As monitoring specialists, we work with several water companies to deliver bespoke waste water monitoring projects, ongoing data analysis and site maintenance to fulfil a wide variety of operational requirements.

Commissioning a wastewater monitoring programme can be a significant investment. A company then chose to use their operating expenditure budget to subcontract the consequent installation, maintenance and management of those monitors across the catchment to us. And a long term project. It can be a challenge to decide which spending model is right.

**CAPEX AND OPEX SPLIT**

Over the last few years, we have established a partnership with a large UK water company that has purchased a total of 150 of our MSFM S2u monitors as a capital expense to the business. The water company then chose to use their operating expenditure budget to subcontract the consequent installation, maintenance and management of those monitors across the catchment to us.

The tables below show the savings that this water company has made in relation to this capex and opex split, as opposed to running with a purely opex model. Monitoring across the catchment is continuous but the company could also choose to use the monitors intermittently for specific purposes. The last box on the table reveals the savings adjustment that the company would save if they opted to only monitor sites seasonally or do flow surveys 50% of the year, for example. So, whether operating continual or seasonal monitoring there are significant savings to be made using a capex/opex monitoring model versus a purely opex monitoring model.
**CASE STUDY OPEX vs CAPEX**

- **Initial CAPEX/OPEX**
  - **Year 1 CAPEX**
    - Monitor: 150
    - Rate: £3,500.00
    - Rate/month: £525,000.00
    - Rate/Year: £525,000.00
  - **Year 1 OPEX**
    - Monitor: 150
    - Rate: £40.00
    - Rate/month: £6,000.00
    - Rate/Year: £72,000.00
  - **Year 2 OPEX**
    - Monitor: 150
    - Rate: £40.00
    - Rate/month: £6,000.00
    - Rate/Year: £72,000.00
  - **Year 3 OPEX**
    - Monitor: 150
    - Rate: £40.00
    - Rate/month: £6,000.00
    - Rate/Year: £72,000.00
  - **Year 4 OPEX**
    - Monitor: 150
    - Rate: £40.00
    - Rate/month: £6,000.00
    - Rate/Year: £72,000.00
  - **Year 5 OPEX**
    - Monitor: 150
    - Rate: £40.00
    - Rate/month: £6,000.00
    - Rate/Year: £72,000.00

<table>
<thead>
<tr>
<th>OPEX Only</th>
<th>Monitor</th>
<th>Rate</th>
<th>Rate/month</th>
<th>Rate/Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>150</td>
<td>320</td>
<td>£48,000.00</td>
<td>£576,000.00</td>
</tr>
<tr>
<td>Year 2</td>
<td>150</td>
<td>320</td>
<td>£48,000.00</td>
<td>£576,000.00</td>
</tr>
<tr>
<td>Year 3</td>
<td>150</td>
<td>320</td>
<td>£48,000.00</td>
<td>£576,000.00</td>
</tr>
<tr>
<td>Year 4</td>
<td>150</td>
<td>320</td>
<td>£48,000.00</td>
<td>£576,000.00</td>
</tr>
<tr>
<td>Year 5</td>
<td>150</td>
<td>320</td>
<td>£48,000.00</td>
<td>£576,000.00</td>
</tr>
</tbody>
</table>

**50% OPEX adjusted for seasonal variation**

- **Year 1 CAPEX**
  - Monitor: 150
  - Rate: £3,500.00
  - Rate/month: £525,000.00
  - Rate/Year: £525,000.00
- **Year 1 OPEX**
  - Monitor: 150
  - Rate: £40.00
  - Rate/month: £6,000.00
  - Rate/Year: £72,000.00

**BENEFITS OF EQUIPMENT OWNERSHIP**

- It can be very beneficial to actually purchase and then own Detectronic monitors and related equipment outright. Key benefits include:
  - The business owns the equipment so there is no requirement for ongoing lease agreements or contracts
  - As the owner of the equipment you can choose to sell when you have finished with it and potentially recover a percentage of the initial purchase cost
  - The equipment can be included as an asset in future tax returns and is subject to depreciation deductions
  - Detectronic monitors and equipment are renowned for not only their efficacy and efficiency but all their longevity with several MFSM monitors still working after 25 years of continuous operation

**SUBCONTRACTOR VS IN-HOUSE RESOURCE**

- In relation to ongoing management of the equipment, employing a subcontractor can be a highly effective solution with numerous advantages such as:
  - Cost efficiencies of hiring subcontractors rather than full time staff
  - Subcontractors have the expertise and full skillset required for the particular job or task in hand
CASE STUDY  
OPEX vs CAPEX

- Potential to increase productivity as the subcontractor will be faster as they experts in their field. This enables employees to focus on core business needs.

- No long-term commitment is required when working with a subcontractor. Staff redundancies in the event of downsizing or business development changes can be complicated and expensive.

- Specialist knowledge. Since we manufacture the equipment we know exactly how it works and how to maximise it to its full potential.

RESULTS

Since working with this specific UK water company, we have made a real difference. Our expertise and insight have supported the client to save both time and money. Take a look at some of our results below.

ALARM INTERVENTION FACTS

- For 1 CUSTOMER between January and September 2018, the Detectronic Data Centre received 86,461 high alarms.
- Our DATA CENTRE ANALYSTS whittled those 86k ALARMS down and sent just 174 REPORTS to the CUSTOMER.
- 64 POTENTIAL POLLUTIONS reported, where the depth has exceeded the spill level.
- 110 INTERVENTIONS reported, where the depth is irregular but below the spill level.
- 36 pollutions confirmed.
- 60 interventions confirmed.
- Only 0.04% of HIGH ALARMS received were reported as potential pollutions.

Having Detectronic as a subcontractor makes operations much more manageable for the client and allows them to direct their crews to investigate the right sites where problems are occurring thus saving valuable time AND money.

“We have been encouraged to think differently about how we work and to develop a sharper focus than ever on improving customer service. The result has been a great performance that has generated outperformance payments of £88 million in our waste water service. At the same time, in relation to sewer flooding, we have made much more progress at a much faster rate than we thought possible.”

To learn more about Detectronic, get in touch:
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