The bank provides a wide range of financial products and services to 3.61 million corporate clients and 216 million individual customers through 16,232 outlets, 162 overseas subsidiaries and a global network of more than 1,504 correspondent banks as well as Internet Banking, Telephone Banking and self-service banking.

### The Requirement
The bank was carrying out a complete refurbishment of its London offices and wanted to invest in a high performance structured cabling system.

### Sourcing a Partner
The bank engaged directly with PTS Consulting Group PLC (PTS), a world class IT consulting and project Management Company which provides its clients with professional services, managed services and resourcing solutions. Since 1983, PTS has successfully delivered high-value, vendor independent solutions to its clients. PTS needed to identify and specify a structured cabling system that was reliable, met all of its clients’ requirements and was backed up by quality and performance standards.

The next step was then for PTS to appoint an experienced installer who could not only carry out the project but also work to tight timescales. PTS had previously worked with Line Management Group (LMG) a company established in 1986 which specialise in the delivery of major cabling and technology installations.

LMG’s core values are a commitment to service excellence, ensuring all employees have the latest training, tools and knowledge to provide the infrastructure services and intelligence necessary to reduce operational costs and improve business performance.

### The Right Product
PTS had decided that the Excel structured cabling system had the necessary product portfolio to meet with the project requirements. Excel structured cabling products constitute an end-to-end solution where performance and ease of installation are pre-requisites. With an emphasis on compatibility and standards compliance ‘from outlet to cabinet’, reliability and product availability, Excel is the complete and trusted solution.

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<table>
<thead>
<tr>
<th><strong>Customer</strong></th>
<th>The bank</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location</strong></td>
<td>London</td>
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<tr>
<td><strong>Requirements</strong></td>
<td>Completely refurbished office and technology refresh</td>
</tr>
<tr>
<td><strong>Equipment</strong></td>
<td>Excel Cat 6A FFTP and Excel OM3 24C Fibre</td>
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"I found the Excel products were efficient in design, entirely robust, whilst also achieving excellent headroom, even with the difficult building environment encountered. Due to the minimal dimensions of the low profile category 6A shielded module, we were able to construct a GOP suitable for a 40mm floor void. This afforded the client the flexibility of a GOP grid design which otherwise may not have been possible. In a challenging project it was reassuring to know that the products performed without any issues."

*Representative of PTS Consulting, John Denyer*
The Excel brand is owned and distributed by Mayflex. Mayflex leads the way in the distribution of Converged IP Solutions. LMG not only had a long standing relationship with Mayflex but they also hold the status of an Excel Solutions Partner (ESP). ESP partner status requires extensive training, the understanding of which is verified through an exam process to demonstrate knowledge of the Excel system and how to design, install and test in accordance with Excel guidelines, best practice and above all standards compliance.

Once partner status is awarded ESP’s are able to provide the comprehensive 25 year warranty for cabinet, copper, fibre and voice installations.

**Design and Installation**

Products chosen for the project included Excel Category 6a F/FTP cable. This type of cable takes the performance capabilities of copper infrastructure to new levels. The cable has been designed to exceed the ISO/IEC, TIA and CENELEC for Category 6a/ Augmented Category 6 component requirements. This delivers Class E/Augmented Category 6 link performance over distances of up 90 meters which supports the applications including 10GBASE-T, 10 Gigabit Ethernet.

Each cable consists of two sets of two pairs which are wrapped together in an “S” configuration with high quality, strong, aluminium/polyester foil tape which provides screening for each pair. These are then wrapped in another, overall foil. This configuration has resulted in both a reduction in diameter and the weight of the actual cable. This in turn has reduced the cable cross-sectional area by 19.7%

Reducing both the size and the weight of the cable means that it occupies less space in the containment installed; this improves airflow in under floor installations especially when at a premium. Less weight means that the containment can also be of lighter construction and handling the cable on site is easier.

To provide the backbone of the installation which was of an inverted design, Excel’s OM3 Multimode Tight Buffered Fibre cable was chosen. OM3 fibre cables are constructed from a number of 900Um buffered fibres which are colour coded and packed in water resistant strength members. The outer sheath is both flame resistant and low smoke zero halogen (LSOH). The design and construction of this range has resulted in a light, easy to install cable.

Due to the limited floor space Line Management worked closely with Mayflex to produce a bespoke Grid Outlet Position (GOP) box. These were then fitted with the standard Excel Category 6a, low profile screened keystone jacks, which provided the perfect solution to the small floor void.

All of this work was carried out in a short 8 week programme, completely driven by the bank, leaving no room for error.

**The Result**

The pre-tender support received from Mayflex was vital and well received particularly during the design stage of the project. Test results received back from the completed installation were exemplary and the client was provided with a full test result history along with the standard Excel 25 year warranty and supporting documentation.

This was a major installation using Excel products, the completed project has given the bank a future proofed network that will continue with the life of the building. Its flexibility will mean that it can grow and change as the bank does.