

## Case Exercise

## The Regional Forensic Science Laboratory

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The Regional Forensic Science Laboratory (RFSL) provides a one-stop service to a range of professionals. These professionals include police officers investigating crimes, narcotics officers who want drugs analysing, fire officers concerned to find the cause of a fire, defence counsels who are trying to strengthen the legal case for their clients, hospitals wishing to identify the cause of cases of poisoning, and private individuals who might be considering taking civil action.

Michael Tay is the head of the RFSL and he explains how his unit operates:

*Forensic science is the application of science to the law and our role is to assist our clients in identifying suspects and victims, clearing innocent persons of suspicion and bringing the wrongdoer to justice. Our task is to provide accurate and objective information based on the evidence with which we are provided. We provide both written reports and verbal evidence in legal trials.*

*We have seven laboratories here, all under one roof, though often exhibits may well be sent from one lab to another for different specialised examinations. The Toxicology Laboratory examines body fluids and organs to determine the presence or absence of drugs and poisons. The Drugs Analysis Laboratory examines exhibits for drug content and body fluids and hair for drug consumption. The Physical Evidence Laboratory applies the principles and techniques of chemistry and physics to identify and compare a wide range of crime-scene evidence: firearms, gunshot residues, tool marks, shoeprints, tyre prints, paints, fibres, explosives etc. The Biology Laboratory examines exhibits for biological material (dried bloodstains, semen, saliva and other body fluids) and identifies the source using conventional serology or DNA typing. The Document Examination Laboratory examines handwriting and typewriting on documents, some of which may be badly charred, for example, to ascertain authenticity and/or source. The Latent Prints Unit processes and examines evidence for latent fingerprints and identifies the source of lifted prints. And the Forensic Pathology Laboratory investigates sudden unnatural, unexplained or violent deaths to determine the cause of death.*

*I know this sounds quite straightforward and scientific but the reality is rather different – it is fraught with problems and confusion. All the police officers, fire officers and hospitals etc. will send exhibits directly to the appropriate lab. This is fine until that lab sends it to another lab and the client no longer knows who has their blood sample etc.*

*The sample they give us will have been given to them by someone else. It might have come from a crime scene, from a victim or a suspect or an eyewitness. Because it can take time to get the sample from the origin it means we are under tremendous pressure to undertake the analysis quickly in order to help them complete the investigation. Hospitals, for example, rely on speedy response from the Toxicology Laboratory to ascertain the cause of poisoning so as to be able to administer the right antidote or treatment quickly to save the victim. The other professionals are usually under very tight deadlines imposed by the organisations, such as courts, to which they are responsible.*

*Yet we have to be very careful to do a thorough and proper job because at the end of the day the real customers are the suspect, either exonerated or convicted, the families and sympathisers of the suspects, the victims and their families who may have suffered terribly, the public, and of course the press and the media. Forensic science carries a heavy weight in the legal system. The judge and jury generally view forensic evidence as objective and impartial when assessing the case against a defendant.*

*The forensic expert's testimony must be clear and comprehensible to lay persons. Prosecutors, defence lawyers, judges and juries often have little time or inclination to get to grips with highly technical forensic evidence. We have to provide it in an accessible way. Because we have to make the information accessible and understandable, defence lawyers will use it to try to undermine the quality of the forensic science laboratory, our processes and even our staff. Their job is to interpret the evidence in favour of their clients and so they will look for weaknesses in the forensic findings to discredit the evidence or render it inadmissible.*

We also have a problem with the evidence that is sent to us. We rely on the people, at the scenes of crime for example, to collect the right type and right amount of evidence. There is also the problem of which evidence to believe – it is possible that it may have been 'planted'.

Furthermore, like many forensic services, our laboratories face significant staff turnover and shortage, which affect capacity, result in loss of expertise and disrupt client relationships. As a result our delivery times can be quite long. The situation is made worse by new technologies that not only are expensive but require a substantial investment in training. Also the people we have are from scientific backgrounds and may be excellent in technical skills but lacking in business sense and customer awareness.

At the end of the day, members of the public want to see justice done, and the criminal punished. They are alarmed when the criminal and judicial processes are unsuccessful in identifying and convicting the criminal. The public expects the correct culprit to be quickly apprehended and dealt with. Mistakes in the criminal justice systems have a wide-ranging impact on the community, victim, victim's family, falsely accused person, investigators, the investigation process, the forensic community and the judicial process. In capital punishment cases, the mistake cannot be corrected because the sentence is irreversible. Justice must not only be done, it must be seen as done, and we have a vital role to play in this. Unfortunately, I sometimes feel that the system is against us and we are not doing all that we should.

## Questions

- 1 Summarise the problems faced by Michael Tay and the other professionals involved in the collection, analysis and use of forensic evidence.
- 2 How could a supply chain approach overcome some of the problems?

## Suggested further reading

- Croom, Simon and Robert Johnston (2003), 'E-service: Enhancing Internal Customer Service through E-procurement', *International Journal of Service Industry Management* 14 (5) 539–555
- Croom, Simon and Robert Johnston (2006), 'Improving User Compliance of Electronic Procurement Systems: An Examination of the Importance of Internal Customer Service Quality', *International Journal of Value Chain Management* 1 (1) 94–104
- Karten, Naomi (2004), 'With Service Level Agreements, Less Is More', *Information Systems Management* 21 (4) 43–45
- Sengupta, Kaushik, Daniel R. Heiser and Lori S. Cook (2006), 'Manufacturing and Service Supply Chains: A Comparative Analysis', *Journal of Supply Chain Management* 42 (4) 4–15
- Tate, Wendy L., Lisa M. Ellram and Stephen W. Brown (2009), 'Offshore Outsourcing of Services: A Stakeholder Perspective', *Journal of Service Research* 12 (1) 56–72
- Womack, James P. and Daniel T. Jones (2005), 'Lean Consumption', *Harvard Business Review* 83 (3) 58–68

## Useful web links



A good, but short overview by Daniel Flint in *Supply Chain Management Review*: [www.scmr.com/article/the\\_service\\_side\\_of\\_supply\\_chain\\_management](http://www.scmr.com/article/the_service_side_of_supply_chain_management)

A hot issue in service management is outsourcing. Here it is discussed by Anna Bawden of the *UK Guardian*:

[www.guardian.co.uk—brighton-council-outsource](http://www.guardian.co.uk—brighton-council-outsource)