Top considerations for developing a new laboratory

Whether you are setting up a new lab, or expanding an existing one, the process can be both exciting and overwhelming. To get set up within budget and timeframe, explore the thought processes and solutions at each phase of your project.

PHASE 1
Your requirements

Establish the key milestones for an effective project delivery against time and budget

EQUIPMENT

When choosing equipment, it is important to consider:

- The intended purpose
- The size of the lab and access for large equipment (site survey)
- The electrical phase and hardwire requirements
- Options for successful delivery and transport inside the facility
- Service costs (IQ, OQ, PQ and on-going support)
- Equipment dimensions

We offer live demonstrations of lab products in a virtual setting and loan products for customer trials.

TIME FRAME

Determining a build time frame is critical for business success. Changes to this time frame may delay outputs and reduce productivity.

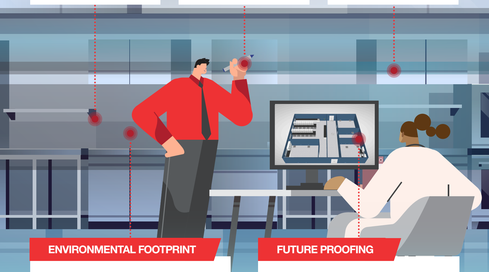
We provide product specifications and delivery schedules for complimentary products across common workflows.

COST

The main facility set up and running costs are:

- IT infrastructure to protect data security and comply with regulatory standards
- Energy consumers such as electrical demands and phase requirements, specialist gas requirements (CO_2, O_2, N_2), water consumption
- Ducting requirements for cytotoxic workflow

We offer 3D software to provide an accurate preview of the lab design and on-going running costs.



ENVIRONMENTAL FOOTPRINT

Funding bodies are encouraging laboratories to lower their environmental impact as much as possible. This can be achieved by reducing waste, procuring sustainable products, and using resources more efficiently.

We can provide detailed information regarding the manufacture, operational demand and sustainable use of laboratory products across equipment and plastic consumables ranges.

FUTURE PROOFING

The future scale up of the project needs to be carefully considered in the planning phase. This ensures that the equipment can handle different assays and/or greater throughput requirements as the project develops and avoids secondary purchases.

We can provide consultative advice based on experience of supplying leading innovative products across the common life science workflows.

PHASE 2
Workflows

Identifying the functional or performance specifications of any equipment used in the required workflows can help to ensure accurate project costs.

RUNNING COSTS

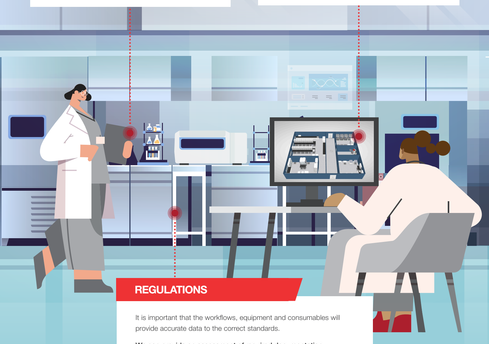
An operating expense (OpEx) is the cost required for the day-to-day function of a lab. This may include electrical demand, water supply, and sourcing consumables.

We can offer precise calculated simulations of a full lab demand.

WORKFLOWS REQUIRED

Understanding the different workflows allows suppliers to recommend equipment and on-going running costs in terms of consumable demand.

Our product specialists can run live samples through any instrumentation, allowing lab managers to calculate the consumables required and the instrument's compatibility.



REGULATIONS

It is important that the workflows, equipment and consumables will provide accurate data to the correct standards.

We can provide an assessment of required documentation, validation and data security standards.

PHASE 3
On-going service and support

The final phase ensures that investment is reliable and that the infrastructure, equipment, and partners will deliver against the project objectives.

CONSUMABLES COSTS

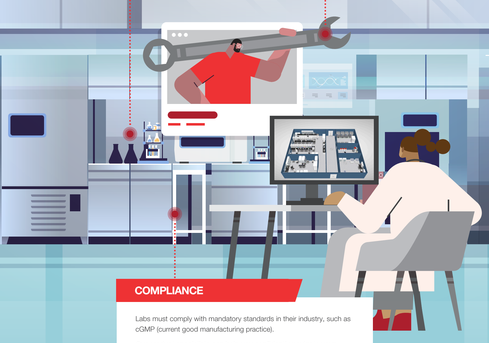
Project managers must have accurate predictions for running costs and supply chain security.

We can provide single prices for consumables for up to three years.

MAINTENANCE

Instruments must be regularly serviced, calibrated, and validated to ensure that they are operating within the manufacturer's specifications and provide the data accuracy and security expected.

We offer flexible service packages which can be tailored to any laboratory's requirements.



COMPLIANCE

Labs must comply with mandatory standards in their industry, such as cGMP (current good manufacturing practice).

Our product specialists can help you confidently navigate your regulatory landscape and provide necessary documentation packages to support validation and audit requirements.

Choosing the right partner

Setting up a new lab is a complex multi-phase process with many considerations, including space, time, cost, and specific infrastructure requirements. Choosing the right partner allows you to mitigate risk and get set up on time, and within budget.

Partner with Thermo Fisher Scientific for unique expertise and qualify for up to 50% discount on product offerings.

Learn more

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