Commercial Director & Service Manager

1. Alstom Grid NME

With Alstom Grid my position was challenging, in that the expected growth would have to exceed 30% P.A.

The core business was, GIS 380/220/11kv Substation Preventive maintenance and overhauling. Power transformers maintenance and overhauling, HVDC S/S maintenance.

The business region covered the whole North Africa and Middle East region of Alstom Grid's supply.

The regional office was in Dubai, that reported to Paris, and subordinates were the individual country service managers and their teams.

The job included direct commercial offers for major jobs made directly from the regional office supervised by me, the development of the teams within the regions both in business orientation and finding the right persons to be able to execute current and future works.

There were many challenges and successes, but I wish to highlight the most interesting and rewarding:

1) 3 year contract for operation and maintenance of the 380KV HVDC Fadli S/S between Saudi Arabia and Bahrain

The GCCIA authority had decided to release the next three years package as an open tender. This required both a strategic and commercially viable offer to compete with local companies that intended on winning the order. The order was again awarded to Alsom Grid after submitting the best technical bid and most competitive price.

1) On site transformer overhauling of High Power Transformers of the Gas trains in Oman.

The Omani authority had one of its three Natural Gas train failed due to a faulty Power Transformers. After our inspection we discovered that there was imminent failure of the other two trains because of the same type of transformers and a possible recurring fault. Due to the urgency of time, it was decided to completely revamp the transformer on site, including exchange of all windings. This required immediate mobilization of a mobile transformer workshop to the remote site, the manufacturing of completely new windings, implementing the installation, and testing the transformer within an eight month period.

2. ABB Service Co. Saudi Arabia

At ABB I was given the responsibility to accumulate long term service contracts with customers for the existing installed bases that consisted of the majority of power equipment installed in Saudi Arabia.

There were many challenges and successes, but I wish to highlight the most interesting and rewarding:

1) Establishing a preventive maintenance agreement with the Phosphate and Aluminum smelter at Ras Alkhair, Saudi Arabia.

The Ras Al Khair industrial city was just being commissioned, and the plant maintenance managers required the development of the maintenance & service program for their 380KV S/S and all the 11 KV S/S within the plants. This included proposing cooperation between ABB and the plants maintenance teams, establishing the maintenance procedures, and defining the required work.

3. Maintenance / Service Manager Experience with Siemens

I held the position of Maintenance / Service Manager for over five years and was finally responsible of an organization with more than 340 personnel from 34 nationalities. I reported to the local CEO.

Siemens AG was receiving orders and needed the local organization to execute the projects with local personel. The Service department was responsible for executing all Siemens projects, except for the medical equipment and telecommunication projects.

There were four types of service businesses related to the department:

1) Power transmission & distribution
2) Automation & control.
3) Generation.
4) Motors & drives.

Initially the majority of the work and resources was dedicated to power transmission and distribution, however this changed with time.

Under my management, the services teams was divided into groups.

1) The management team.
2) Installation team.
3) Commissioning team.
4) Internal services team.
5) Commercial administration team.

The Commercial administration team was managed by the commercial manager, who was my counterpart, and who also reported to the CFO directly. The rest of the teams had team leaders who reported directly to me. The management team also included the team leaders of each team and the sales teams. They worked together with the commercial administration team when making offers. In the beginning all our offers were made and released by me to Germany as costing within the Siemens AG offers to the local market. After developing the business, most offers were later sent directly into the local market.

We also developed three internal service teams that included the coordinators, store keepers, internal staff, and the calibration lab team. The resource coordination team, being part of the internal services team, was responsible for assignments of all team members, and all the tools and equipment to the projects. The tools were maintained by at the tools store, that included a calibration laboratory and repair workshop. The coordinators were continuously informed of what tools, equipment, and what persons were available for assignment. We developed and maintained weekly efficiency reports (scorecards). In special cases personnel and tools were requested from the central coordinator, in Nurnberg, Germany but this was meant to be kept to a minimum.

Every three months a resource control meeting was made during which the following were discussed:

1) Tools requisitions,
2) Employment of personnel,
3) Training / development of engineers,
4) Ordering of project specific personnel from local manpower providers.

Most of the installation workers were out-sourced or specifically recruited for long term on a project by project basis. After one year there were over 2500 outsourced installation workers assigned at any time to the department.

As personnel play the key role in a Service organization, a major focus was placed on continuously developing more people and obtaining more tools, while assuring that most of them were continuously assigned to jobs. An agreement was made with a vocational training center to develop local youth.

All the project managers reported directly to me. Both the coordinator and the project managers planned ahead and assured that all persons and equipment were always available on sites when needed, that sufficient resources were available to satisfy the projects schedules, and that the efficiency of the persons and tools was at a maximum. Financials and customer payments were planned on a weekly basis as well.

On the sites the service engineers also participated during erecting, so as to eliminate any redundant work. The commissioning engineers would take over as soon as the erection was completed to finalize every aspect before final testing and handing over.

The majority of the local staff were engineers. The service engineers consisted of specialist in different technical fields. These included among others, erection, protection, SF6 SWGR installation & testing, automation and control, etc.

The project managers were assigned directly to the consultants/owners and were responsible for planning the availability of the resources and equipment at sites and getting payments. In some instances one project manager was responsible for a multitude of projects. The installation supervisors reported directly to the project manager. The commissioning team consisted of the engineers who would test each equipment and cable installed before testing the whole plant. In many cases revisions to designs, engineering and programming had to be done on site.

During this period the need to expand and revamp substations arose. The business also expanded into operation & maintenance of existing plants, after sales service projects and troubleshooting jobs. The organization expanded and won installing & commissioning jobs for industrial complexes. Now the competence requirement increased to include Automation & Control, Motors & drives and Power generation.

The complete organization had to change from a reactive organization that received orders to implement jobs, to a pro-active organization. To develop the organization I also had to developed new

processes and procedures that would allow the organization to grow quickly.

The business developed into a much wider array of persons, procedures, activities and products.

The below describes the development of the "Maintenance / Service Management" department processes during this time.

A) General notes on discipline:

- Assurance and adherence of company procedures.
- Company secrecy and Information maintenance.
- Corporate ethics and compliance.
  - Professionalism in implementation and adherence to rules & regulations (Company & Laws)
  - Fair play – non monopoly practices.
  - Global ethical requirements.
- Networking procedures (vertical and horizontal).
- Industry standards & regulations.

B) Maintenance /Service Management for electrical & electromechanical plants.

I) Electrical & Electromechanical maintenance / service management processes:

1) Services account management:
   Identification of potential customers and studying their needs.
   Proposing to the customer modern technologies.
   Determining opportunities and evolving them into contracts.
2) Service sales management.
   Studying the requirements of the customer instances/opportunities and proposing offers compliant to their requirements.
   Identifying the competitors and understanding their strengths and weaknesses.
   Basic technical and commercial offers. (Bid – No Bid Procedure).
   Technical offer.
   Commercial offers.
   Proposing to the customer & presenting alternative offers tailored specifically to available products specification and available resources.
   Product availability scheduling (Procurement & delivery).
3) Commercial & financial management
   Costing break down.
   Profitability determination.
   Project & service contracts cost controlling.
   Project & service contracts financing.
   Product availability management (procurement & delivery).
   Spare parts, identification, procurement, storage, and costing.
   Cost allocation to projects and contracts.
   Financial managment and reporting.
4) Regional Sales & Resource distribution management
   Identifying the regions and their needs.
   Developing & distribution of resources closest to the customers.
   Key customer account management.
5) Resource management
   Human resources.

Identifying & determining the required resources.
Efficiency & effectiveness monitoring & controlling.
On the job Mentoring.
Training.
Efficiency & effectiveness reporting & controlling.
Allocation & Mobilization.

Equipment & tools
Identification and planning.
Service & calibration services.
Allocation & mobilization.
Operation & maintenance scheduling.
Efficiency & effectiveness reporting & controlling.
Allocation & transportation

6) Marketing & market studies.
Identifying the market needs, trends, changes.
Identifying the market schedules, (Down times, Plant stop for revamping ….).

7) Global networking management
Horizontal alignment with global entities.
Identification of global resources for special projects.

8) Operation & Maintenance Management
Plant lifecycle management.
Renewable energies proposals.
Optimum revamping of products proposals.
Identification of modern techniques in assistance with global partners.

9) Modernization and alignment through the horizontal organization
Determining the evolution of technologies and products with global partnership programs.
Alignment of activities with horizontal management goals.

10) Reporting & feedback
Budgets, budget controls, periodic reports.
Aligning to global programs.
Information sharing and resource sharing programs.

11) Quality management & control
Document control.
Technical procedures, work instructions.
Auditing of activities & compliance.
Calibration services & instrumentation procedures.
Corrective & preventive actions (controlling & reporting)

II) Electrical & Electromechanical maintenance / service management activities:

1) Service industry of electrical plants / O&G / water pumping stations:
Upgrading / expansion of existing substations/plants.
Revamping / renewing of existing substations/plants.
Spare parts, identification, procurement, storage, and costing.
Installation & commissioning of running projects.
Project management and controlling (including PAC / FAC management)
Installation & supervision of installation.
Cabling & termination
Control systems commissioning
Protection systems commissioning
Tools & equipment management
Manpower planning

Allocation
Planning & budgeting
Transport
Local procurement support

After sales opportunity (service projects & contracts) of installed plants.
Identification of modernization (refurbishing) needs of customers plants.

2) Service industry of electromechanical plants:
Motors & drives / Gas turbines.
Troubleshooting /revamping of existing motors and drives / Gas turbines plants.
Identification of modernization needs of customers plants.
Project management and controlling of service contracts
Spare parts, identification, procurement, storage, and costing.
Agreements with local workshops for mechnical works.

3) Service industry of Automation & Control systems.
Industrial control / SCADA system commissioning / troubleshooting.
RTU projects (expansion & revamping) of substations systems & LDC centers.
Spare parts, identification, procurement, storage, and costing.

4) Marine industry.
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III) Electrical & Electromechanical maintenance / service management products:

1) Power transmission & Distribution
Asset Services
Maintenance / troubleshooting, availability of spares,
Installation & commissioning of new projects
Service projects
O&M contracting.
Engineering / consultation services
Metering Services
Smart metering installation & commissioning
Smart metering engineering & consultancies
High voltage services
Environmental & quality management and consultancy
SF6 services related projects.
Transformer services
Transformer service projects
Training & Mentoring
Training for new products.
Technical support to operators and service personnel of owners.

2) Automation, Control, & Protection
Smart grid monitoring solutions
Generation monitoring solutions

3) Power Generation
Performance enhancement studies
O&M, overhauling, site / local repairs, spares
Service projects. (Identifying maintenance requirement and executing periodic jobs)
Modification & Upgrade (New technologies, environmental)
Training & Mentoring
Training for new products.
Technical support to operators and service personnel of owners.