<table>
<thead>
<tr>
<th>Title</th>
<th>Hewlett-Packard HK SAR Limited -- Customer satisfaction and service marketing in enterprise services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author(s)</td>
<td>Lee, Yiu Fai Bruce (李耀輝)</td>
</tr>
<tr>
<td>Citation</td>
<td>Lee, Y. F. B. (2011). Hewlett-Packard HK SAR Limited—Customer satisfaction and service marketing in enterprise services (Outstanding Academic Papers by Students (OAPS)). Retrieved from City University of Hong Kong, CityU Institutional Repository.</td>
</tr>
<tr>
<td>Issue Date</td>
<td>2011</td>
</tr>
<tr>
<td>URL</td>
<td><a href="http://hdl.handle.net/2031/6433">http://hdl.handle.net/2031/6433</a></td>
</tr>
<tr>
<td>Rights</td>
<td>This work is protected by copyright. Reproduction or distribution of the work in any format is prohibited without written permission of the copyright owner. Access is unrestricted.</td>
</tr>
</tbody>
</table>
HEWLETT-PACKARD HK SAR LIMITED --
CUSTOMER SATISFACTION AND
SERVICE MARKETING IN
ENTERPRISE SERVICES

BY

LEE YIU FAI BRUCE

Presented to the College of Business
City University of Hong Kong in Partial Fulfilment
of the Requirement for the Degree of

Master of Business Administration

CITY UNIVERSITY OF HONG KONG
2011
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>4</td>
</tr>
<tr>
<td>1. A CASE STUDY</td>
<td>5</td>
</tr>
<tr>
<td>1.1. Company Background</td>
<td>5</td>
</tr>
<tr>
<td>1.2. About HP Enterprise Services</td>
<td>6</td>
</tr>
<tr>
<td>1.3. Goals of HP Infrastructure Technology Outsourcing (ITO)</td>
<td>7</td>
</tr>
<tr>
<td>1.4. About Global Integrated Service Management (ISM)</td>
<td>8</td>
</tr>
<tr>
<td>1.5. HP Enterprise Services Organization Chart for ITO and ISM</td>
<td>9</td>
</tr>
<tr>
<td>1.6. Industry Concerned</td>
<td>10</td>
</tr>
<tr>
<td>1.7. Problem Identification</td>
<td>11</td>
</tr>
<tr>
<td>1.8. Problem Objective</td>
<td>13</td>
</tr>
<tr>
<td>2. LITERATURE REVIEW</td>
<td>14</td>
</tr>
<tr>
<td>2.1. Characteristic of Service</td>
<td>14</td>
</tr>
<tr>
<td>2.2. SERVQUAL &amp; Five Dimensions of Quality</td>
<td>15</td>
</tr>
<tr>
<td>2.3. The Gaps Model of Service Quality</td>
<td>16</td>
</tr>
<tr>
<td>2.4. Marketing Research</td>
<td>17</td>
</tr>
<tr>
<td>2.5. Information Technology Infrastructure Library (ITIL)</td>
<td>18</td>
</tr>
<tr>
<td>3. METHODOLOGIES ADOPTED</td>
<td>20</td>
</tr>
<tr>
<td>3.1. Design Survey</td>
<td>20</td>
</tr>
<tr>
<td>3.2. Data Gathering Procedure</td>
<td>20</td>
</tr>
<tr>
<td>3.3. Data Analysis Procedure</td>
<td>21</td>
</tr>
<tr>
<td>3.4. Assessment Methods</td>
<td>21</td>
</tr>
<tr>
<td>3.5. Assessment Approach</td>
<td>21</td>
</tr>
<tr>
<td>4. DATA ANALYSIS AND FINDINGS</td>
<td>23</td>
</tr>
<tr>
<td>4.1. Account Survey</td>
<td>23</td>
</tr>
<tr>
<td>4.2. Voice of Client (VoC)</td>
<td>24</td>
</tr>
<tr>
<td>4.3. Data Analysis</td>
<td>25</td>
</tr>
<tr>
<td>4.4. Summary of Findings</td>
<td>54</td>
</tr>
<tr>
<td>4.5. Result and Implications</td>
<td>55</td>
</tr>
<tr>
<td>5. SUGGESTIONS AND RECOMMENDATION</td>
<td>62</td>
</tr>
<tr>
<td>6. CONCLUSION</td>
<td>66</td>
</tr>
<tr>
<td>7. LIMITATIONS AND LEARNING</td>
<td>67</td>
</tr>
</tbody>
</table>
ABSTRACT

Hewlett-Packard (HP) is one of the leading IT services providers, and IT service delivery involves customer perception and the quality of service delivered. HP is trying to standardize IT service delivery for all customers under Enterprise Services. They believe the implementation of ITIL and ITSM can benefit the delivery team and customer. The service management team at HP aims to standardize the delivery process for the delivery team. An impressive transformation and service management initiative has been started with the support of HP's top management.

The Global Integrated Service Management in HP is not a new organization in HP, but it is new in the Asia Pacific Region. The organization was established in Aug 2010. The goal of the organization is to align the standards of all the customers in Asia Pacific Region to HP's global standard. The ITIL and ITSM concepts in the Asia Pacific Region are weak and immature. The service management team needs to do a great deal during the transformation. The maturity of the ITIL and ITSM concepts in the North Asia Region is relatively lower than in the South Asia Region, and there are many customers in the North Asia Region. The North Asia Service Management Team is working with a resource constraint and resistance from the delivery team.

In this project, the maturity level and the use of the ITSM process in the North Asia Region will be analyzed to see how they match with overall performance ratings and customer loyalty. Although the delivery team has been encouraged to adopt the ITSM process by being told its benefits in theory, the delivery team can better understand these benefits from real data, overall performance ratings, and customer perspectives. A list of existing HP accounts will be involved in the project, and the result will be shared with the other delivery teams. The service management team can align with the HP global standard and achieve the goals of the organization.
1. A CASE STUDY

1.1. Company Background

Hewlett-Packard (HP) was founded in 1939, a global technology leader with major business operations in computer hardware, software, printing, and services. HP is now one of the world's largest information technology companies with revenue totalling $126 billion for fiscal 2010 and operations in nearly every country. HP is ranked No. 10 in 2010 Fortune 500 with approximately 324,600 employees worldwide.

In 2006, HP surpassed IBM as the largest technology company in the world in terms of overall revenue. In 2007, HP's revenue was $104 billion, making HP the first IT company in history to report revenues exceeding $100 billion. In 2008, HP retained its global leadership position in the inkjet, laser, large format, and multi-function printers market, as well as its leadership position in the hardware industry. HP acquired Electronic Data Systems Corporation (EDS) upon improving their IT service group. HP aims to challenging IBM’s supremacy in IT Services. HP’s strategies are: “Services as the driver for growth! Invent and deliver great experiences!” HP Enterprise Services now serves 426 of the Fortune 500 companies and works with more than 1,700 business and government clients in 90 countries. Services now contribute 28% of the total revenue in HP.


A corporate organization chart can be seen below:

1.2. About HP Enterprise Services

HP Enterprise Services (HP ES) is a business unit under HP Enterprise Business (HP EB). HP ES provides applications (Apps), business process management (BPM), and infrastructure technology outsourcing (ITO) services, along with consultation and support to approximately 1,000 business and government clients in 90 countries. ITO is focused on infrastructure support from high-end to desk-side support, and Apps is focused on application development and support. As one of the largest segments of HP, HP ES leverages the breadth of HP's extended portfolio to offer the most comprehensive end-to-end IT services. HP ES delivers business outcomes as a service, providing the people, ideas, business processes, and technology to help customers focus their investments on the results they need. HP ES helps enterprises become more productive, innovative, and secure so they can grow and helps governments deliver services to citizens more efficiently. To help achieve these outcomes, HP ES utilizes the Best Shore delivery strategy, making processes more consistent, increasing availability of systems and resources, and improving operational performance globally.

HP ES helps businesses and governments leverage technology more effectively to achieve better outcomes. As a part of HP Enterprise Business, HP ES can leverage the extended portfolio of the world's largest technology company, delivering everything clients need to succeed in a
competitive market. HP ES now serves 426 of the Fortune 500 companies and works with more than 1,700 business and government clients in 90 countries. A recently commissioned survey of over 500 global C-level executives shows that they believe HP ES is the best provider to help them respond to their highest priorities and the most credible in providing the benefits they need most.

1.3. Goals of HP Infrastructure Technology Outsourcing (ITO)

Infrastructure Technology Outsourcing (ITO) is one of the business units under HP Enterprise Services (HP ES). HP ES produces better business outcomes for customers through a comprehensive infrastructure services portfolio. With service excellence and consistent, globally delivered standardized services, HP ES guarantees customers peace of mind, while its ability to drive innovation ensures customers a compelling strategy for the future.

HP ITO provides both Data Center Services (DCS) and Workplace Services (WPS). DCS targets the customer using mid-range to high-end systems. The machines are hosted in HP or the Customer Data Center and ITO to provide onsite or remote support. WPS targets the customer using a low-end to mid-range server. ITO provides onsite desk-side support to the client. Most of the workplace service is onsite support.

HP Enterprise Services' infrastructure services produce better business outcomes for customers in three critical ways:

- **Cost reduction**: Enhancing operational efficiency to drive down cost and increase competitiveness through expertise, automation, and leveraged global delivery

- **Agility and growth**: Enabling expansion and growth through a flexible, responsive infrastructure

- **Manage and mitigate risk**: Enabling compliance, protecting critical assets, and ensuring the continuity of enterprise operations
HP ES achieves these outcomes by delivering IT services that optimize the value of customer corporate assets and accelerates their competitive advantage through an approach that is:

**Comprehensive** - Complete solutions across infrastructure, services, and software to manage IT holistically

**Automated** - Automation encompassing people, processes, and technologies for efficient IT service delivery

**Integrated** - Integrated solutions incorporating the industry's leading products and services

**Global** - Globally delivered solutions maximizing cost efficiencies and ensuring consistency

1.4. About Global Integrated Service Management (ISM)

Global Integrated Service Management (ISM) manages the service management in HP Enterprise Services. The service management standard was adopted well in the Americas, Europe, Middle East, and Africa (EMEA) Regions (except Asia Pacific and Japan) both in pre-acquisition HP (pa-HP) and pre-acquisition EDS (pa-EDS) in the years before acquisition. After the integration of EDS into HP Enterprise Services, the service management lead of pa-EDS took over the position of service management in HP Enterprise Services. A series of integration and transformation is now taking place in HP Enterprise Services, such as aligning the service management standard and Tool Retirement and Account Migration (TRAM) in HP Enterprise Services, especially in the Asia Pacific and Japan (APJ) Regions.

The objectives of ISM are to manage the development and continuous improvement of the Information Technology Infrastructure Library (ITIL) and Information Technology Service Management (ITSM) processes used by outsourcing services in the delivery of global ITO service offerings. Structured sets of activities (process) and mandatory requirements (standard) are the key success factors of services. The ISM team facilitates HP Enterprise Services and/or the delivery team to:

- Maintain higher availability of service
• Help IT activity align to real-time business priorities
• Identify potential service improvements
• Identify additional service or training requirements
• Reduce number and business impact of incidents, problems, and known errors
• Improve customer satisfaction
• Create new business value with the alignment of IT services

1.5. HP Enterprise Services Organization Chart for ITO and ISM

The organization chart of Information Technology Outsourcing (ITO) and Integrated Service Management (ISM) under HP Enterprise Services is shown in the below diagram.

HP Enterprise Service Organization Chart (ITO & ISM)

Remarks: The job function of service line is attached in Appendix Section 8.1 HP Enterprise Services Organization Chart by Functions
1.6. Industry Concerned

**Worldwide IT Services Trend and Spending**

IT Services or IT Service Management (ITSM) is the discipline for managing information technology. It is centered on the customer’s perspective of how IT can contribute to their business and create value. The IT services provider must focus not only on advancement of the technology, but also on the quality of the services and relationships with customers. The services provided by the vendor should meet or exceed customer expectations and create a benefit to the business operation. IT services is not limited to a particular vendor’s product or to the technical details of the systems under management. IT services focus on the solution, framework, process flow, and standard to structure IT-related activities and the interaction of IT technical personnel with business customers and users. IT services often bring focus with the best practice (e.g., ITIL), standard (e.g., ISO 9001/20000), governance, and audit. With the support of a pre-defined framework and standard, the IT services provider can deliver excellent services to every customer.

According to Gartner, the IT services market is expected to remain strong as worldwide IT services end-user spending increases. It is forecasted to exceed $819 billion in 2008. Core outsourcing (IT management and process management) remains the highest growth area in the market. In 2008, core outsourcing services are on track to represent 42% of the total worldwide IT services end-user spending. Worldwide IT spending is forecasted to total $3.6 trillion in 2011, a 5.1% increase from 2010, according to the latest outlook by Gartner. In 2010, worldwide IT spending totaled $3.4 trillion, up 5.4% from 2009 levels. The Asia/Pacific Excluding Japan (APEJ) Region overall IT services market is expected to grow 9.4% year-on-year in 2011, driven by outsourcing, project-oriented services, and cloud services, according to market research firm IDC.

Today, clients do not care if it is faster, more efficient, or has more features. Now the value of IT is measured against the tangible results it enables, things such as shortening sales cycles, entering
new markets, generating new product lines, and communicating more closely and efficiently with customers and citizens.


Remarks: The strategy of IBM and HP is attached in Appendix Section 8.2 Strategy of IBM and HP

1.7. Problem Identification

HP tends to extend the service business by the acquisition of EDS. Since the market share and experience of EDS (before acquisition) in IT services is greater than HP, HP would like to integrate the service delivery model, including the concepts, tools, and best practice, into HP Enterprise Services. EDS has a standard guideline and policy for the ITSM, while HP has standard ITSM tools to facilitate the implement of ITSM in HP Enterprise Services. HP Enterprise Services has a new initiative called ITO transformation, which was started in Dec 2010. The goals of the ITO transformation are to standardize the process and tools in all HP’s accounts (or customers). With the support of HP top management, the ISM team is now supporting the ITO transformation and driving various service management initiatives, including training and certification, account surveys, target account lists, ITSM Assessment, incident reduction, event reduction, configuration management database rollout, and best shoring. The goals of ISM are:

1. Delight Your Customers:
   - Meet 100% SLA to all supported customers
   - Meet 90%+ operational KPIs for all supported customers
   - Reduce the resolution time of incidents by 20% for supported customers
   - Reduce the number of incidents by 20% for supported customers
• Improve the reporting of SM related metrics for selected customers

2. ITO Transformation

• Improve the service management process for supported customers through APJ standard ITSM delivery model

• 100% compliance in administrative reporting, e.g. Omega, TTPA

• Pass audits with no major findings for all supported customers

• Support the Asia SM initiatives and ITO Transformation Program

3. Make Your Numbers

• 100% contract renewal for all supported customers

• Reduce the cost of delivery of capabilities by 10%

ISM is driving for the service management initiatives and working closely with the Capabilities Team, Subject Matter Experts (SME), and Account Delivery Manager (ADM). There are many activities that need to be perform, such as data collection, internal meeting with the ITO delivery team, process review meetings, data analysis by SMEs, and capabilities. The delivery team may not co-operate with the ISM team as there are extra workloads for the service management initiative during the preparation and implementation phase. The account delivery manager may not support the service management initiative since they need to commit the cost or head count savings before the start of the transformation. For example, the incident reduction project aims to reduce 15% of incidents for all accounts. The account delivery manager should commit a certain amount of cost saving if the number of incidents is reduced by 15%, but may not agree as they need to spend extra effort to support the ITO transformation and to expend extra resources on the upcoming service management task in order to keep the low incident rate. The ITO transformation is focused on the delivery team first and will get involved with customer support once the ISM team has identified the area for improvement. But the ITO transformation project has no analysis of customer perception or the quality of the received service. It is quite difficult for the ISM or account delivery manager to convince the customer to support the service
management initiatives, especially those customers that are required to invest in the ITSM tools and the change of the ITSM process.

From HP internal, the ITO Transformation project is supported by HP top management and with the grounding of IT best practices. The account delivery manager and the delivery team should (or may be forced to) support the project. And there is much internal analysis to show that the implementing of IT best practices and ITSM tools can improve work efficiency. But there is no analysis from the external view. From the customer's perspective, the support or evidence to convince them to change the internal process and investment on ITSM tools is weak. The customer may not be willing to pay for more, especially exiting customers. They are currently using HP’s services, and HP should decide how to improve efficiency.

1.8. Problem Objective

This project aims to help the ISM and account delivery manager to understand the importance of ITSM and tools implementation for IT services from the service marketing and customer perspectives.

The objectives of this project are outlined below:

1. Identify the importance of ITSM and tools implementation from the view of customer perception and perceived service.

2. Understand the customer perception and the gap of perceived services.

3. Analyze the impact of tangible and intangible service in IT Services.

4. Analyze customer loyalty and how HP can retain existing customers.

5. Prioritize the importance of the ITSM process.

6. Improve the service quality of HP ITO services.

7. Support the ISM goals of satisfying customers and ITO Transformation.
2. LITERATURE REVIEW

2.1. Characteristic of Service

What are services? Put in simplest terms, services are deeds, processes, and performances. The services offered by IBM are not tangible things that can be touched, seen, and felt, but rather are intangible deeds and performances (Valarie A, Mary, & Dwayne, 2006, p.4). The characteristics of services are:

- **Intangibility**: Services are intangible. Unlike physical products, they cannot be seen, tasted, felt, heard, or smelled before they are bought.

- **Inseparability**: Services are inseparable. Services are typically produced and consumed simultaneously.

- **Variability**: Services are variable. Services are highly variable since they depend on who provides them and when and where they are provided.

- **Perishability**: Services are perishable. Services cannot be stored.

In HP Enterprise Services, the services offered by HP are same as IBM's. The characteristics of IT Services include the elements and characteristics of service. IT Services also include overseeing flexible pricing, consumer service, enterprise services, creating value and benefit, and customer solutions. Flexible pricing means that service can be charged with a very high profit margin. For example, HP has a 15.9% profit margin while IBM has a 36.4% profit margin. In customer service, interactions are built around episodic experiences and brands. In enterprise services, interactions are built around long-term relationships over the life of the enterprise. For creating value and benefit, “Each party in the exchange needs the other’s knowledge in negotiating the exchange.” Service suppliers should understand the client’s business operation and create value/benefit to the client. For customer solutions, solutions are a customized and integrated combination of goods and services for meeting customers' business needs.
2.2. SERVQUAL & Five Dimensions of Quality

To measure customer satisfaction with various aspects of service quality, Valarie Zeithaml and her colleagues developed a survey research instrument called SERVQUAL. It is based on the premise that customers can evaluate a firm’s service quality by comparing their perceptions of its service with their own expectations. SERVQUAL is seen as a generic measurement tool that can be applied across a broad spectrum of service industries (Christopher & Jochen, 2007, p.420). SERVQUAL is a universal tool to identify customers’ expectations.

Data gathered by the SERVQUAL survey can be used to:

- Identify the average gap score between customers’ perceptions and expectations
- Access a company’s service quality along each of the five dimensions of service
- Track customers’ expectation and perception
- Identify and examine customer segments that differ significantly in their assessments of a company’s service performance
- Access internal service quality

SERVQUAL is important in measuring and improving quality in services. The five dimensions of service are:

1. **Tangibles**: Appearance of physical facilities, equipment, personnel, and communication materials
   
   Example of customers’ questions: Are the HP’s data center facilities attractive?

2. **Reliability**: Ability to perform the promised service dependably and accurately
   
   Example of customers’ questions: Does the account delivery manager call me back after the system has recovered?

3. **Responsiveness**: Willingness to help customers and provide prompt service
   
   Example of customers’ questions: When there is a problem, does HP acknowledged the problem and resolve it quickly?
4. **Assurance**: Knowledge of and courtesy towards employees and their ability to convey trust and confidence

Example of customers' questions: Are the employee in HP are consistently courteous with me?

5. **Empathy**: Caring, individualized attention the firm provides its customers

Example of customers' questions: Does HP have operating hours convenient to me?

---

### Five Dimensions of Quality

![Diagram of Five Dimensions of Quality]

---

2.3. **The Gaps Model of Service Quality**

Zeithaml, Berry, and Parasuraman identify four potential gaps within the service organization that may lead to fifth and most serious final gap – the difference between what customers expected and what they perceived was delivered. Christopher Loverlock extends and refines their framework to identify a total of seven types of gaps that can occur at different points during the design and delivery of a service performance. (Christopher & Jochem, 2007, p.424).

The 7-gaps model are:

1. The knowledge gap
2. The standards gap
3. The delivery gap
4. The internal communications gap
5. The perceptions gap
6. The interpretation gap
7. The service gap

The Gaps Model is useful to identify the external and internal gaps between the customer and the organization. In IT services, HP need to identify the scope of each service and the gaps for the current service delivery. For example, customer may expect the HP delivery team is using ITSM tool to manage the delivery service. But HP may not implement ITSM tool due to cost constraint and thus create the gap between customer expectation and the service delivery.

2.4. Marketing Research

Understanding the expectations and perceptions of the customer is essential in providing good service quality. Marketing research must focus on service issues, such as what features are most important to customers, the level of overall service quality, and what customers think the company can and should do when problems occur in service delivery. The design of marketing research is important and should be designed by first defining the problem and research objectives. The most common research objectives in services are:

- Discover customer requirements or expectations for service
- Monitor and track service performance
- Assess overall company performance
- Access gaps between customer expectations and perceptions
- Forecast future expectations of customers

Marketing research can be qualitative or quantitative. Qualitative marketing research is a set of research techniques used in marketing and the social sciences in which data is obtained from a
relatively small group of respondents and not analyzed with inferential statistics. This differentiates it from quantitative research, which is analyzed for statistical significance. Qualitative marketing research. Wikipedia. [online] Available at: <http://en.wikipedia.org/wiki/Qualitative_marketing_research> [Accessed 5 June 2011]. As a social research method, it typically involves the construction of questionnaires and scales. People who respond (respondents) are asked to complete surveys. Quantitative marketing research. Wikipedia. [online] Available at: <http://en.wikipedia.org/wiki/Quantitative_marketing_research> [Accessed 5 June 2011].

Example of Marketing survey conducted in HP:

<table>
<thead>
<tr>
<th>Type of Research</th>
<th>Primary Research Objectives</th>
<th>Qualitative / Quantitative</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account survey</td>
<td>To monitor and track service performance</td>
<td>Quantitative</td>
<td>Continuous</td>
</tr>
<tr>
<td></td>
<td>To gather latest information for the customer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voice of Client</td>
<td>To identify/attend dissatisfied customers</td>
<td>Qualitative</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>To access service performance of teams</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>To measure customer loyalty</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**2.5. Information Technology Infrastructure Library (ITIL)**

The Information Technology Infrastructure Library (ITIL) is an IT management framework that provides practices for Information Technology Services Management (ITSM), information technology development, and IT operations.

ITIL is a best practice framework. It covers service support, service delivery and business IT alignment.
Five volumes comprise the ITIL v3, published in May 2007:

1. ITIL Service Strategy
2. ITIL Service Design
3. ITIL Service Transition
4. ITIL Service Operation
5. ITIL Continual Service Improvement

HP is one of the leading IT service providers. They have industry experience, and they have their best practice for IT service delivery. ITIL is one of the frameworks that HP is using for the service delivery.
3. METHODOLOGIES ADOPTED

3.1. Design Survey

An account survey is designed by the ISM team to gather the latest customer information. The quantitative survey covers ITSM processes, such as incidents, problems, changes, configuration, service level management, and determining what kind of service is currently delivered by HP. The data are expected to have a one-year record in different ITSM areas. The account survey is mainly for HP internal exercise, and there is no customer involvement.

A Voice of Client (VoC) survey is designed by HP Enterprise Services and conducted quarterly. The qualitative survey requires customer involvement and is designed for the customer’s IT manager and chief information officers to complete.

3.2. Data Gathering Procedure

The account survey is circulated to the account delivery manager in different countries who is responsible for collecting all the information from their delivery team. In order to make sure the data collected from the account delivery manager are correct, the ISM team will conduct a phone interview with the account delivery manager to verify the understanding of each question. This is especially important as the ITSM and ITIL knowledge for different countries and account delivery manager may not be the same. For example, they frequently confuse the definitions of incident and problem.

The Voice of Client is circulated to the customer and their IT manager(s), and the chief information executive is responsible for filling in the information. The account delivery manager will conduct a briefing to the customer and explain the purpose of the survey and briefly explain the meaning of each question. The account delivery manager will discuss the questions with the customer and make sure the client understands their importance in relation to HP. Overall, there...
is a set of questions to comprise the client loyalty and innovation metric. The account delivery manager and the senior management will review the VoC and develop a Voice of Client Improvement Plan to address the customer’s feedback.

### 3.3. Data Analysis Procedure

Once all the account survey data have been collected, they will be summarized in a single Excel file. The information by countries will be analyzed based on different ITSM processes. The Voice of Client is an Excel file with a predefined formula. Once the question is answered by the customer, an assessment result can be generated, such as one regarding overall performance and loyalty.

### 3.4. Assessment Methods

In this project, a quantitative assessment will be performed and the survey results summarized in Excel. The two survey results will be processed and assessed by the Excel Pivot Table. The assessment results can combine internal information from HP’s perspective according to the account survey and external information from the customer’s perspective according to the VoC.

### 3.5. Assessment Approach

In this project of five ITSM processes, customer perception and loyalty will be assessed in order to analyze the benefit of ITSM and tool implementation.

- Incident Management
- Problem Management
- Change Management
- Configuration Management
- Service Level Management
- ITSM Maturity
- Customer Perception
- Overall Perceived Service Quality
- Customer Loyalty
4. DATA ANALYSIS AND FINDINGS

4.1. Account Survey

The account survey exercise was conducted from Dec 2010 to March 2011, and the information was continuously updated by the account delivery manager and the ISM team. Five countries from the North Asia Region are included in the exercise: Country 1, Country 2, Country 3, Country 4, and Country 5. There are 21 accounts from Country 1, 13 accounts from Country 2, 14 accounts from Country 3, 2 accounts from Country 4, and 32 accounts from Country 5. The accounts come from different industries, including banking, finance, insurance, manufacturing, retails, government, transportation, telecommunication, and information technology. Since HP has more than 1,000 accounts globally, this round of the survey only covered the accounts with a total contract value of more than US$500,000. The ISM leader believed that the area for improvement in accounts with a total contract value of less than US$500,000 was limited, and so customers would not be willing to invest in the ITSM tool. Among these 82 accounts, the lowest annual contract value was US$ 52,000, and the highest was US$13,979,467. The account survey covers:

- Incident Management
- Problem Management
- Change Management
- Configuration Management
- Service Level Management
- Service Scope
- Total contract value
- Total contract length
For the ITSM process, the survey examined the maturity and effectiveness of the ITSM process and whether the ITSM tool were implemented or not. The survey also included information on the service scope, contract value, contract length, and use of man power resources.

4.2. Voice of Client (VoC)

Voice of Client (VoC) is the feedback program for HP Enterprise Services. The survey is conducted quarterly, and there are 48 accounts that have completed the Voice of Client so far. There are 14 accounts from Country 1, 11 accounts from Country 2, 8 accounts from Country 3, 1 account from Country 4, and 14 accounts from Country 5. The annual outsourcing services revenue of US$1 million or more should participate in the VoC program. So the number of accounts that have completed the VoC survey is less than the number of accounts completed in the account survey.

The characteristics of Voice of Client are:

- Business unit-specific program focuses on customer’s experience with outsourcing services
- Evaluate relationship and performance on critical success factors on outsourcing services contracts
- Identify relationship, service and innovation strengths, and areas of improvement
- Closed loop process aligned to account business plan and service level deliverables
- Interlock with Service Excellence Dashboard framework

The program rules for Voice of Client are:

- HP Enterprise Services accounts with annual outsourcing services revenue of US$1 million or more must be on the Service Excellence Dashboard and must participate in VoC.
- The use of the VoC program is beneficial to the customer and HP, providing more comprehensive perceptions of performance and relationships.
- Account teams should coordinate the planning and execution of each program at the participant level. Program teams are available to help ensure a successful outcome.
There are three performance categories in the Voice of Client: the Loyalty Segment Rating, Other Indicators, and Other Composites. For the Loyalty Segment Rating, customers can create their rating based on overall performance, referenceability, renewability, value, competitive advantage, and overall quality. For Other Indicators, customers can create their rating based on innovation, thought leadership, and outage reduction. For Other Composites, customers can create their rating based on account leader, solution/service, and delivery.

The ratings of performance categories range across Excellent, Good, Average, Fair, and Poor with a decreasing level of performance.

The ratings of loyalty level range across Top Box, Promising, Neutral, and In Jeopardy with a decreasing level of loyalty.

4.3. Data Analysis

Incident Management

1. The presence of Incident Management and tools vs. Customer Perception on received service

Criteria:

In this analysis, the total number of ratings is counted on overall performance, referenceability, renewability, value, competitive advantage, quality, innovation, thought leadership, outage reduction, continuous improvement, account leader, solution/service, and delivery and is then plotted against the account with no incident management, with incident management but no ITSM tool, and with incident management and the ITSM tool.
**Analysis results:**

The accounts with incident management and the ITSM tool have the largest number of Excellent and Good ratings. The number of Excellent ratings is greater than the number of Good. Only a small number of accounts are rated as Average.

The accounts with incident management implemented but no ITSM tool are primarily rated with Good and a few with Excellent.
The accounts with no incident management implemented usually rate as Excellent because incident management is not in the service scope, and thus the presence of incident management does not affect the rating.

**Trend:**

There is an increasing trend of Good and Excellent ratings if the accounts have been implemented with incident management and the ITSM tool.

<table>
<thead>
<tr>
<th>ITSM Process &amp; Tool</th>
<th>No IM</th>
<th>With IM</th>
<th>IM with ITSM Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effect on Performance Rating</strong></td>
<td>😞</td>
<td>😊</td>
<td>😁</td>
</tr>
</tbody>
</table>

2. **Trend of Incident Record vs. Customer Perception on Overall Service**

**Criteria:**

In this analysis, the total number of overall grades counted is plotted against the number of incidents in the account.

**Analysis result:**

The area with incident numbers fewer than 1,000 per month is greater than the area with more than 1,000 per month. There are 12 Excellent and 12 Good ratings counted with incident
numbers fewer than 1,000, and there are 7 Excellent and 5 Good ratings counted with incident numbers greater than 1,000.

**Trend:**

There is an increasing trend of Good and Excellent ratings if the number of incidents is lower.

<table>
<thead>
<tr>
<th>Number of Incidents</th>
<th>Overall Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. **The presence of Incident Management and Tools vs. Customer Loyalty**

**Criteria:**

In this analysis, the total number of overall grades counted is plotted against the level of loyalty for the customer. The level of loyalty is also compared with no incident management, with incident management but no ITSM tool, and with incident management and the ITSM tool.

**The presence of Incident Management and tools vs. Customer Loyalty**

**Analysis result:**

The accounts with incident management and The ITSM tool have the largest number of Excellent ratings and the highest customer loyalty level as well as the second-highest loyalty level of
Promising with highest number of Excellent ratings. For the account with incident management implemented but no ITSM tool, the number of Excellent or Good ratings is far lower. For accounts with no implemented incident management, the customer loyalty level and overall ratings are very low.

**Trend:**

There is an increasing trend of loyalty level and overall rating of Excellent if the account has incident management implemented and ITSM tool

<table>
<thead>
<tr>
<th>Implement of IM and ITSM Tool</th>
<th>Customer Loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Graph" /></td>
<td><img src="image2.png" alt="Graph" /></td>
</tr>
</tbody>
</table>

**Problem Management**

4. **The presence of Problem Management and tools vs. Customer Perception on received service**

**Criteria:**

In this analysis, the total number of grades is counted on overall performance, referenceability, renewability, value, competitive advantage, quality, innovation, thought leadership, outage reduction, continuous improvement, account leader, solution/service, and delivery and is then plotted against the account with no incident management, with incident management but no ITSM tool, and with incident management and the ITSM tool.
Analysis result:

The accounts with problem management and the ITSM tool have the largest number of Excellent and Good ratings. The number of Excellent ratings is greater than the number of Good. And no such accounts rate as Average. The accounts with problem management implemented but no ITSM tool rate mostly as Good and a few as Excellent and Average. The accounts with no problem management implemented usually rate as Excellent or Good. The reason is that problem management is not in the service scope, so the presence of problem management does not affect the rating.
Trend:

There is an increasing trend of Good and Excellent ratings if the accounts are implemented with problem management and the ITSM tool.

<table>
<thead>
<tr>
<th>ITSM Process &amp; Tool</th>
<th>No PM</th>
<th>With PM</th>
<th>PM with ITSM Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect on Performance Rating</td>
<td>😞</td>
<td>😊</td>
<td>😊</td>
</tr>
</tbody>
</table>

5. Trend of Problem Record vs. Customer Perception on Overall Service

Criteria:

In this analysis, the total number of overall grades counted is plotted against the number of problems in the account.

Analysis result:

The area with a number of problems less than 10 per month is greater than the area with more than 10 per month. There are 17 Excellent and 19 Good ratings counted with numbers less than
10, and there are 3 Excellent and 3 Good ratings for accounts with numbers greater than 10. There are 13 Excellent and 9 Good ratings for those accounts with a record of zero problems.

**Trend:**

There is an increasing trend of Good and Excellent ratings if the number of problems is smaller.

<table>
<thead>
<tr>
<th>Number of Problems</th>
<th>Customer Loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="chart1.png" alt="Bar chart" /></td>
<td><img src="chart2.png" alt="Bar chart" /></td>
</tr>
</tbody>
</table>

**6. The presence of Problem Management and tools vs. Customer Loyalty**

**Criteria:**

In this analysis, the total number of overall grades counted is plotted against the level of customer loyalty. The level of loyalty is also compared with no problem management, with problem management but no ITSM tool, and with problem management and the ITSM tool.

**The presence of Problem Management and tools vs. Customer Loyalty**

![Bar chart](chart3.png)

**Analysis result:**

For the result, the accounts with problem management and the ITSM tool have the largest number of Excellent ratings and the highest customer loyalty level as well as the second-highest loyalty level of Promising with highest number of Excellent ratings. No account rated as Neutral.
For the accounts with problem management implemented but no ITSM tool, the number of Excellent or Good ratings is far lower. For accounts with no problem management implemented, the customer loyalty level and overall rating are very low.

**Trend:**

There is an increasing trend of loyalty level and overall rating as Excellent if the account has problem management implemented and ITSM tool.

<table>
<thead>
<tr>
<th>Implement of PM and ITSM Tool</th>
<th>Customer Loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Graph" /></td>
<td><img src="image2.png" alt="Graph" /></td>
</tr>
</tbody>
</table>

**Change Management**

7. *The presence of Change Management and tools vs. Customer Perception on received service*

**Criteria:**

In this analysis, the total number of grades is counted on overall performance, referenceability, renewability, value, competitive advantage, quality, innovation, thought leadership, outage reduction, continuous improvement, account leader, solution/service, and delivery and is then plotted against the account with no incident management, with incident management but no ITSM tool, and with incident management and the ITSM tool.
Analysis result:

From the result, the difference between accounts with or without change management and the ITSM tool is not obvious when comparing the different performance categories. The accounts with change management and the ITSM tool have a fewer number of Average ratings. In overall, there is no significant difference with or without change management in the account.

Trend:

There is no trend of Good and Excellent ratings with change management.
8. Trend of Change record vs. customer perception on Overall service

Criteria:

In this analysis, the total number of overall grades counted is plotted against the number of changes in the account.

![Graph showing trend of Change record vs. customer perception on Overall service]

Analysis result:

The area with a number of changes less than 50 per month is greater than the area with more than 50 per month. There are 17 Excellent and 19 Good ratings counted with a number of changes less than 50, and there are 3 Excellent and 3 Good ratings counted with changes greater than 10.

There are 6 Excellent and 8 Good ratings for accounts with a change record of zero.

Trend:

There is an increasing trend of Good and Excellent ratings if the number of changes is lower.
9. The presence of Change Management and tools vs. Customer Loyalty

Criteria:

In this analysis, the total number of overall grades counted is plotted against the level of customer loyalty. The level of loyalty is also compared with no change management, with change management but no ITSM tool, and with change management and ITSM tool.

Analysis result:

The accounts with change management implemented and the ITSM tool have a higher customer loyalty level, but the difference is not significant compared with the others. There is no account rated with Promising in the Excellent or Good rank. Accounts with or without change management are performing well with a high customer loyalty level and their overall ranking is Excellent or Good.
Trend:

There is no trend of Good and Excellent ratings with change management and customer loyalty.

<table>
<thead>
<tr>
<th>Implement of Chg and ITSM Tool</th>
<th>Customer Loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Graph" /></td>
<td></td>
</tr>
</tbody>
</table>

Configuration Management

10. The presence of Configuration Management and tools vs. Customer Perception on received service

Criteria:

In this analysis, the total number of grades is counted on overall performance, referenceability, renewability, value, competitive advantage, quality, innovation, thought leadership, outage reduction, continuous improvement, account leader, solution/service, and delivery and is then plotted against the account with no incident management, with incident management but no ITSM tool, and with incident management and ITSM tool.
Analysis result:

The accounts with configuration management have the largest number of Good ratings. The number of Excellent ratings is greater than for those with the ITSM tool. In general, accounts with configuration management have a better performance rating compared with those with the ITSM tool. This may imply that the implementation of the ITSM tool cannot help or benefit configuration management. The ITSM tool may not be user-friendly enough, or the function may not be strong enough. The accounts with no configuration management implemented are usually
rated as Excellent or Good. Configuration management is not in the service scope, so the presence of configuration management does not affect the rating.

**Trend:**

Accounts with configuration management implemented have a better rating with Good and Excellent.

<table>
<thead>
<tr>
<th>ITSM Process &amp; Tool</th>
<th>No CM</th>
<th>With CM</th>
<th>CM with ITSM Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect on Performance Rating</td>
<td>😊</td>
<td>😐</td>
<td>😊</td>
</tr>
</tbody>
</table>

11. The presence of Configuration Management and tools vs. Customer Loyalty

**Criteria:**

In this analysis, the total number of overall grades counted is plotted against the level of customer loyalty. The level of loyalty is also compared with no configuration management, with configuration management but no ITSM tool, and with configuration management and the ITSM tool.

**Analysis result:**
The accounts with configuration management implemented have a better performance on the customer loyalty level, and there is no major difference in the second loyalty level of Promising among the three situations.

**Trend:**

Configuration management with no ITSM tool shows a better rating, but there is no trend identified.

<table>
<thead>
<tr>
<th>Implement CM and ITSM Tool</th>
<th>Customer Loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Graph" /></td>
<td><img src="image2.png" alt="Graph" /></td>
</tr>
</tbody>
</table>

**12. Number of Incident vs. ITSM CM usage**

**Criteria:**

In this analysis, the total number of incidents and the implementation of configuration management and the ITSM tool are compared and plotted in a pie chart. This analysis aims to find whether the presence of configuration management can help to reduce the number of incidents.

![Pie chart](image3.png)

**Analysis result:**
About 74% of incidents have no configuration management or ITSM tool, and with the implementation of configuration management the number drops to 13%. The result is the same as the implementation of the ITSM tool. Configuration management helps reduce the number of incidents in overall service delivery.

**Trend:**

Configuration management and the ITSM tool help to reduce the number of incidents.

<table>
<thead>
<tr>
<th>ITSM Process &amp; Tool</th>
<th>No CM</th>
<th>With CM</th>
<th>CM with ITSM Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Incidents</td>
<td><img src="image1.png" alt="Graph" /></td>
<td><img src="image2.png" alt="Graph" /></td>
<td><img src="image3.png" alt="Graph" /></td>
</tr>
</tbody>
</table>

**13. Number of Problems vs. ITSM Configuration Management usage**

**Criteria:**

In this analysis, the total number of problems and the implementation of configuration management and the ITSM tool are compared and plotted in a pie chart. This analysis aims to find whether the presence of configuration management can help to reduce the number of problems.

![Pie Chart](image4.png)

**Analysis result:**
About 21% of problems have no configuration management. About 42% of problems have configuration management, and 37% have configuration management and the ITSM tool. Configuration management does help reduce the number of problems in overall service delivery.

**Trend:**

Configuration management and the ITSM tool help to reduce the number of problems.

<table>
<thead>
<tr>
<th>ITSM Process &amp; Tool</th>
<th>No CM</th>
<th>With CM</th>
<th>CM with ITSM Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No. of Problems</strong></td>
<td><img src="image" alt="Graph" /></td>
<td><img src="image" alt="Graph" /></td>
<td><img src="image" alt="Graph" /></td>
</tr>
</tbody>
</table>

**14. The presence of Configuration & Incident Management and tools vs. overall performance ratings**

**Criteria:**

In this analysis, the accounts with incident management and the ITSM tool are selected and compared with different levels of configuration management and overall performance ratings.

**Analysis result:**

The implementation of configuration management gives a better performance on the overall performance rating. The implementation of the ITSM tool can improve the overall performance rating, but the effect is not obvious.

**Trend:**
An increase in the level of configuration management helps to improve the overall performance rating, but it drops when the ITSM tool is implemented.

<table>
<thead>
<tr>
<th>Level of CM</th>
<th>Overall Perf. Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>![Graph]</td>
</tr>
</tbody>
</table>

15. The presence of Configuration & Problem Management and tools vs. overall performance rating

Criteria:
In this analysis, the accounts with problem management and the ITSM tool are selected and compared with different levels of configuration management and overall performance ratings.

![Graph]

Analysis result:
Implementation of configuration management gives a better rating on overall performance. The implementation of the ITSM tool can improve the overall performance rating, but the effect is not obvious.

Trend:
An increase in the level of configuration management helps to improve the overall performance rating, but it drops when the ITSM tool is implemented.

<table>
<thead>
<tr>
<th>Level of CM</th>
<th>Overall Perf. Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Graph" /></td>
<td><img src="image2.png" alt="Graph" /></td>
</tr>
</tbody>
</table>

Service Level Management

16. The presence of Service Level Management and tools vs. Customer Perception on received service

Criteria:

In this analysis, the total number of grades is counted on overall performance, referenceability, renewability, value, competitive advantage, quality, innovation, thought leadership, outage reduction, continuous improvement, account leader, solution/service, and delivery and is then plotted against the account with no incident management, with incident management but no ITSM tool, and with incident management and the ITSM tool.
The accounts with service level management and the ITSM tool and the accounts with service management have a better performance rating. Most of the accounts are rated with Good and some with Excellent. And accounts with service level management and the ITSM tool receive a smaller number of Average ratings. There is no account with no service level management that is rated with Excellent.

Trend:

Accounts with service level management and the ITSM tool rate better.
17. The presence of Service Level Management and tools vs. Customer Loyalty

Criteria:

In this analysis, the total number of overall grades counted is plotted against the level of customer loyalty. The level of loyalty is also compared with no service level management, with service level management but no ITSM tool, and with service level management and the ITSM tool.

Analysis result:

The accounts with service level management implemented and the accounts with service level management and ITSM tools have a better performance on the loyalty level, and their results are similar. The accounts with no service level management also give acceptable results, with some rated Good or Excellent.

Trend:

Accounts with service level management implemented and the ITSM tool show better performance than those with no ITSM tool and no service level management.
ITSM Implementation

18. The presence of ITSM Process & Tool vs. Overall Perf. Rating

Criteria:

In this analysis, the customers with the ITSM process implemented (e.g., IM, PM, ChgM, CM, SLA) were selected first. The customers are further compared as to whether they have implemented the ITSM tool, and the results of overall performance rating are compared. The results show the effect the ITSM tool has on the overall performance rating.

**The importance of ITSM Tool vs. Overall Perf. Rating**

Analysis result:

Implementation of incident management with the ITSM tool has the highest impact on the overall performance rating. When incident management with the ITSM tool is implemented for the account, the number of Excellent and Good ratings increased to the highest level. While the implementation of the ITSM tool has less effect compared to that of incident management, there is no difference in the number of Excellent and Good ratings.
Trend:

Importance of ITSM tool: incident management is the most important, and the other issues of problems, changes, configuration, and service level management are the same.

19. Maturity level of ITSM in North Asia Region

Criteria:

In this analysis, the maturity of ITSM implementation in North Asia Region is examined. The accounts with the ITSM process and tools are mature in ITSM implementation. The individual maturity of the ITSM process and overall maturity of ITSM is examined.
Analysis result:

The findings for Country 4 are ignored as there is only one account in Country 4. The ITSM maturity in Country 1 is highest with 61%, followed by Country 5 with 43%, Country 3 with 36%, and Country 2 with 31%.

Trend:

Not applicable.

Type of outsourcing services

20. DCS and WPS services vs. Customer Loyalty

Criteria:

In this analysis, the total number of overall grades counted is plotted against the level of customer loyalty. The level of loyalty is also compared with the type of service for the account.
Analysis result:

The accounts with either DCS or WPS services have a better performance rating. Those with DCS services have a better performance rating with more Excellent ratings. The accounts with both DCS and WPS services have a poorer performance rating.

Trend:

The performance rating decreases when the type of service increases in the account.

### Type of Service vs. Customer Loyalty

#### Trend of contract length vs. Customer Perception on Overall service and loyalty

Criteria:

In this analysis, the total number of Overall grades counted is plotted against the contract length (in months) and level of customer loyalty.
Analysis result:

The contract lengths of 48 months and 62 months give the highest loyalty level and performance ratings. The loyalty level from 3-36 months is relatively low. This result is normal as the customer is new to HP or new to the delivery team. It takes time to build up the loyalty level. After 62 months, the loyalty level drops and the performance rating drops, but the performance rating is still high with Excellent or Good. Beyond 62 months, customers may be looking for some new or additional service as they are already satisfied with the service perceived.
Trend:

The performance rating and loyalty level increase from 3-36 months and decrease beyond 62 months.

<table>
<thead>
<tr>
<th>Length of Contract</th>
<th>Customer Loyalty</th>
</tr>
</thead>
</table>

Customer Perception and Loyalty in North Asia Countries

22. Customer loyalty in North Asia Countries

Criteria:

In this analysis, the total number of overall grades counted is plotted against the level of customer loyalty in North Asia Region.

Analysis result:

The findings for Country 4 are ignored as there is only one account in Country 4. The accounts from Country 1 have the highest level of loyalty and performance ratings. Country 5 is in second place, but some of the accounts have a low loyalty level. Country 3 is in third place, and Country 2 in forth.
Trend:
Not applicable.

23. Customer Perception of received service in North Asia countries

Criteria:
In this analysis, the total number of overall grades counted is plotted against the different countries in the North Asia Region.

![Customer Perception on received service in North Asia Countries](chart)

Analysis result:
The findings for Country 4 are ignored as there is only one account in Country 4. The accounts from Country 1 have the highest number of Excellent and Good performance ratings. Country 5 is in second place, Country 3 in third, and Country 2 in forth.

Trend:
Not applicable.
4.4. Summary of Findings

After the data analysis of the ITSM process, loyalty, and performance ratings, a summary of the ITSM process and the effect on customer loyalty and performance ratings is summarized as below:

<table>
<thead>
<tr>
<th>Increase in the level of complexity</th>
<th>Effect on Customer Loyalty Level</th>
<th>Effect on Performance Ratings</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incident Management</td>
<td>High</td>
<td>High</td>
<td>From no ITSM process to ITSM process implemented to ITSM tool implemented</td>
</tr>
<tr>
<td>Problem Management</td>
<td>High</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Change Management</td>
<td>No effect</td>
<td>Medium</td>
<td></td>
</tr>
<tr>
<td>Configuration Management</td>
<td>No effect</td>
<td>Medium</td>
<td></td>
</tr>
<tr>
<td>Service Level Management</td>
<td>Medium</td>
<td>Medium</td>
<td></td>
</tr>
<tr>
<td>Type of Services</td>
<td>High</td>
<td>High</td>
<td>From single type of service to two types of services</td>
</tr>
<tr>
<td>Contract Length</td>
<td>High</td>
<td>High</td>
<td>Increase in contract length</td>
</tr>
</tbody>
</table>

The effect of configuration management on the number of incidents and problems and the effect on performance ratings.

<table>
<thead>
<tr>
<th>Increase in the level of complexity</th>
<th>Effect on No. of Incidents</th>
<th>Effect on Performance Ratings (with IM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configuration Management</td>
<td>Decrease</td>
<td>Increase</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Increase in the level of complexity</th>
<th>Effect on No. of Problems</th>
<th>Effect on Performance Ratings (with PM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configuration Management</td>
<td>Increase</td>
<td>Increase</td>
</tr>
</tbody>
</table>

The maturity level, loyalty level, and overall rating in the North Asia Region is summarized below: (The result of Country 4 is excluded as there is only one account from Country 4.)
<table>
<thead>
<tr>
<th>Maturity level of ITSM</th>
<th>Loyalty level</th>
<th>Overall rating</th>
</tr>
</thead>
</table>

* All in descending order

### 4.5. Result and Implications

**Flowcharting Service Delivery**

The nature and sequence of the Data Center Services (DCS) and Workplace Services (WPS) are involved in delivering service to customers. The flowcharting of DCS and WPS below shows the nature of the customer’s involvement and identifies the visible action, invisible action, core product, and benefits received.

Flowcharting for DCS:

[Flowchart for DCS]

Flowcharting for WPS:
Remarks: The HP ES Delivery Model Sample is attached in Appendix Section 8.3 HP Enterprise Services Delivery Model

The flowcharting of DCS and WPS shows a slight difference between DCS and WPS services. DCS services mainly provide remote support as the servers are located in the data center, while WPS services mainly provide onsite support as the machines are mainly desk-side servers. To simplify the investigation, some of the process in WPS is highlighted. In reality, it is also true that some of the WPS customers require onsite support, but some do not. In the flowcharting, the tangible or visible items include payment, ongoing support, system failure, service desk, account delivery manager, and regular meetings. They are tangible, and the customer can contact, touch, or feel the presence of these items. The core-product and benefits are using the system, resuming the service after failure, and the service level report. The intangibles include ongoing support, the delivery team's investigating the problem, training, changes of management, event management, incident management, high-severity incident management, and problem management. Customers cannot touch or feel the presence of these items. The previous section had a detailed analysis related to incident, problem, change, configuration, and service level management. The results show that
incident and problem management have a high impact on customer loyalty and performance ratings.

The ITSM process will now be discussed in detail from the service marketing perspective.

**Service Dimension and HP ITSM process/Tool:**

<table>
<thead>
<tr>
<th>Service Dimensions</th>
<th>HP ITSM process/Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>• Weekly/Monthly Service Delivery report</td>
</tr>
<tr>
<td></td>
<td>• Daily health check</td>
</tr>
<tr>
<td></td>
<td>• Service Desk, HP show a sincere interest in solving a problem</td>
</tr>
<tr>
<td></td>
<td>• <strong>Incident Management</strong>, HP insists on error-free or no service interruption</td>
</tr>
<tr>
<td></td>
<td>• <strong>Change Management</strong>, HP promises to do something (change) by a certain time, and does so</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>• Understanding customer expectations and fulfilling the customer's requirements according to service contract</td>
</tr>
<tr>
<td></td>
<td>• Service Level Management. HP always meets or exceeds the service level</td>
</tr>
<tr>
<td>Assurance</td>
<td>• Technical and Service Quality training for the delivery team</td>
</tr>
<tr>
<td></td>
<td>• Account delivery manager consistently courteous with the customer</td>
</tr>
<tr>
<td></td>
<td>• <strong>Problem Management</strong>, HP will find out the root cause from your IT system</td>
</tr>
<tr>
<td>Empathy</td>
<td>• Voice of Client (VoC), HP understands the customer’s needs</td>
</tr>
<tr>
<td></td>
<td>• Event management</td>
</tr>
<tr>
<td></td>
<td>• Service Desk, HP provides 24/7 support to customer’s IT system</td>
</tr>
<tr>
<td></td>
<td>• <strong>Configuration Management</strong>, HP gives customer individual attention on their IT inventory</td>
</tr>
<tr>
<td>Tangible</td>
<td>• Return on Investment (from customer perspective)</td>
</tr>
<tr>
<td></td>
<td>• Using the system (from customer perspective)</td>
</tr>
<tr>
<td></td>
<td>• <strong>Service Level Management</strong>, HP provides service level reports that meet or exceed customer’s expectations</td>
</tr>
</tbody>
</table>
As regards reliability, customers’ expected features and advanced technologies could never be more important than reliability, stability, and security. Therefore, incident and change management are important in providing a reliable system to the customer. Incident and change management are invisible or semi-visible actions. **For incident management,** any abnormal situation for the IT system is treated as an incident. The delivery team should have the knowledge and skills to restore the system in a timely manner. When there is an incident, the customer may not able to get the latest information if there is no incident management implemented. The only way for the customer to get the latest information is to contact the account delivery manager. Incidents are divided into different categories. Some have a service impact, while some do not. Customers get nervous if the incident has a service impact as it may affect the business operation and create losses. As seen in the data analysis, an increase in the number of incidents results in a decrease in the overall performance rating and loyalty level. The implementation of incident management and the ITSM tool will result in an increase in the overall performance rating and loyalty level. From the technical perspective, the implementation of the ITSM tool can help the delivery team keep track of and resolve the incident. From the customer perspective, incident management is an invisible action, so they will not usually know whether the delivery team is using a well-defined incident management process and tool. They care about the visible part, having the system restored to normal and receiving the incident report from the delivery team. This result shows that the implementation of incident management and the ITSM tool can result in the increase of the overall performance rating. The HP delivery team should try to transform the invisible actions into visible items, such as online incident records and incident trend analyses.

**For change management,** the implementation of change management and the ITSM tool do not have an impact on the overall performance rating, but an increase in the number of change records per month does lower the overall performance rating. Change management is an invisible or semi-visible action. In reality, the delivery team will test and review the change before the delivery team will schedule a timeslot for the change. The change action is transparent to the customer, and the customer will perform a check after the change is implemented. From the customer's perspective, the delivery team should complete the change within the committed or promised time slot. This is important from the standpoint of a reliable business operation. The results show that the overall performance rating from the customer is not concerned with change management and ITSM tools. One possible interpretation is that most of the change is fully tested before being implemented with a fallback procedure. The chance to have a business impact is relatively low when compared with an incident.
As far as assurance is concerned, customers expect the delivery team to be equipped with the knowledge and skills to perform their IT consultancy. In order to ensure staff quality, HP provides their delivery team with regular project management training and technical upgrades. Training is an invisible action to customer, but the deliverable can be a visible action. Problem management is invisible to the customer. With problem management implemented, the delivery team will perform root cause analysis and document the solution to then avoid the problem. The delivery team will then be equipped with the knowledge to handle the same or a similar problem in the future. From a service delivery perspective, the implementation of problem management is transparent to the customer. Even if the delivery team does not perform problem management, the customer will not notice, and it will not impact to the customer’s IT system. This indicates that the implementation of problem management and the ITSM tool has a high impact on the overall performance rating and level of customer loyalty. The definition of problem management is to identify the root cause of the problem and perform preventive action to avoid the same problem's happening again. The customer may benefit from problem management as a repeated problem is avoided and the delivery team can handle the same or a similar problem in a timely manner. So even though the process of problem management is invisible to the customer, the customer can feel the benefit from problem management, and this will cause an increase in the overall performance rating. The implementation of the ITSM tool allows the delivery team and customer to check the root cause of a specific problem. The ITSM tool transforms the intangible items into tangible ones. The customer feels satisfied and confident if the problem is documented with a root cause. Customer loyalty is thus increased as the delivery team shows assurance and care to the customer. A low number of problems’ matching with a higher overall performance rating also confirms the previous finding.

For the issue of empathy, customers expect to have close and effective communication with the internal staffs, so HP has the Voice of Client (VoC), which is used to evaluate the relationship and the performance of critical success factors regarding the outsourcing of contract services. The account delivery manager will also conduct informal customer surveys or meetings that will be reviewed by the client manager in order to suggest improvements. Configuration Management is also evidence of empathy in IT service delivery. According to the ITIL best practice, the implementation of ITSM tools will benefit the implementation of configuration management. But this study shows that the implementation of configuration management results in a better overall performance rating, yet the results of configuration management with the ITSM tool show a poorer performance than that of no configuration management at all. The result also matches with the loyalty level. The accounts with configuration management implemented gave the best overall performance rating. From the flowchart it is clear that configuration management is an invisible
action, and the purpose or use of configuration management is mainly to support the delivery team when they are handling incidents and problems. Comparisons of the data show that the implementation of configuration management results in a better loyalty level and overall performance rating and helps to reduce the number of incidents and problems.

That the implementation of configuration management with the ITSM tool has a negative effect may be due to the tool's not being good enough for the overall delivery. According to ITIL best practice, the implementation of the ITSM tool should improve the overall ITSM process, but there are many configuration management tools implemented, such as Excel, CA NSM, and HPSM. Function and user friendliness also affect the overall ITSM process. This may be the reason for the negative effect of the ITSM tool in configuration management.

For the tangibles aspect, customers expect to have tangible results when using HP services, such as an increase in ROI, shortening of sales cycles, and the possibility of penetrating new markets. The implementation of Service Level Management definitely will benefit the customer. But its effect on the overall performance rating and customer loyalty is not obvious in the study. From the service delivery perspective, the delivery team should manage the service level according to the service contract. The delivery team should meet or exceed the service level, or the customer may complain or even penalize HP. Most of the ITO service contract is charged by the service level instead of a man power resource base. So customers do expect HP to meet the service level. It thus becomes a basic requirement. The implementation of service level management and the ITSM tool can help the delivery team to improve the efficiency of tracking the service level and report generation. But the preparation of reports and keeping track of the service level during incidents is invisible to the customer. The visible part is the service level report presented by account delivery manager in the weekly/monthly meeting. Since the service level is the basic requirement in the service contract, the presence of service level management and the ITSM tool will not tangibly affect the customer. So service level management has less effect on both overall performance rating and customer loyalty. But the implementation of service level management and ITSM tools definitely increase the overall rating in all areas.

Other factors affect customer loyalty

The length of contract and the service types of service affected the customer loyalty. When customer start to use IT service, there is a period of time to experience the service quality. In IT service, there is a learning period for the delivery team in order to meet the required service level since the team is not familiar to the system at the very beginning. If the service delivered exceeds customer’s expectation, the customer loyalty increases after a period of time. Once the customers are being
satisfied, the expectation will become higher and it’s more difficult to create customer delight. From the assessment results, the customer satisfaction increase from first year to fourth year. But it drop beyond the fourth year, from delivery perspective, it is difficult to create customer delight for a customer who use the service more than four years. Customer may expect something new to the delivery service, e.g. innovation and value added service. The delivery team cannot increase the customer loyalty level just only meet the required service level.

The number of service types offered also affects the customer loyalty. It is easier to satisfy a customer if the delivery team only provides a single type of service. The complexity of the service increase will cause the level of customer loyalty decrease since the delivery team is more difficult to full fill the expectation of the customer.

**Customer perceived service with ITSM maturity level**

Overall, the level of customer loyalty and the overall performance rating matches the ITSM maturity level. The implementation of the ITSM process improves customer loyalty and overall performance rating. From the technical perspective, the implementation of ITSM helps the delivery team to provide a better delivery service and reduce the work load. From a sales perspective, the implementation of ITSM helps to improve the overall performance rating and customer loyalty. IT outsourcing service is very complicated, as it involves the interaction of human knowledge and skill levels, the advancement of technology, and the cost and value of the service. It is very difficult to delight the customer during the day-to-day delivery operation. This study shows that ITSM is a good tool to delight the customer and to improve overall service delivery. The ITSM benefits both internally and externally.
5. SUGGESTIONS AND RECOMMENDATION

The setup of ISM in the North Asia Region aims to align the standard service management policy and practice with the HP global standard. Currently, the accounts in the North Asia Region are running in customer- or delivery team-specified procedures. Most of the accounts do not have a well-defined ITSM process and tools. One reason for this is that the popularity of ITIL practice in North Asia Region is low, so the account delivery manager does not implement the ITIL concept in service delivery. During the implementation of ITO transformation, the account delivery manager may not be acting in accordance with best practices, as they may not believe the implementation of ITSM and tools can help the delivery team to reduce the workload and improve overall performance. The delivery team may have reservations regarding the changes of procedures, processes, and additional effects after the implementation of ITSM and tools. The delivery team may believe that the procedures in their account are well defined and have run well for several years. They may not think there is a need to change procedures and that the standard procedure will not help in overall service delivery. After this in-depth analysis of the ITSM process, customer loyalty, and overall performance ratings, the results show that the ITSM process has a positive effect on customer loyalty and overall performance ratings.

The ITO Transformation and Service Management Initiative is supported by HP top management, but progress is slow as the whole exercise involves so many accounts in different countries and is meeting resistance from the delivery teams. Besides the top-down approach, the ISM team should discuss and show the benefits of this change to the delivery teams. According to the analyses of previous section, the maturity of the ITSM level can benefit the customer from the service marketing perspective. The suggestions below are based on the analysis:

1. Provide ITIL/ITSM training to the account delivery manager and the delivery team

Most of the delivery teams in the North Asia Region do not understand the ITIL/ITSM concept. In order to align the service management to the global standard, all account delivery managers should
participate in an ITIL Version 3 foundation course and get certified. Account delivery managers are the ones who are managing the overall service delivery, and they are the focal point from the customer's perspective. They should be fully equipped with the ITIL concept. The account delivery manager should able to explain the benefits and importance of following ITIL best practice to the customer. And they can help the ISM team to implement the ITSM and tool to the delivery team.

2. **Present the benefit of ITSM to the overall service delivery from the technical perspective**

Besides the standard ITSM materials from HP ITO transformation and ISM team showing the benefits of the implementation of ITSM and tools, the ITSM team can extract the results from this report and present them to the account delivery manager and the delivery team. The real data and analysis results on the importance of the ITSM process and tool can allow the delivery team to see the importance of the ITSM process for themselves. The drop in the number of incidents and problems means the delivery team can reduce efforts during delivery, and the delivery team can understand the effect of the implementation of ITSM and ITSM tools.

3. **Present the benefit of ITSM to the overall service delivery from customer perspective**

The account delivery manager may not be aware of the benefits of the implementation of ITSM. They may notice the reduction in workload from a delivery perspective, but they may not be aware that the customer may benefit as well. Some of the account delivery managers may think the reduction in the number of incidents and problems comes with the commitment of reduction in the head count. Some of them may not want to get involved in the reduction project, as there is a lot of work during the implementation of ITSM standards. The ITSM team should present to the account delivery manager that the customer will be delighted if a standard ITSM is implemented. This will result in the increase of overall performance ratings and loyalty levels, which in turns should result in increased contract renewals, selling of new services, and increases in profit. The account delivery manager will give extra support if they notice the benefits of the customer's delight.
4. Get customer buy-in and request their support

Customer buy-in and support are key to the success of ITO transformation and SM initiative. The implementation of ITSM involves the change of process and ITSM tools. Some customers may not be willing to change the process and tools, as they don’t understand the benefits or they may not want to invest in the ITSM tools. The ISM team can present the analysis results to the customer and show the benefits of the implementation of ITSM. The account delivery manager should present these to the customer to reduce the number of incidents and problems, resulting in the increase of system stability and reliability. This is important as most of the systems supported by HP ES are critical systems, such as databases and Web application services. An increased number of incidents increases the chance of system unavailability and results in the loss of money and business.

5. Prioritize the implementation of ITSM process

The ITO transformation and ISM team should prioritize the implementation of the ITSM process according to its importance. There are a large number of accounts in the North Asia Region, and some of the accounts already identified as key will implement the ITSM process in the first stage. For the rest of the accounts, the ISM team should implement the ITSM process according to the results of this study. They should implement incident and problem management first, then service level, change, and configuration management.

The SM team should able to solve the problem objective.

1. The implementation of incident, problem, change, and service level management directly affects the customer's perceived service. Configuration management can improve the quality of incident management and result in improving the customer's perceived service.

2. The implementation of ITSM and tools helps to narrow the gap between customer perception and perceived services.

3. Tangible actions help improve the overall performance rating (e.g., incident trend analysis, online status checking of incident or problem record).
4. The increase in ITSM maturity levels results in the increase of customer loyalty levels.

5. The importance of the ITSM process and tools in descending order are incident, problem, service level, change, and configuration.

6. The implementation of ITSM and tools improves the overall performance rating of service delivery.

7. The customers will be delighted if the delivery team were implemented with ITSM and tools.
6. CONCLUSION

In conclusion, the ITO transformation and SM initiative on ITSM processes and tools can be a benefit to the overall performance rating and customer loyalty. The teams should let the account delivery manager and the delivery team understand the benefit by explaining the goals and objective of service management. Beside the top-down approach, the teams should explain the benefit of implementing service management from the customer's perspective. Since IT service is very complicated and involves the perception of the customer, the account delivery manager should try to understand service management from a different angle. The gap between the service delivered and the service perceived by the customer can be narrowed with the implementation of service management.
7. LIMITATIONS AND LEARNING

7.1. Project Limitations

There are some limitations of this project:

1. Small number of accounts in the Account Survey and Voice of Customer

There are 82 accounts from the Account Survey and only 48 accounts from Voice of Customer. As accounts with annual outsourcing services revenue of US$1 million or more should participate in the VoC program, the number of accounts from VoC is less than those of the Account Survey. This report can only address the service management standpoint for those large accounts. But the HP service management team is focusing on the large accounts and can give valuable information to the team.

2. Only two accounts from Country 4

Country 4 is included in the North Asia Region, but there are only two accounts from Country 4, and only one account has participated in the VoC program. The results of the analysis for Country 4 are not meaningful as the sample size is too small.

3. Event management is not included in this project

In the Account Survey, event management is not included, so this project cannot analyze the impact of event management. Event management is one of the ITSM processes and should be an “intangible” action from the service delivery perspective. The intangible action is difficult to present to the customer, yet most of the time it affects the overall performance rating and customer loyalty.

4. Efficiency of the ITSM tools is not included in this project

The efficiency of the ITSM tool is a key factor of success in service management. Configuration management shows that the overall management rating decreases after the implementation of configuration management tools. Since this project is focusing on service marketing, it does not analyze the efficiency and effectiveness of the ITSM tool.
7.2. Lesson Learned

The topic of this project is service marketing, and the assessment areas are the ITIL and ITSM processes for an IT company. ITIL and ITSM processes focus on the best practice of IT service delivery while service marketing deals with the characteristics of services and how to improve service quality and narrow the gap between the service provider and receiver. After the literature review and the analysis of this project, I have integrated the ITSM process with service marketing. The ITSM process can be matched with service marketing, as with their tangible and intangible actions, and they have a close relationship in overall service delivery. For typical IT outsourcing services, the account delivery manager and the delivery team may consider the implementation of ITIL and ITSM processes, and they may notice the benefits. But they may not think about how the IT delivery service and ITSM process can be matched with service marketing. In this project, I have performed many analyses, and the results show that the two can be linked and have a close relationship. When I conducted the Account Survey, I also learned how to design the survey and how to interact with the interviewee effectively. In data analysis, I have learned how to compare and analyze the data from different perspectives and angles. Overall, I have learned how to integrate my IT knowledge with my business sense.

7.3. Contribution to the Company

This project is sponsored by Thomas Chau, Country Manager, ITO HK, HP, and Jimmy Tsang, North Asia Service Management Leader, ITO HK, HP. When I started this MBA project in Oct 2010, I was working in ITO HK, HP as a technical Leader and was responsible for the delivery service and Project Manager of Quality Management System responsible for the ISO Audit for ITO HK. The North Asia Service Management leader believes that there is a strong synergy effect for my MBA project and his new organization as his new role is to help the delivery teams in North Asia to improve their service quality and reduce costs by identifying areas to apply the industry's best practices, such as ITIL and leverage HP global knowledge and capabilities, such as Best Shores. I
have been invited by him to help his new organization to conduct an account survey and analysis. The results from the account survey can help his new organization and my MBA project. In April 2011, I was moved from Technical Leader to Service Management Consultant and now report directly to the North Asia Service Management Leader. I am helping him to conduct the Incident Reduction Project and ITSM Assessment for Country 2 and Country 3. I have shared the progress report of this MBA project with him, and he has given me many valuable insights. After the completion of this MBA project, I will conduct a presentation and share the findings with the service management team. The service management team can assist the account delivery manager for service delivery performance and customer perspective by using the results from this project.
8. APPENDIX

8.1. HP Enterprise Services Organization Chart by Functions

**North Asia Service Management Lead (North Asia SM Lead)**

The North Asia Service Management Lead looks after the North Asia Region including Country 1, Country 2, Country 5, Country 4 and Country 3 and he is stationed at Country 2. The Asia Pacific Region was divided into North Asia and South Asia and two leaders from pa-EDS were appointed to lead the region. The objective of the lead is to align the Asia Pacific Region to HP Global Integrated Service Management standard. Currently, the service delivery in Asia Pacific Region is using different tools or standard for service management / delivery. Be more specify, the goal of the North Asia SM lead is to help the delivery teams in North Asia to improve their service quality and reduce cost by identifying areas to apply the industry best practices such as ITIL and leverage HP global knowledge and capabilities such as BestShore. A number of activities will be conducted in the Transition, Transformation and Implementation stage this year. These including account analysis in terms of customer satisfaction, service management tools, current process for service delivery and the potential growth for the account. The North Asia SM team consist of 13 members and they come from the existing service delivery team including Country 1, Country 2, Country 4, Country 5 and Country 3.

**Asia Pacific/ Japan Information Technology Outsourcing (APJ ITO)**

China ITO, HK ITO, Japan ITO, Korea ITO, Taiwan ITO, Malaysia ITO, Singapore ITO, Philippines ITO, Thailand ITO and Indonesia ITO and the rest of South East Asia ITO organization are under APJ ITO organization. They have similar service line and capability to delivery a wide range of IT services.

**Service Line**
ITO has a wide service line and each service line provide a wide range of portfolio of services. They are Account Delivery Manager, Workplace Services, Data Center Services, Program and Project Management, Global Network Services, and Global Information Security.

**Account Delivery Manager (ADM)**

The Account Delivery Manager (ADM) acts as the single point of accountability for the entire services engagement under the Agreement, minimizing the number of contacts customers need to maintain. The ADM will have periodic account reviews with customer to demonstrate the value of HP support, to recommend best practices and work processes to enhance service effectiveness, and to communicate with customer’s management during high visibility account escalations. When normal support processes break down, the ADM will be engaged to resolve support issues, mediate internal support responsibilities, and take ownership for support issues during account meetings. The ADM will identify all the key support contacts for customer in order to engage the proper support resources when needed.

Role of ADM:

- Act as the single point of overall service management contact
- Organize regular meeting for services performance review
- Formulate and streamline the services change request process and procedure
- Formulate and streamline the contract variation process for changes in services scope
- Formulate the due diligence, transition, implementation and risk mitigation plan
- Formulate and continuously improve escalation procedure be in place to facilitate complex problem resolution
- Coordinate HP service support resources when specific skills are needed
- Manage changes request in service and contract scope
- Deliver weekly and monthly incident reports, monthly inventory report and incident performance trend analysis reports as well as conduct weekly review meeting / conference call and monthly service review meetings
● Ensure premium services quality and immediate problem resolution

● Manage ongoing support issue

**Workplace Services (WPS)**

Workplace Services (WPS) are responsible for the WorkPlace Service Line portfolio and capability functions. WorkPlace Service Line provides a comprehensive end-to-end management suite for a client’s total workplace environment by delivering a mix of automated, mobile and personalized services. WPS apply the latest technology, best-in-class support processes wrapped with extensive security measures to transform the workplace environment and manage every detail of the operations.

WorkPlace Service Line responsibilities include productivity applications, device management and support services to deliver client focused innovative solutions. WPS design, build, enhance, deploy and maintain these services with a focus on deployment and value. WPS create standards, best practices and harvest proven solutions to support our corporate goals to eliminate outages and continuously improve quality. WPS provide:

● Lifecycle management solutions for desktop, mobile devices and end-user environments.

● Automated provisioning, deployment & management services based on profiles and best-in-class processes.

● Service desk, asset management and onsite or remote support for problem management and resolution.

● WorkPlace Services:

  ● Mobile Workplace

  ● Collaboration

  ● Managed Messaging

  ● Thin Client Management

  ● Workplace Software Management

  ● Site Support
Data Center Services (DCS)

Data Center Services (DCS) is responsible for Data Center Offerings and Services, which includes Storage Services, Midrange Server Services (non-Wintel), Mainframe Services, and Data Center Modernization Services. DCS design, build, enhance, deploy and maintain these services; and identify and implement standards and best practices to promote repeatability and reduce customization.

Objectives:

- DCS will be responsible for growing the Infrastructure Services business above market rates by helping build the pipeline and seeking ways to expand profits.
- DCS will be accountable for designing, testing, enhancing, deploying and maintaining Infrastructure services.
- DCS will identify and implement standards and best practices to promote repeatability and reduce customization.
- DCS will forge strong working relationships with our organizations, especially the regional hubs, to accelerate adoption.

Data Center Services:

- Data Center
- Enterprise Application Hosting
- Server Management
- Storage Services
- Managed Mainframe
- Web Hosting
- Adaptive Infrastructure as a Service

Program and Project Management (PPM)
The PPM capability has global reach to a leveragable staff of over 7000 program managers, project managers and project management support professionals. Over 3400 of this staff are certified Project Management Professionals (per Project Management Institute’s (PMI) PMP and other certifications). PPM have experience in virtually all ES service offerings and a presence in all ES supported industries. The project manager will work closely with the ADM and delivery team during the Transition and Transformation (T&T) stage and any project from the account.

PPM features and capability:

- Increase the leadership commitment/sponsorship necessary for success
- Instill a formal project management strategy into business operations
- Provide clear and concise project communication amongst stakeholders
- Ensure that ownership of the project plan takes place at the working level
- Improve performance through process, process measurement and effective change management

Application Services PPM capability provides services ranging from sales support, PPM consulting, collaboration and training to full delivery in the following areas:

- Program and Project leadership
- PPM support resources
- Enterprise/Program Mgt Office (PMO) start-up and support
- Scope definition & change control
- Plan development & maintenance
- Program and Project communications
- Risk management
- Resource planning, leveling and analysis
- Project cost and earned value analysis
- Quality management
- Project, program and project portfolio management process and tool support
• Health check assessments of project & program processes

**Global Network Services (GNS)**


Networking Services:

• Network Transformation

• Unified Communications

• Network Management

• Network Security

• Network Application

• Carrier Management

**Global Information Security (GIS)**

The Global Information Security (GIS) organization provides integrated, scalable, information security solutions that allow enterprises to fulfill their obligations to their employees, customers, partners and vendors, while protecting their brand and image. GIS help their clients stay ahead of the changing threat landscape by using leading-edge intelligence and resources to design, deploy and operate secure, compliant solutions that reduce risk.

Security, Compliance and Continuity Services:

• Governance, Risk, Compliance

• Identity & Access

• Information Security

• Threat & Vulnerability
8.2. Strategy of IBM and HP

Strategy of IBM

IBM, it’s distinctive culture and product branding has given it the nickname “Big Blue”. It means IBM is so big and cannot be come down. In 1992, the financial loss of IBM is $5 billion, which is the highest loss in American corporate history. The former CEO of IBM, Louis V. Gerstner, Jr. started to reform the strategy and culture of IBM. Starting from 1996, IBM successfully transformed from a product base company to an IT Services and software leading company in the market. And from 2001, IBM became the market leading of IT Services and the total revenue of the company is $83 billion and $35 billion is come from IT Services. And IBM successfully to keep the leading position up to now. IBM CEO Sam Palmisano IBM have proven to be the higher-value, higher-margin, and higher-growth markets of software and services. One of the rational for IBM IT Service is selling $1 of product can up sales with $3 services. And IBM’s recent success stems primarily from the growth in its services business.

Strategy of HP

HP has been very successful in the last 25 years. In the past, HP is focusing on IT product and the merge with Compaq in 2002, the acquisition of 3Com and Palm in 2009 strengthen the product lines of HP from households, small-to-medium-sized businesses and enterprises. From the financial data of HP’s product revenue, it is noticed that there is a decline in product revenue. But for the IT Services, which is a growing area with steady income. The success of HP enables HP to buy a company as large as EDS in 2008 and extend the business area to IT Services. According to the former CEO Mark Hurd, he sees an extensive hardware stack as indispensable to the strategic deployment of an interlaced hardware-software-services strategy. So HP’s strategy is to invest as much as they can on improving their IT service group. HP is trying to follow the IBM business model where services are the driver for growth. HP is smart enough to
bought EDS for the growth of IT Service and also the software capability (EDS is one of the IT company gets CMMI Level 5). EDS brought a wealth of home grown enterprise software technologies, frameworks, service management, process and best practices that help HP’s software portfolio and IT Services.

IBM spent more than 5 years and transformed from a hardware base company to an IT Consulting Service company. Now HP is still learning to maintain the biggest IT company in the market. While the integration between EDS and HP Enterprise Services is still on progress, HP need to spend extra effort to maintain it’s market leading position in IT product and learn to retain and extend their IT Service business on existing and new client.

8.3. HP Enterprise Services Delivery Model

Service Delivery Team

A Service Delivery Team includes one Account Delivery Manager, Team Leader(s), and various team members with a combination of site base and offsite based resources with various Subject Matter Expert (SME). They can be running in dedicated or leveraged mode depends on the size of the account, the service scope and the required skill level. The formation of the service delivery team comes from different service line (depends on the service scope of the account), either local service line, global service line or BestShore. A global delivery model with resources and facilities in multiple countries, uniform processes and methodologies, and supported by a worldwide infrastructure. To ensure ongoing service improvement, HP will appoint an experienced Account Delivery Manager, who will oversee the delivery and ensure the quality of services rendered by the onsite or offsite service team. The Account Delivery Manager will participate in regular service review and is empowered to allocate shared resources of HP to continually evolve and enhance the quality and level of service.

BestShore
BestShore strategy provides the right blend of onshore and offshore delivery capabilities, which are positioned to ensure that clients receive high-quality, cost-competitive services from locations that best fit their unique requirements. BestShore provide a service that accelerates a more robust and centralized approach to regional news delivery. And it is responsible for near-shore and far-shore delivery and resource/labor management and optimization.

BestShore provides:

- Competitive global advantage
- Best unit costs of service
- Leverage capabilities and assets more broadly
- Consistency and reliability
- Quality & seamless efficiency
- Talent strategy – tapping the diverse resource market

EDS invested a lot in BestShore ITO delivery center into global footprint before the acquisition. There are a number of BestShore centers located at Argentina, Costa Rica, Panama, Morocco, Bulgaria, Slovakia, Hungary, Tunisa, India, Country 1, Malaysia and Philippines. EDS use BestShore strategy to serve most of their customers. BestShore balanced global footprint that minimizes risk and provides benefits far beyond cost reductions. Now, more than 550 customers are leveraging these advantages today and gaining the benefits from BestShore.

**Example of HP Global Delivery Team Structure:**

One of the global company who is the pre-acquisition client’s of EDS (pa-EDS’s client), their head office in France and they outsourced their Thailand business operation to HP. Since the Asia IT head office of the customer is stationed in Hong Kong, HP assigned the Client Manager and Account Delivery Manager and based in Hong Kong. This can facilitate the client management and escalation of problem. HP proposed BestShore to serve the account and Malaysia BestShore center was chosen as the first and second level support since the language level and time zone is matched with Thailand. The servers were located in Singapore and the
third level support is stationed in Hong Kong. The delivery team is running in leveraged mode and was supported by HP global support team. The BestShore model is satisfied by the customer and they plan to outsource all business operation in Asia to HP using the similar delivery model.

HP GLOBAL DELIVERY TEAM STRUCTURE

---

**HP Global Support Team**
- Chief Technology Office
- HP Global ITO team
- HP HK Quality Management Office
- HP HK ITO team

**HP Service Delivery Team**
- Client Manager
- Account Delivery Manager

**Customer (Business operation in Thailand)**
- Customer Governance
- IT Managers
- Business Users

---

**HP Service Delivery Team**
- Service Desk
- Server Monitoring
- MY Service Desk
- MY Monitoring Team
- MY Wintel Support Team
- MY 2nd Level Unix Support Team
- HK 3rd Level Support Team
- 3rd Level Support for Storage, R&R, OS
- 3rd Level Support for Server, ERP, DB, Storage
- SG Data Centre Operation
- HP Global Support Team
- HP HK ITO team

---

**HP Global Delivery Team Structure**

---

---

---
9. **REFERENCE**


