With more than 104,000 employees in more than 110 countries, Shell plays a key role in helping to meet the world's growing demand for energy in economically, environmentally and socially responsible ways.


To excel as a major oil and gas producer, Shell needs a reliable and versatile IT infrastructure that leverages new technology and enables business innovation. From helping to discover new oil to supporting teamwork across its global workforce, IT infrastructure is vital for the success of Shell's business.

In October 2005, Shell began investigating options for IT infrastructure delivery in the future. In 2006, the company expressed the intention to outsource a substantial part of the IT infrastructure services, while retaining strategic control and also certain specialist services that bring specific competitive advantage.

As a consequence, the Infrastructure Sourcing Programme was launched as one of the largest and most complex business transformation programmes undertaken by Shell. Working together with sourcing advisory experts from TPI, Shell's programme implemented a new infrastructure delivery model and sourcing strategy to bring substantial benefits to its business. The programme has impressed stakeholders within and outside Shell: every deadline set was hit; every target was met or exceeded. Powerful lessons can be learned from this programme setup and management.

THE CLIENT'S CHALLENGE

A Changing World

The Shell logo has existed for more than 100 years, testament to the company's vast experience and leading position in the oil and gas industry.

However, times have never been more turbulent. In today's markets, companies such as Shell face a highly competitive environment, with volatile crude oil prices and increasing technical challenges and costs to find and produce hydrocarbon reserves.

To continue to thrive, Shell's strategy is “More Upstream, Profitable Downstream.” In other words, the company aims to grow its hydrocarbon reserves and production while ensuring that manufacturing, marketing and distribution of products remain cost-effective and efficient.

IT Infrastructure

Technology is key to the success of Shell's business strategy, and IT (infrastructure) is the pervasive technology that impacts the performance of all its business activities.

Between 2002 and 2005, Shell accomplished a successful initiative to globalise its IT infrastructure. The organisation, technology and processes were standardised and streamlined, while many parts moved to Malaysia and India. Reliability, global working and unit costs improved immensely, providing Shell with robust and efficient infrastructure services.
By 2005, Shell was ready to consider major change in the delivery model and sourcing strategy for infrastructure services in order to:

- Focus more on business needs and IT opportunities, which had become overshadowed by technical service matters
- Increase the value from the suppliers and contracts engaged in its IT infrastructure delivery
- Find more elasticity in service capacity to better cope with peaks and troughs typical of the business
- Contain the growing costs of maintaining existing IT infrastructure services and developing new ones

Shell asked TPI to validate the result of a study the client had commissioned to recommend changes to the delivery model and sourcing strategy that would support Shell well into the future.

**New Delivery Model and Sourcing Strategy**

TPI’s validation process evaluated the strategic options that had been recommended to Shell for sourcing and delivery of IT infrastructure. It engaged thought leaders from within and outside Shell and took account of the capabilities demonstrated by the outsourcing industry. By mid-2006, TPI’s experts advised:

- Outsourcing a substantial part of the IT infrastructure services, while keeping the strategic controls and those services within Shell that can provide the company with a competitive edge
- Implementing a recommended delivery model and sourcing strategy blueprint, based on a multisourcing arrangement, that shows the activities to be outsourced or retained. It assumed contracts with multiple suppliers, each responsible for the global delivery of a distinct set of services.
- Providing an outline approach for the Infrastructure Sourcing Programme to realise the recommended delivery model and sourcing strategy.

Shell’s Executive Committee supported TPI’s advice and gave the green light for the Infrastructure Sourcing Programme.

**Chapter 2: The Business Case for Change**

Before embarking on the Infrastructure Sourcing Programme, Shell formulated its business case — the justification for change — as follows:

- Focus – Split responsibilities for identifying business needs and exercising strategic controls from service development and operations
- Agility – Increase service reliability and performance and create more elasticity to address the large swings in demand for infrastructure services and projects
- Sustainability – Ensure wider access to the top talent and innovation available in the IT industry and obtain more value from suppliers engaged in infrastructure delivery
- Financials – Reduce the unit cost for IT infrastructure and turn fixed into variable costs

The hard and soft targets of the business case were approved by Shell’s executive committee.
Chapter 3: The Infrastructure Sourcing Programme

Programme Setup

Success of a large undertaking such as the Infrastructure Sourcing Programme hinges on these preparations:

- Agree on the mission statement and business targets that need to be met or exceeded by the programme
- Develop and communicate the programme plan by defining, scheduling and estimating the activities and deliverables and clearing the plan with all stakeholders
- Create a high-performance team: select skilled staff, then articulate the mission, plans, roles and responsibilities for each team and individual
- Set up governance by defining the major decision and check points, such as transparency on who decides what and the criteria that will apply

For the Infrastructure Sourcing Programme, the following additional preparations were critical for success:

- Create diversity in the programme team by ensuring variety in disciplines/skills, experience with the different service lines and base countries of programme staff
- Bring the core programme team together in one location, acknowledging the inconvenience this brings for team members, such as longer periods away from home
- Make change and communications management a priority, engaging all stakeholders to build commitment and solicit their feedback

Programme Phasing

The programme involved consecutive phases for feasibility and implementation.

The feasibility phase had to demonstrate that the programme targets could be met or exceeded with a viable plan for implementation. The work culminated with the final decision on outsourcing made in December 2007 by the Shell executive committee on the basis of:

- Best and final offers from suppliers
- Design and details of the retained IT organisation
- Outlook on realisation of the business case
- Implementation plan

The implementation phase ended with the successful transition of services to suppliers by the end of September 2008 on the basis of:

- Contracts signed with the preferred suppliers
- Quality of services at the end of the transition stage
- Effectiveness of the retained IT services organisation
- Transformation plans to change/improve services

Governance and Management

The Shell executive committee set the targets, was kept informed on plans and progress, and made the final decision to outsource IT infrastructure services.
Governance was delegated and consisted of these roles:

- Executive steering committee, chaired by the Shell Group chief information officer, with overall accountability for the programme
- Executive tender board, chaired by the group vice president of contracting and procurement, accountable for review and advice on commercial matters
- The programme director, responsible for delivering the business targets and managing the programme team and resources

The programme team involved many disciplines, including IT, finance, human resources, contracting and procurement and legal specialists. The size of the programme team varied over time, ranging between 100 and 150 full-time-equivalent employees, with 60 to 80 full-time core team members. The team was organised in workstreams, each responsible for specific deliverables, such as:

- The programme management office (PMO) team, charged with planning, reporting progress, assistance with resourcing, and providing facilities and support for programme teams and staff
- The change and communications team, charged with articulating and communicating the changes designed by the programme, working with stakeholders to build commitment and receiving feedback
- The commercial deal teams, focused on defining the commercial strategy to be followed, developing the request for proposal to suppliers, evaluating the best and final offers, selecting the preferred suppliers and approving the completed contracts
- The people and organisation teams, focused on terms and conditions for staff transfers, proposing the organisation design for the retained IT controls and services, documenting processes and interfaces for the new ways of working, enabling staff transfers, and on readiness of the retained IT organisation

Apart from workstream leaders, the programme team also had discipline leaders to manage and coordinate discipline-specific staff across the workstreams. For example, the finance leader would coordinate finance activities and coach staff across the workstreams to ensure financial integrity across the programme.

The programme leadership team consisted of the workstream and discipline leaders, the PMO leader and the programme director. In their weekly meetings, the programme leadership team reviewed progress versus plans, reviewed issues and risks and decided on remedial actions. This ensured constant focus on deliverables and meeting the timeline.

Workstream and discipline teams would also meet weekly to receive updates on the overall programme status. Staff was encouraged to be candid about potential problems they observed. This open communication meant problems could be tackled early and kept team spirit high.

Once the preferred suppliers had been announced, Shell enabled these suppliers to participate in managing and steering the implementation work. The critical step was establishing a joint PMO team with the suppliers that would create and maintain the implementation plan and monitor and report progress of deliverables required for services transition. A joint transition management meeting was held weekly with representatives of Shell and the suppliers to review the progress, issues and risks and decide on actions.

Projects were defined for a number of major changes required for services transition, such as for modifications needed in the request-to-pay processes and systems. These change projects were resourced with staff from Shell and the suppliers, and a joint steering committee was instituted to steer these projects at stage gates and for major decisions.
The Commercial Challenge

The commercial deal teams produced the detailed scope and requirements for the service bundles. These teams worked closely with the suppliers on the technical solution and pricing of services, conducting the following steps:

- Solution framing – Going out to the market and inviting potential suppliers to advise Shell on how to structure and operate the new delivery model
- Request for proposal – Documenting scope and requirements for services and sending to suppliers for their technical and commercial response
- Evaluation and short-listing – Evaluating responses from suppliers to RFPs, ranking on technical and commercial aspects and short-listing suppliers to make final offers
- Best and final offers – Inviting, receiving and evaluating the best and final offers from the short-listed suppliers
- Selection of preferred suppliers – Evaluating final offers on technical and commercial aspects and recommending preferred suppliers
- Contract closure and signing – Ensuring all contract details are agreed and documented and organising contract signing

The “solution framing” step was particularly successful, with suppliers providing their views on best practices and solutions for outsourcing. This interactive process involved presentations and follow-up discussions and created a positive ambiance for the next steps.

Retained IT Controls and Services

A crucial part of the project was identifying and specifying which IT controls and services would remain within Shell. For the retained controls and services, the programme team developed an organisation structure detailed down to individual positions and job descriptions.

The retained organisation that was agreed upon employs some 550 positions covering the following areas:

- Strategic controls – Involves positions for developing strategy and planning, controls on architecture and technology, managing service performance and interfacing with suppliers on contractual and commercial issues
- Business interface and demand – Teams within Shell who manage demand, identify new requirements, assess quality of services delivered by suppliers and alert when incidents impact business performance
- Specific Services Delivery (SSD) and Specific Projects Delivery (SPD) – Deliver services that can bring competitive advantage to Shell’s oil and gas business and services for seismic processing and interpretation, plus assist project teams with change and stakeholder management at the company

Structuring and sizing the retained IT organisation required many stakeholders in Shell’s business to agree and took several months to conclude.

Engagement and Transparency

Throughout the study and programme, Shell aimed for open and honest communication with all stakeholders. With more than 4,000 employees and contractors directly affected by the programme, engagement and transparency were important.
Sharing information with employees and contractors as early and as fully as possible without jeopardizing commercial integrity — such as through newsletters, town halls, change councils and meetings with staff councils — yielded these effects:

- By sharing goals and plans, staff had the opportunity to prepare themselves
- Early feedback was collected that was relevant for next steps
- Speculation and rumours were to a large extent avoided because staff knew what to expect

To help prepare for change, Shell organised “Facing Change” workshops, open for staff to attend and helping them to anticipate the journey and take hold of their future.

**Chapter 4: The Deliverables**

The infrastructure sourcing programme resulted in an outsourced IT infrastructure service with four service areas:

- Managed network services – Telecoms, connectivity, and collaboration services
- Hosting and storage, including data centres
- End-user computing – Desktops, service desks and on-site support
- Operational integration – Enabling integrated effort of suppliers for activities such as incident management

Shell has selected three IT suppliers to deliver these services: AT&T for managed network services; T-Systems for hosting and storage; and EDS for end-user computing.

EDS has also assumed the role of operational integrator, one of the most innovative roles of the delivery model. It has a separate responsibility and team to orchestrate the work when integrated efforts of multiple suppliers are needed. For instance, when a serious incident is declared, EDS will supervise and direct the actions of all the suppliers until it is resolved.

Underlying the teamwork of Shell and suppliers is a well-documented process model based on industry standards, including Information Technology Infrastructure Library (ITIL) and Control Objectives for Information and Related Technology (CoBIT). The model specifies the steps and responsibilities of the players involved and documents the handoff of actions and results from one player to the next to ensure that the baton is successfully passed.

**The Results**

The RFP was issued 1 May 2007, the final decision for outsourcing was taken on 18 December 2007, the contracts were signed on 31 March 2008, and the services went live on 1 July 2008 – a remarkable timeline.

A major achievement of the programme has been the high rate of staff transfers; 98 percent of offers to employees were accepted, helping to explain why the transition has been smooth and free of business disruptions.

With the transition of services achieved, a transformation programme started during 2008 that enables the suppliers to transform the services and their delivery. These transformations will bring new technology and functionality to Shell and enable the suppliers to streamline delivery and achieve service and cost levels as contracted. The transformations have been scoped and scheduled as projects and will take place from the end of 2008 until early 2011.
The TPI Solution

While Shell had experience in running large business change programmes, it had never undertaken an outsourcing project the size and complexity of the infrastructure sourcing programme. Shell decided to work with an experienced advisor who could team with its executives, managers and staff to turn the proposed delivery model and sourcing strategy into reality.

The TPI Proposition

Shell recognised that TPI offered unique knowledge of the market and suppliers amassed from its involvement in many complex outsourcing engagements. TPI offers clients a structured approach to outsourcing, tried and tested over many years. Using the TPI approach and advisors ensures that an outsourcing programme is implemented quickly and stays on track. TPI and Shell worked closely with law firm Clifford Chance on drawing up contracts for services with the suppliers that would best fit Shell's requirements.

TPI at Work

The first TPI activity was working with the Shell team to develop the programme plan and organisation based on the TPI M-STEP methodology. TPI advisors were assigned to the workstreams and programme leadership team to consult on the contents and quality of the deliverables required.

The RFP represented the key deliverable for the commercial deal stream. TPI provided an RFP template that could be tailored to Shell's specific circumstances and requirements. This structure ensured quality and completeness and enabled the suppliers to give precise responses.

Shell had decided on a multisourcing arrangement that held each selected supplier responsible for a set of distinct services. It also required suppliers to collaborate in specific processes under an operational integrator. These processes include request management, incident management, problem management, performance management and invoice management, all of which required suppliers to work closely together for desired results. As such a role is not yet widely practised, TPI conducted research that contributed to the requirements in the RFP.

TPI and Shell staff qualified the suppliers that would be invited to respond to the RFP, using criteria such as geographic footprint and experience.

The RFP was issued in May 2007 to qualified suppliers. At this point, Shell staff and TPI advisors worked closely with these suppliers to help them understand Shell's requirements and the process for selecting the preferred suppliers. TPI and Shell's procurement team jointly guided suppliers through the evaluation process, enabling them to develop prototypes and demonstrations that matched Shell's needs.

TPI helped Shell define the criteria to downselect the suppliers based on their technical solutions and the pricing of their services. The selection criteria and ratings were agreed before the RFP was finalised and did not change further. The technical and financial ratings were determined by separate teams to avoid prejudice. Combining the two, Shell then selected suppliers on their total ratings and did not apply further criteria.

Also typical for the TPI approach are the mutual value discovery (formerly known as “yellow pad”) sessions, which involve a supplier, the relevant Shell staff and TPI. The sessions are conducted when the RFP is issued to clarify the contents and selection process and also to clarify the responses when suppliers send their proposals. These intense interactions are critical for the success of the supplier selection and often require more than 60 staff together in the meeting room.
CLIENT BENEFITS

Working with TPI was a key element of the successful completion of the infrastructure sourcing programme. Specific benefits of the TPI/Shell partnership included:

- Using a proven TPI approach covering all required actions and results
- Ability to plan and schedule the work, knowing what skills and team size were required
- Template RFP that ensures crisp and clear communication of what was required and offered
- The commercial and technical acumen of TPI consultants and market intelligence

Three months after service commencement, Shell had identified a number of key lessons on managing business change programmes on this scale. Some of the generally applicable lessons included:

- To meet deadlines and milestones, programmes need a clear and simple governance structure, a mission and goals agreed to by the key stakeholders
- Keep an open mind and let suppliers challenge your requirements and views
- Transparency with potential suppliers leads to best results and makes the collaboration enjoyable
- Staff and contractors affected by the outsourcing should be engaged and their feedback incorporated as early and fully as possible

Leadership and Teamwork

Strong programme leadership paid off to drive achievement of the major milestones. Programme leaders created a high-performance team that was clear about the mission and overall programme goals and plans as well as their individual roles and responsibilities. They were encouraged to raise problems early on and would see these addressed right away. The core team shared offices in The Hague, always able to sit down in one room and sort out any issues together.

Change and Communications

The priority put on change and communications management by Shell and the resourcing and professional execution of these activities were fundamental to the programme’s success. The programme identified its stakeholders and their needs for making change and ensured these needs were addressed. That way, the programme was aware and secured the commitments required to implement change.

In hindsight, the engagement of stakeholders should have received even more attention. The infrastructure programme was hardly visible for staff outside IT, such as those in the business line. Even many IT staff involved in applications management were not aware of the changes and impacts from infrastructure outsourcing.

Holding the Suppliers Accountable

An important lesson learned was to make sure that the language of the contract clearly specifies what the suppliers must deliver and to hold the suppliers accountable for these deliverables. Shell found that in some areas, the deliverables and milestones were not clear enough, requiring much time to solve after contract signing.

Also, Shell’s tendency to step in and help suppliers having difficulty in delivering introduces the risk of suppliers feeling they are no longer fully accountable.
CONCLUSION

The initial service contracts will last for five years. For the immediate future, Shell’s priority is to monitor and steer realisation of the business case, ensuring that the benefits are achieved.

Shell aims to create a true partnership with and across AT&T, T-Systems and EDS that is more than just the contracts. Critical for the partnership will be the mutual respect shown for each other and partner behaviour. Shell will need to focus on new requirements and service levels, leaving the development and delivery of services to the suppliers. For IT infrastructure strategy, architecture and planning, all partners will have to contribute and seek accommodation of other views.

Though cost levels need to be closely managed, Shell needs to provide space to pursue other goals as well, such as collaboration on business innovations. Shell created the Innovation Council, a team including representatives from the suppliers, which is tasked with developing opportunities that can improve business performance.

Shell has strategic suppliers for products, applications management and infrastructure management. Together with some critical niche suppliers and its own IT organisation, they need to forge a “OneIT” model in which suppliers work together driven by the goal to improve Shell’s business, not just their own bottom line. Shell refers to it as the ecosystem. With all players working together it thrives, but if one or more won’t play, it falters.

LOOKING FOR A STRATEGIC PARTNER?

TPI’s IT Infrastructure experts can help you achieve your organizational goals through objective advice, knowledge of your industry and experience with arrangements from simple to complex.

Looking for a strategic partner? Contact the TPI regional leader (listed below) nearest you. For more information, visit www.tpi.net.