COM6655 Professional Issues Autumn 2022

Tutorial for week 5 (25th October): Liability for Defective Software

Solution sketch

Moral and Ethical Defences

Engineers

Could argue that checking the calculations was impractical given the time schedule, and therefore they were unable to exercise the required "reasonable" standard of care.

Software developer

Could argue that the arithmetic bug would have been of little consequence if conventional construction materials had been used.

Anyway, "everyone knows that all software has bugs" so the users of the system should have been more careful.

So, the software developer blames the engineers for not exercising due care in using the package.

They also blame the expert who provided information about the materials for the expert system. If his information had been correct, the bug in the package would not have precipitated the disaster.

Expert

Claims that all human knowledge is incomplete.

Also, no single individual can be expected to keep pace with the latest developments in such a fast-moving and complex area.

The software company should have realised this and built more checks into the package.

The software company would counter that testing of the software cannot reveal the absence of errors - just the presence of errors.

Potential Liability

(i) Contract law

The engineers will be employed under a contract by the property developer.

So, the developer may sue the engineers on the basis that they have failed to exercise due care in the execution of their duties.

This would probably be the case even though the software is known to be defective.

The software used by the engineer will be licensed or bespoke.

In either case, the Consumer Rights Act 2015 applies, so the engineer may be able to sue to the software developer and/or supplier on the basis that they have failed to exercise a reasonable level of care and skill in the development of the system (if bespoke) or that the software was not fit for its intended purpose (licensed).

Whether the software company has exercised reasonable care would be decided by the courts.

The fact that the negligence of the engineer contributed to the accident would favour the software developer, as would the fact that the engineers were using a new type of alloy that the developer may not have been aware of.

The expert may have been contracted by the software developer.

The developer could sue the expert for failing to exercise due care when supplying rules for the expert system.

The families of the dead workmen cannot sue the engineers or software developer by contract law since there is no contract between them - Privity of contract.

Likewise, no contract exists between the property developer and the software company.

(ii) Negligence

The families of the dead workmen must sue by negligence.

The engineer will certainly owe a duty of care to workmen, and the software developer may also owe a duty of care since it is foreseeable that an error in the software could lead to loss of life on a construction site (however, these circumstances are rather more remote).

The engineer may sue the software developer in negligence. However, damages would be reduced because of the contributory negligence of the engineer.

(iii) Negligent misstatement

The engineer may have an action in negligent misstatement against the programmers, expert and knowledge engineers for the provision of incorrect advice.

However, the software developer could claim that the engineer should be qualified to use the system and was negligent by failing to spot errors in the output of the system.

Also, the software developer may have included a disclaimer with the software exempting liability for defective advice from the system.

(iv) Product Liability

Whether the Consumer Protection Act applies is unclear – whether they supplied a complete system of which software was a part.

Seems that only software was traded, so the CPA does not apply.

If it did, the software would be defective if its safety is not what one is entitled to expect.

Mitigating circumstances would be a disclaimer with the software, and whether the software was being used for an inappropriate task.

Note that the software developer boasted that its product was “the most reliable on the market” so the engineer would be justified in expecting a high standard of safety.