives recommended by Network Operation Centre (NOC) Analyst. This is to make sure that they do the preventive maintenance with the correct guidance and direction. The team also assigned a dedicated ‘Preventive Maintenance Ground Field Team’. This dedicated team is to make sure the maintenance work could be done effectively and avoid the extra cost resulted from a poor maintenance of the network. The task assignment also has been calculated and assigned according to manpower availability. This is to avoid unbalance work load in the team.
4. Standardize the Structure Ensuring Quality

Mr. Fadhil transformation team also studied the best functioning structure to be implemented with certain enhancement addressing point of failure in the ENZ team. The enhancements with the structure are discussed as in the Table 2 below:

<table>
<thead>
<tr>
<th>Enhancement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve Productivity</td>
<td>• The team function has accountability to vendor/contractor, aligning with Contract Requirement.</td>
</tr>
<tr>
<td></td>
<td>• Multi skilled workforce increasing productivity</td>
</tr>
<tr>
<td>Improve Preventive Maintenance Process</td>
<td>• Systematic assignment of Preventive Maintenance (PM) by Network Operation Centre (NOC) based on Fault Occurrence Trending</td>
</tr>
<tr>
<td></td>
<td>• Dedicated Preventive Maintenance Workforce</td>
</tr>
<tr>
<td>Improve Cycle Time</td>
<td>• Specific MTTR (Minimum Time To Recover) Accountability Derived to Team Level</td>
</tr>
<tr>
<td>Quality</td>
<td>• Quality Assurance (QA) is independent party from operation, oversees Team ENZ &amp; vendor partnership collaboration</td>
</tr>
</tbody>
</table>

5. Suffice Tools & Test Gear

The team is to ensure sufficient nationwide tools, testgears, PPE and vehicle to support ENZ Operating Model. They also must ensure ENZ tools, testgear, PPE and vehicle is properly tagged & inventorized. A sufficient and complete tools, test gear, PPE and vehicle are very important to the ENZ team to make sure they can do their job efficiently.
6. **System Centralization**

Throughout implementation, field teams are being trained to be aware of daily task inventory and productivity via centralized medium. This task is divided into three phase as shown in the Figure 4 below: This system centralization is to systematically track specific team accountability and individual effort.

![Figure 4: 3 Phase of System Centralization](image)

7. **Result Driven Performance Management**

Specific team accountability and individual effort can be tracked systematically once each field team is equipped with online system. Demarcate duration held by each sub units/cross units with regards to Minimum Time To Recover (MTTR). Demarcate target team and individual productivity based on job function. KPI Matrix setting emphasis on individual performance.
What has been achieved in Pilot Phase?

As the pilot project of this program has been completed, there are several achievements that the Mr. Fadhil and team can be proud off. There is 15% increment in productivity of ENZ team. The tools deficiencies have been addressed by 10%. The Minimum Time To restore (MTTR) also reduce by 8% in ENZ. There is also 6% improvement in External Plant Field Team average competency. Furthermore the establishment of External Plant Yardstick & Guidelines could help the team to have a clear demarcation of the job. Finally, the establishment of ‘System Based Productivity Tracker’ could help track specific team accountability and individual effort systematically.
Conclusion

Mr. Fadhil and his team are assigned to tackle is the issue of high fault rate in External Plant Unit. External Plant Unit is one of unit under Operation and Maintenance Department in TM. The issues at the External Plant Unit are regarding to the inefficient organization structure, nonstandard process and also lack of staff competency. Mr. Fadhil and team have analyse the problem and take a holistic action plan to resolve this issue and transform the organization to be effective and competitive.

Mr. Fadhil and team come out with comprehensive and holistic solution to cater the above problems. They have outlined 7 Lean Operating Model for the improvement works of External Plant Unit as stated below:

1. Raising Competencies
2. Streamlining Processes
3. New Preventive Maintenance Modus Operandi
4. Standardize the Structure Ensuring Quality
5. Suffice Tools & Test Gear
6. System Centralization
7. Result Driven Performance Management

The present study provides a significant contribution to the insights of scholars as well as practitioners into the process of addressing structural inefficiency, disintegration process and staff incompetency problem. Thereby, the conceptual model of system approach and system integration solution to the organizational improvement work can be an important steppingstone for scholars investigating the concept of organizational transformation program as well as for practitioners constructing or reviewing transformation program within their organization.
References


Exhibit 1: Organizational Structure of Group IT & Technology of Telekom Malaysia