EMGT 835 FIELD PROJECT

HelpMe Telecom - Service Support Organization (SSO) Operating Plan

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Executive Summary

Introduction

HelpMe Telecom is a leading telecom company, and has had a string of highly successful quarters. The company's revenues are increasing mainly due to the explosive growth in the wireless sector. HelpMe Telecom also offers a suite of wire line products and local telephone service to a wide range of customer and business market segments. One key issue facing HelpMe Telecom today is customer satisfaction; the company has yet to increase its ratings amongst its principal competitors today.

Service Support Organization

Service Support Organization (SSO) is one business unit which supports the sales and marketing units. SSO handles customer orders for various wire line products. SSO's order volumes have increasing for the past few months, and the organization is faced with decreasing order quality, extremely long order processing intervals, employee morale and employee turnover; these issues have significantly affected customer satisfaction ratings.

An extensive situational analysis of SSO done for the field project indicates that that the focus of any improvements needs to be on the people and the overall ordering process existing within SSO. The order process today lacks the project management purview which is needed to ensure accountability and assign responsibility to each of the suppliers in the ordering process. Without proper metrics in place, SSO also finds it difficult to drive performance with its suppliers.

The current 'own-the-order' culture within SSO is also impacting performance.

The culture is truly focused on helping customers one-at-a-time; whereas a culture shift is needed to help improve the process, which in turn would help many customers at a time.

With these recommendations, SSO team has compiled process improvement initiatives and action plans; in addition metrics have been identified to validate these initiatives.

Conclusion

With HelpMe Telecom facing intense competition externally, SSO is only more at pressure to deliver. With customer satisfaction ratings decreasing, the current SSO management team understands the need and has accepted the challenge in trying to change employee culture, processes and systems that have stymied the organization for past ten years or more.

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Introduction

HelpMe Telecom is a premier telecommunications company, and is riding high particularly after a string of highly successful quarters and a recently concluded merger. The company faced severe difficulties with the dot-com bust and excess network capacity, and had undergone several rounds of layoffs in trying to achieve cost reductions as demanded by Wall Street. The company's revenues are increasing now mainly due to the explosive growth in the wireless sector and the wireless operations have only recently begun to make positive contribution to the company's profits. In addition to wireless products, HelpMe Telecom also offers a suite of wire line products and local telephone service to a wide range of customer and business market segments. One of the key issues facing HelpMe Telecom today is customer satisfaction; the company has yet to increase its ratings amongst its principal competitors today. The company currently fares at or near bottom of many customer satisfaction surveys even though it has an extremely reliable, state-of-the-art network providing service to its customers. The company comprises of several units of which one is the subject of this field project. Service Support Organization (SSO) is a HelpMe Telecom business unit that provides support to business customers' orders for dedicated point-to-point circuits. The bandwidths offered range from DSos (64kps) to OC48 (2.0 Gbps) in a variety of circuit and service types for a broad range of business customers. For instance, Citibank's need for a dedicated data connection (for 44 Mbps) between their New York headquarters and their local branch office in Kansas City would be an order that SSO processes. SSO is primarily responsible for the overall

customer order process beginning from the point-of-sale to the installation of order at the customer premise. Contrary to market perception of wire line products, SSO's order volumes have been steadily increasing for the first half of 2005, and the organization is faced with decreasing order quality, extremely long order processing intervals, employee morale and employee turnover; these issues have significantly affected customer satisfaction ratings.

Recently SSO has undergone a significant management change from the Vice-President through to Manager levels; the new management team is fully committed to bringing about key changes to improve customer satisfaction with the overall ordering process. SSO management also realizes the difficulty in bringing attention and focus of senior executive management to this particular wire line segment, when the overall HelpMe Telecom strategy and the market place is focused on the wireless sector.

This field project was done to develop and then implement a business operations plan for SSO using principles and knowledge gained from the Engineering Management program at the University of Kansas – Edwards Campus. The business plan included a comprehensive review of SSO's core processes, current strategy and present mode of operations. The findings were evaluated against Mckinsey's 7-S framework model. The project comprised a detailed examination of the Shared Values, Staff, Skills, Structure, Style, Strategy and Systems, and presented a new operational model for SSO. In addition, the field project also provided implementation strategies and timelines for the new operational model. The field project also incorporated measurement criteria to evaluate the success

of the new business plan, which is currently being assessed by gauging improvements in SSO's three key metrics:

- Customer Expected Date (CED) Met CED is SSO's ability to meet the
 customer's expected installation date. With this metric averaging below
 60% for the first half of 2005, the new business plan targeted the CCD Met
 at 80% by end of the year 2005.
- 2. Order Interval This measures SSO's ability in meeting requested intervals for circuit installation. Again for the first six months of 2005, the actual interval is greater than the requested interval. The business plan calls for decreasing the gap between actual and requested intervals.
- 3. Order Throughput SSO's key metrics are being measured on total opportunities, which are defined as the number of circuits installed per month (June qty 204). The new business plan targeted a gain a 100% improvement in SSO's Wideband (or WB defined as > 45 Mbps) circuit order throughput.

Historic graphical data for these three metrics is provided in Appendix 1.

Literature Review

Eliyahu Goldratt's book, 'The Goal', provides a framework to help understand the on-time delivery challenges in a manufacturing plant and to find solutions by identifying and managing bottlenecks in the assembly process. Throughout the book, using various incidents, the author provides us an inspiration to interpret production challenges and a methodology to seek resolution. By extension, many of the key learnings from the book can directly be applied to the Service Support Organization(SSO) organization. Hence this book was referenced extensively throughout this field project.

To begin with for SSO, an attempt to address the question – 'What is SSO's goal?' provides the same answer – make money by increasing throughput while simultaneously reducing both inventory and operating expense. Like the factory, SSO needs to:

Make Money – make customer acceptable order processing intervals, which could effectively be used by HelpMe Telecom's sales teams to generate more business;

Increase Throughput - increase production of customer orders;
Reduce Inventory - reduce order intervals since orders in process are akin to
inventory; and finally

Reduce Operating Expense – reduce employee time spent in processing orders and improving order quality.

So yes, in a way SSO does operate like the factory, only it's motivating factors might be different. In the book, Alex's plant was given a three month ultimatum to turn over his plant or face closure. With the recent HelpMe Telecom merger closure, SSO too might be in this precarious situation. Not that SSO faces an immediate shutdown, but if it is not able to achieve its goals, it may not be able to survive the onslaught of additional orders coming through due to increased HelpMe Telecom business customers. Even if SSO does survive, the recent globalization and outsourcing spate only add to SSO's motivating factors in stepping up the pace towards our goal.

The <u>three</u> key metrics for SSO as described in the previous section, also line up similarly the factory's goals - by increasing <u>Customer Expected Dates</u> (CED) and increasing customer satisfaction, SSO will be able to help generate more revenue for HelpMe Telecom; by reducing <u>Order Intervals</u>, SSO can reduce it's operating inventory and hence operating expense; and finally in increasing <u>Order Throughput</u>, SSO can churn out more orders per month.

The author highlights various situations which are highly reflective of SSO's challenges. As discussed in the book, an example of the heat treat furnace bottleneck exists in SSO today. In SSO, the provisioner's time is the most significant resource. Often, SSO responds to escalations which can take anywhere from an hour or more to resolve. Effectively, this may have impacted productivity of that resource, making it a bottleneck for all pending orders that could have been assigned to that resource. The other concept presented on the heat treat furnace bottleneck was that of stacking and sorting the products that it handled. By sorting and stacking SSO Access Service Requests appropriately for the

provisioning team, SSO can make much more efficient use of their time. Again, in a recommended realignment proposal which is currently being reviewed, there has been a need identified for a Subject Matter Expert (SME) group which should be able to filter or process orders that require special treatment to avoid ineffective use of the remaining team's resources.

Another related issue to the bottleneck was the point for quality control; in the factory, it was done after the product had consumed the bottle neck resource. This happens far too often in SSO, when the SSO team works on incoming orders that have incorrect information to begin with, and those for which end up having no HelpMe Telecom network availability. This directly contributes to increase in SSO's operating expenses while slowing down throughput. The factors contributing to these issues could either be internal or external which SSO may have no control over. For internal factors, process improvements need to be effected; whereas external factors may have to be influenced using more defined Service Level Agreements (SLAs) with the participating teams.

The one factor that SSO cannot control today is demand - the orders entering into the system. This is crucial in trying to keep the line balanced with the flow. Often, teams look to measure the efficiency of all resources, and in an effort to keep all the resources efficiently utilized, the teams expose themselves to the demand fluctuation risks. Once the line is balanced, SSO can help our sales team bring in additional orders, and try to achieve a stable demand curve. This was depicted rather well in the book when Alex decided to go for Bucky Burnside's additional one thousand units.

The author conveys other subtle yet important messages in the book – one being celebrations, and the other the need to maintain a balanced personal and professional life. With each new milestone, the team celebrated and that kept the plant and the employees moving on. Alex did not find all solutions in his plant, his interaction with his children provided him some of the most logical yet unapparent solutions to his problems. Finally, the author also hints at setting stretch objectives for teams to accomplish, for instance when Bill Peach asks Alex to get a minimum 15% reduction in operating expenses.

In conclusion, the literature reviewed provided a framework for this field project, to understand what SSO's goal is, and inspired ideas for implementing process improvements as SSO plans its journey towards the goal. It is through this journey that the SSO team will realize an efficient operational model, gain more learning and ultimately emerge as a stronger team.

Procedure and Methodology

The field project began with an initial assessment of SSO's core processes. Early data gathering for the project was done through a series of informational interviews conducted with SSO's employees and management team, and through collection of key metrics data from SSO's reporting teams. Very early on in the project, it was known that there was lack of day-to-day reports that could indicate any problem areas for SSO. The entire SSO team including management was mired with escalations, and hence did not have any formal reporting processes in place to provide any insightful quantitative date into this project. Hence, information interviews and one-on-one meetings with the team provided the basis for much of the information for project. In addition, information about HelpMe Telecom's strategic direction was sought from HelpMe Telecom executive management.

A detailed situational analysis was completed to identify opportunities for improvement and is presented in a later section of this document. Based on findings, the operational improvements for SSO was presented to and discussed with SSO's management. The field project also included actions plans in the recommendations, and methods to implement the identified initiatives. Measures of success have also been defined and SSO is currently collecting and analyzing measurements throughout implementation, noting favorable trends towards improvement goals for the three key metrics. The historic data and current metrics are provided in the appendix.

Results

SSO Core Process

SSO is mainly responsible for the overall customer order process beginning from the point-of-sale to the installation of order at the customer premise. SSO takes customer orders from the sales teams, performs validation checks on the orders, ensures internal and external network availability, sends an order to the local exchange company (LEC), and finally oversees the order progress through installation. As part of this process, there are several forms to be filled, software and systems in place that need to be updated in to keep accurate customer records for billing and network capacity management. There are also numerous handoffs between the participating organizations in this ordering process. Due to decreasing performance in order processing, SSO is faced with a lot of escalations from the Sales teams trying to ensure that all orders are handled expeditiously.

SSO - Situational Analysis

SSO team initiated a situational analysis as a first step in trying to identify improvement opportunities. The detailed situational analysis is attached in Appendix 1. The situational analysis of SSO showed that the focus of any improvements needs to be on the people and the overall ordering process existing within SSO.

Strategy

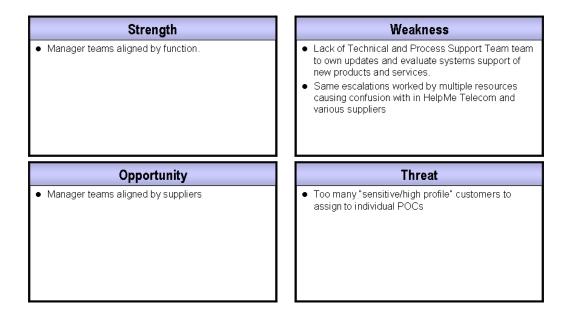
Overall there was no defined business strategy for SSO; as orders came into the system and were delayed; only escalations lead to any kind of resolution. In addition to this fire-fighting operational mode, lack of a formal metric reporting structure often left SSO with no starting point to find solutions to their operational issues. Without the strategy focus, SSO will only exacerbate their current situation with the increase in orders with new business expected from the recent merger closure.

Strength Weakness 'Fire-fighting' is current mode of operation, escalations lead to resolution. Lack of reports/reporting capability to identify and drive strategic initiatives. Lack of awareness of ordering specifics/intervals that Sales may include in customer contracts Opportunity Threat Develop in-house reporting capabilities. New opportunities will severely task the 'fire-fighting' Align Incentive Opportunities and Performance Objectives across several business units to ensure Escalation-based resolution adding avoidable costs linkage for all stakeholders. into the network. Financial implications/payouts to customers when contract requirements are not met

Structure

SSO had an effective structure with each manager team aligned by functions — with three managers each being responsible for Narrowband, Wideband and Escalations respectively. SSO's effective structure had helped in negotiating its operational issues to some extent. Though not strongly, the current structure is fairly positioned to incorporate new process improvements recommended in this field project and take SSO into a new operational mode. To counter this, the field

project also recommends a structural realignment later in the document to make this a competitive strength for SSO.



<u>Systems</u> – Systems/Process Analysis

SSO's ordering systems have not been kept pace with technology changes over the years, yet with improving supplier's systems, SSO can achieve significant improvements without having to rely on extensive system modifications. It is the process analysis aspect that provided the most insight into SSO's challenges, and by far provided most of the opportunities that could result from process improvements recommended in this field project.

The overall order process today lacks the project management purview which is needed to ensure accountability and to assign responsibility to each of the suppliers in the ordering process. SSO management team needs project managers in place assigned to each distinct sales unit that brings in the orders, the project managers will own the orders through the entire process and are responsible for assigning responsibility and accountability to the supplier units.

SSO interfaces with a lot of internal and external supplier and customer organizations as part of the ordering process and standard Service Level Agreements (SLAs) are in place to ensure performance with the interfacing units. Without proper metrics in place though, SSO finds it difficult to drive performance with its suppliers. The management team requires work to be done on establishing order pipeline management reports to provide order processing times within the various supplier units, and needs to put in place jeopardy reports assigning ordering process defects again to the supplier teams.

Strength

- Several HelpMe Telecom units contribute to the overall order process.
- SSO's Order Ownership across the several HelpMe Telecom's units.
- 'SSO' knowledge.

Opportunity

- There is need for an overall Project Management / Program Management to coordinate between various supplier units, providing accountability and metrics
- SSO Ownership process focused to help more than one customer at one time.
- Improved Ordering Process with external suppliers
- Use of established HelpMe Telecom forecasts to drive capital investment, and work across all impacted units.

Weakness

- Lack of accountability, visibility and metrics for the various HelpMe Telecom units to drive performance.
- SSO Ownership one customer at a time.
- Ordering system needs to be updated with industry/LEC changes.
- Lack of a valid forecast to drive consistency between all HelpMe Telecom units

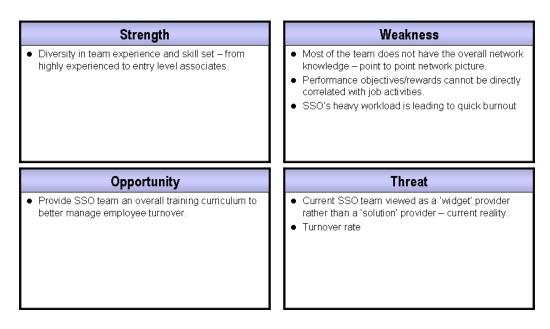
Threat

- Lack of system upgrades to support new technology, new equipment, and new product offerings
- Inconsistency in deploying process improvement initiative across all Sales groups.
- No end-to-end testing of new products and services to ensure success before deployment.

Staff

In the past few years, SSO has also gone through several rounds of layoffs that were needed to contain costs. Contrary to market assessments, the SSO wire line order volumes have kept increasing. As of May 2005, SSO had already processed about 60% of the 2004 order volumes. With no increase in headcount, the current associates are buried under extremely heavy volumes, leading to significant burnout and turnover. The management team needs to review and

execute a major realignment of functions within the order process, to ensure more balanced workload for the associates. By far the most impact that management can achieve is to do a thorough headcount evaluation and implement a plan to add more employees into the team.



Skills

SSO associates have an average of 8-10 years experience in doing the provisioning function. Though this is an asset for many teams, it is SSO's current weakness. Over the years, there has been a build up of extensive 'tribal' knowledge among the individuals, and a total lack of process and training documentation. The newer employees are often saddled with conflicting information and training from several experienced associates. SSO can realize long-term benefits with standardization and shared documentation on training, customer solutions and process initiatives. Even with the experienced associates, there has been no training provided on overall network configurations, and there is a definitely a lack of business acumen that hinders SSOs ability to think beyond

their current day-to-day issues. SSO needs to quickly formulate a training program for their associates which will help address this need. This will also prepare their associates with a career path to explore with HelpMe Telecom, thus retaining valuable associates within the organization.

Strength Weakness Not aligned with internal suppliers Experience and tenure of several associates. Ordering systems knowledge Team lacks the end-to-end network picture • Individual 'tribal' knowledge helps provide several 'Tribal' knowledge – lack of process documentation one-off solutions for our customers. Lots of doers and lack of thinkers Opportunity Threat Train SSO team on overall network components; Pending retirement of several highly experienced provide financial/business process training to help team associates develop HelpMe Telecom business practices. Shared documentation can be perceived as job security concerns.

Style

SSO has a new management team in place which can help with the transitional improvements within the team. The management team has been carefully selected from different units within the company, especially with some being chosen from the various supplier units that SSO interfaces with. The team is aware of the headcount challenges, and the overall wireless direction for HelpMe Telecom, and understands constraints imposed by limited resource allocation to the wire line products. Given the limited provisioning history and background for the new managers, the management team can affect change by delegating decision-making to the existing supervisor team and individual employees, thus providing them with a sense of empowerment. Rather than hands-on

management, it is prudent for the new team to keep focus on the balance between short-term operational improvements and the drivers of long-term value creation:

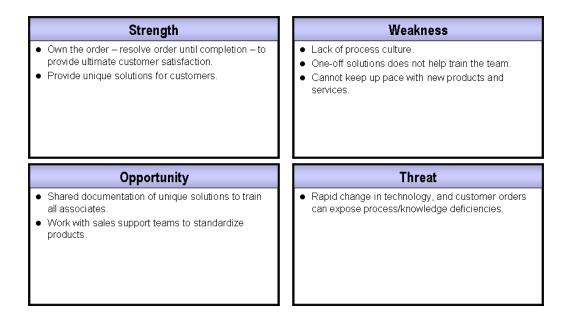
Short-term Operational Improvements	Long-Term Value Creation
 Hire additional contractors to clear current order backlog. Identify Subject-Matter-Experts (SMEs), and delegate problem resolution. 	 Create robust training process/documentation for future associates. Provide further training and good career counseling to the SMEs to retain them in HelpMe Telecom.

Strength Weakness Senior Management Commitment to Capital • Executive Management Commitment to change Investment to improve order turnover intervals. improve current process. • Management Team - diverse in experience and skill No time to supervise people Of recent - more executive management visibility for the team. Meet and greet ritual Opportunity Threat New management team has no PLP history, New Management not Provisioning-savvy provides opportunity to foster change. One-on-One meeting to improve employee morale

Shared Values - People and Culture

The current 'own-the-order' culture within SSO is also impacting performance. Over the past ten years, previous management had instilled the 'own-the-order' culture within the team; the team carried pretty much the burden of the order, even though the supplier units were non-conforming. The culture truly focuses on helping customers one-at-a-time; every customer order was an escalation which needed to be resolved. A culture shift is needed to make the team assume

ownership of the overall process, and use the new management tools to help drive performance with the supplier units. This will help improve the process which in turn would help many customers at a time.



This section concludes the evaluation of SSO's current operations and processes against the 7-S Model. With detailed understanding of these SSOs aspects, the field projects provides in the following section, conclusions with key recommendations for SSO's future operational plan.

Conclusion - Field Project Recommendations

With the 7-S study completed, the objective of the field project was to identify recommendations for SSO that would directly contribute to its three key metrics. With historic data available on these metrics, these would provide the measurements to validate the recommendations listed below.

1. Implement Project/Program Management Team.

SSO is currently taking order from seven HelpMe Telecom sales segments. SSO needs to establish a program manager for each sales segment; who will be the SSO's liaison to the sales account teams. The program manager will evaluate the existing pipeline of orders from these sales segments, monitor incoming order volumes and work with SSO managers to establish strategy for expected increases in future incoming volumes. The program manager will also work with the sales accounts team to monitor the incoming order quality and work with to define and implement process initiative to improve the incoming order quality.

2. Establish new performance measurement reports.

SSO currently is dependent on several internal supplier teams to complete their order process. Currently, there is no method to track accountability of defects in the order process attributable to these supplier teams. With an introduction of a 'hold code' report, SSO can assign root cause defects to these suppliers for orders held due to these internal teams. The historical data compiled from these reports will also drive future performance improvements and operational strategies for the future. For instance, if it is deemed that orders are being held consistently for lack of HelpMe Telecom equipment, it

may be prudent then to revisit the HelpMe Telecom's capacity management thresholds and decrease capacity thresholds to implement equipment additions in the network.

3. Realign organizational structure to gain operational efficiencies.

SSO currently sends orders to various Local Exchange Companies (for instance SBC, Bellsouth, Verizon). Each LEC has their own ordering process and requirements for its customers. To gain more LEC specific knowledge and efficiencies, it is recommended that SSO structurally align with the LECs and create manager teams facing each LEC. In interviews with other internal supplier teams, it was discovered that the proposed SSO re-alignment will also correspond with its internal supplier teams. Hence, from an ordering perspective, the whole end-to-end process will be LEC or region specific. In addition, SSO needs to add to its workforce immediately to reduce the pending backlog. It is recommended that SSO hires contractors rather than employees. This will provide SSO the flexibility to control its work force in relation with the incoming volume; in addition it will also provide a method to evaluate performance of contractors before hiring them permanently into SSO.

4. Culture shift

By far this will be the most difficult and the most long-term recommendation that SSO needs to begin working on immediately. With years of being in the 'fire-fighting' mode, SSO will need to emphasize the need to shift from the 'reactive' mode to the 'proactive' mode. Establishing the 'program

management' team is one step in this direction, which will provide SSO a proactive view into incoming orders into the system and formulate working plans accordingly.

The second recommendation is to introduce the 'project management' concept within the ordering process. The recommendation is to have project managers in place, to manage large volumes of orders for say a single customer. Having the project management team in place, SSO will be able to coordinate the activities of all stakeholders in the ordering process to be able to proactively identify and mitigate risks to the ordering process.

Finally, a strong focus on the process rather than the one-customer-at-a-time approach will help SSO go a long way in increasing customer satisfaction. The current SSO team associates are expert at providing one-off customer solutions, yet fail to devise resulting process improvements that can benefit more customers in future. With acute emphasis on monitoring incoming order quality, LEC alignment and introduction of program management, SSO management needs to instill this 'process focused' approach in the current

team today.

Suggestions for Additional Work

The 7-S Model has been used as a tool to identify and recommend process improvements for SSO's operating plan. With the implementation of these process improvements in place, SSO will be reviewing its three key metrics as outlined in this document to evaluate success of the operating changes. Further recommendation for SSO is to do an additional analysis of the key processes using the 8-S model. The 8-S model provides a framework for organizations to evaluate and perhaps reformulate existing strategies. In the 8-S model, Skills is replaced by reSources as one of the contextual 'S's and Strategic Performance is added to drive focus on the strategy execution effort. An evaluation of the 'Resources' for SSO may derive the need to position additional resources such as money, headcount and systems to improve performance. SSO's analysis on the eighth 'S' for 'Strategic Performance' can reveal areas of focus for SSO in setting objectives and measuring them, ensuring a successful alignment of the previous 7 'S's with the final 'S'. SSO management can further use the 8-S model to define and drive strategy; including implementation and performance measurement to ensure it remains on firm footing as the telecom business environment becomes more complex and more competitive.

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Appendices

- 1. Key Metric Charts (Confidential not for publication)
- 2. Pre and Post Organizational Structure (Confidential not for publication)