Case study 1:

Process for selecting and developing IT-based products

Company X is a large multi-national company that develops off-the-peg software products that are intended to support the wide variety of work practices that occur in different kinds of organization.

In Company X the process for deciding what new IT-based products to develop runs on a yearly cycle. The process is initiated by the members of the New Products Subcommittee (NPS) of the Executive Board (EB) comprising the Chief Executive, the IT Director, the Planning Director, and the Finance Director. The NPS decide how much money will be available in the forthcoming year for developing new IT products. This figure is communicated to the Products Development Committee (PDC), whose membership includes the Business Programme Managers and the IT Director, who manages the IT Unit.

During the preceding year, each Business Programme Manager (BPM) will have collected ideas for new IT-based products. The ideas will have come from a variety of sources. For example, BPMs and their staff continuously monitor the external environment. Changes in legislation or the introduction of a new product from a rival company might trigger the idea for a new IT-based product. Again, a Business Sponsor (BS) may push for a new product. And, in addition, the Compliance Department, the Finance Department, and a Company X employee whose specific role it is to monitor legislative change also monitor the external environment. As a result of this monitoring, any of these agencies may also suggest new ideas for IT-based products.

Ideas for new IT-based products are expressed in writing on a one-page form with the following fields: product description, product rationale, and an estimate of product development costs.

The Products Development Committee reviews all the new product ideas paying particular attention to estimates of development costs. Eventually they decide which new products will be candidates for development and therefore how much of the allocated sum will be apportioned to each Business Programme for the forthcoming year. The decisions are communicated to the Executive Board, which usually approves them unchanged, but sometimes may make small changes.

A Business Programme Manager now knows how much they have to spend on the development of new IT-based products in the forthcoming year. Each sends their portfolio of new product descriptions to the IT Unit, with a request that the feasibility of the development of the products in the portfolio be investigated.

The IT Unit performs a feasibility study for each new product idea. During feasibility studies, the one page form typically expands into a forty-page report, including an elaboration of the requirements for the product, and a more precise costing. When all the feasibility studies for a Business Programme have been completed, the set of reports is sent to the Business Programme Manager.

The Business Programme Manager uses the feasibility reports to prioritize the new product ideas, and sends the prioritized list to the Products Development Committee. When all the lists have been received from all the Business Programme Managers, the Products
Development Committee considers all the proposed products, their priorities and costings. Eventually it approves a set of new IT-based products for each Business Programme.

When a Business Programme Manager knows what new products they are responsible for developing, they initiate two streams of activity. First, they send the list of their products to the IT Unit, which allocates a Project Development Manager to each new product development, i.e. to each new project (since products are developed within projects). Second, the Business Programme Manager appoints a Business Sponsor for the project, often the person who originally suggested the new product idea. A copy of the feasibility study report for the product is passed to the Business Sponsor.

The Business Sponsor further elaborates the requirements for the new product which are documented in the feasibility study report. Business Sponsors use either their own staff or systems analysts from the IT Unit to perform this task. The task usually involves establishing a dialogue about the requirements with the relevant stakeholders. Dialogues are established using a variety of means including interviews and workshops. The results of this work are documented in the form laid down in the CompanyX's Software Development Standard, which is used on all projects. The resulting document sets out requirements for product functionality, product quality, project completion times, and project costs. It is passed to the associated Project Development Manager.

The Project Development Manager is responsible for satisfying all the requirements for the project. When this responsibility has been discharged, the Project Development Manager delivers the completed IT-based product to the Business Sponsor, and signs off the project.

At this stage, the Business Sponsor also signs off the project. However, at some later date, the Business Sponsor must try to demonstrate to both the Products Development Committee and the Executive Board that the product is delivering the financial benefits that were promised for it.

During the product development phase every Project Development Manager produces a project status report once a month for the attention of the associated Business Sponsor. Business Sponsors review status reports for all their projects, and write a summary report for the associated Business Programme Manager. Each of these, in turn, reviews all their reports, and writes their own summary report for the Products Development Committee. The Products Development Committee sends on to the Executive Board only summary reports for projects in which the Executive Board have flagged an interest.

In practice, this status reporting process is the main method by which project status is communicated “up the line” in CompanyX. Informal status reporting occurs rarely, and when it does occur, attempts are made to fit it back retrospectively into the formal process.

The formal status report may carry a variety of messages. For example, it may carry requests to cancel projects, requests for more money, requests for changes to project priority, and requests for product functionality changes.

Requests to either cancel a project or to ask for more money may be made anywhere along the line: for example, Project Development Managers, Business Sponsors, or Business Programme Managers may make such requests. A request for major changes to a product’s functionality normally originates with the Business Sponsor or Business Programme Manager.

A decision to cancel a project may only be taken by the Products Development Committee. And this power extends, at least in theory, even to projects for which the Executive Board has signalled a special interest. Similarly, a request to make a major change to a product’s functional requirements can be approved only by the Products Development Committee. (Minor changes to product functionality may be approved by just the Business Sponsor and Project Development Manager, acting together.) By contrast, a request for more money might be dealt with either by the associated Business Programme Manager, or by the Products
Development Committee, or by the Executive Board, depending upon the amount of money requested. For example, a relatively small increase in funding might be approved or rejected by a Business Programme Manager alone, while a request for an increase in funding in the order of millions of pounds would be decided only by the Executive Board.

A separate process exists for requesting more physical resources, i.e. people and equipment. Here, a Project Development Manager makes a bid for such resources from a pool managed by the IT Resource Manager located in the IT Unit.