Question 1:

The trouble with Philadelphia's water billing system could be considered a result of both technical and people problems.

On the technical side, the article cites technical complexity as one of the reasons for Project Ocean's problems. The new system was intended to be run by several city departments, but the system was too complex to be effectively implemented. Additionally, the choice of an "off-the-shelf system" that required heavy modification has also added to the technical difficulties.

On the people side, administrator turnover included as one of the reasons for Project Ocean's problems. The constant turnover among executive sponsors made it difficult to maintain continuity and effectively manage the project. Additionally, the limited involvement of the Water Department in the project management has also contributed to the difficulties. This resulted in a lack of understanding of the specific needs and requirements of the water billing system, which led to poor decisions and a shortfall of accountability.

Furthermore, Mr.Kishinchand's opinion that the project managers did not have much to lose if Project Ocean failed because the city's Finance Department oversaw the project — not the Water Department, which is the main operator and user of the system, indicated that people problem was the major cause of the trouble.

Therefore, it could be concluded that a combination of technical and people problems, including technical complexity, administrator turnover, lack of involvement of the Water Department in the project management, and poor business processes, culminated in the downfall of Philadelphia's water billing system.

Question 2:

These are several factors that have contributed to the delays and cost overruns associated with Project Ocean, as well as the failure of the new billing system to be deployed:

- Technical complexity: The new water billing system was intended to be run by several city departments, but it was too complex to be effectively implemented. The choice of an "off-the-shelf" system that required heavy modification may have added to the technical difficulties, as it would have taken more time and resources to customize the system to the specific needs of the city.
- Administrator turnover: Constant turnover among executive sponsors made it difficult to maintain continuity and effectively manage the project. This turnover would have resulted in a lack of knowledge and understanding of the project, which could have led to poor decisions and a shortfall   of accountability.
- Oracle's inexperience: Oracle had only done viable customer service systems with a small portion for billing purposes. Municipal billing systems tend to be tremendously complex. The "off-the-shelf" components of such systems must be heavily modified - a complex and time-consuming effort.
- Limited involvement of the Water Department: The Water Department is the main operator and user of the system, but they were not involved in the project management, which could have led to a lack of understanding of the specific needs and requirements of the water billing system.

- Poor business processes: The article mentions that "problems came up between the contractors and businesspeople" and that "continuity was a problem, and we could have had better-defined business processes". This suggests that communication and coordination among the stakeholders were not effective and clear, and the business process was not well defined, which could have resulted in confusion and inefficiency.
- Unrelated charges: 12 months ago, MOIS was assigned to review the work completed on Project Ocean so far. This led to a work stoppage and the suspension of several consultants, Oracle employees, and a private contractor whom a federal grand jury in Connecticut had indicted on unrelated charges that she had paid a state senator to help her win consulting contracts, which also would have affected the project negatively.

Question 3:

The city's MOIS and Oracle had different views when negotiating a new agreement to continue Project Ocean.

The MOIS focused on protecting the city's investment and finding a solution that will work within 18 months. They were looking to address the issues that have arisen thus far, such as technical complexity, administrator turnover, poor business processes, and lack of involvement of the Water Department in the project management. They were also looking to establish clear goals, timelines and milestones, and a clear plan for how to manage the technical complexity of the system.

On the other hand, Oracle wanted to deliver on its promise to complete the project and maintain that the work performed thus far conforms with the current agreement. They argued that their experience in customer service systems and the "off-the-shelf" components of the system have been heavily modified. They also acknowledged that the project was complex and the problems that arose were not necessarily their responsibility but rather the city's. They were looking to minimize the impact on their reputation and to complete the project as soon as possible.

For the project to be successful, both parties will need to come to an agreement that addresses the issues that have arisen thus far, and establishes clear goals, timelines and milestones, and a clear plan for how to manage the technical complexity of the system. This may require both parties to make concessions and a willingness to work together in the city's best interests.

Question 4:

The project could be saved, but it would require a new agreement between the city of Philadelphia and Oracle that openly addresses the issues that have arisen thus far. This new agreement should include clear goals, timelines and milestones, and a clear plan for how to manage the technical complexity of the system. It should also include better-defined business processes, a more involved Water Department, and clear communication and coordination among the stakeholders. However, it is worth noting that even with a new agreement, there is no guarantee that the project will be successful.

There could also be no agreement. In this scenario, the city may need to consider other options for their water billing system, and Oracle would incur significant financial losses due to the termination of the contract.

In any case, it is important that both parties work together in good faith and with transparency to find a solution that is in the best interests of the city and its residents.