A. City of Bellingham Police Department (CBPD) 1999-2000

System code name: Longarm. A client-server system with front-end client using Visual Basic 6 connecting to Oracle database at the backend. I was responsible for coding the front-end, and as developer we have a copy of Oracle.



Since this was dated back 1999, those were the days where all business rules and logics commonly resided in stored procedures. Remote data objects (RDO) recordsets instead of Models, ViewModels, and DbContext. However, I had experimented and separated the UI logics into classes leaving the layouts and command calls in the forms. For example, if a form has master and child components, there will be at least two classes representing the form. These classes worked similar in concept to ViewModels. Except, the results from calls to Oracle were retrieved into recordsets, then copied into UI controls. Bindings didn't work reliably.

"Modus_Operandi" was a field in a table. There were two incident remarks when officers file their reports. One for strict internal where I presumed was actual detail of the incident, and the other was a summary for public consumables such as the media and the court.

The CBPD's budget was restrictive. If I can redo the system with the experience I have now, this is the goal & vision.

With B2B, the organizations are in ways interconnected via information. Take an example of Tesla Insurance. Their driver insurance is based on the individual's driving statistics. As a result, the cost is lower than that of regular car insurance, such as ICBC, which is based on statistics from demographic. How does this relate?

A Tesla EV collects the information through its sensors, and processes the information to help manage its vehicle. In CPBD case, a mobile laptop collects information from an officer during a routine traffic stop, and processes the information to help the officer determine the course of action.

The same information that manages the car consists of how the driver drives. This information is fed to Tesla datacenter which in turn helps the Tesla insurance figure the cost for the driver.

In CBPD case, some information could be shared (A) with the national registry. For example, if a

Front-End Clients

Mobile

Application Services

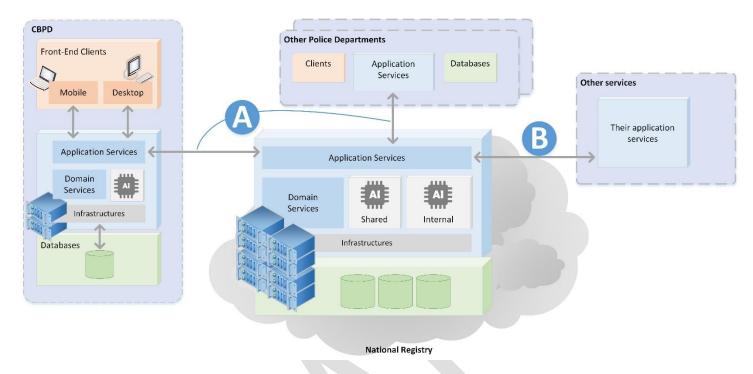
Domain Services

Infrastructures

Databases

vehicle is stolen, the data in its datacenter in Bellingham police department may not have this record. However, a record may have been collected from other jurisdiction or other states where the vehicle had pass through, and is shared with

the national registry. This data is relayed to the officer and more effective action can be taken. The registry could potentially tab into information made available by other services (B) like Tesla.

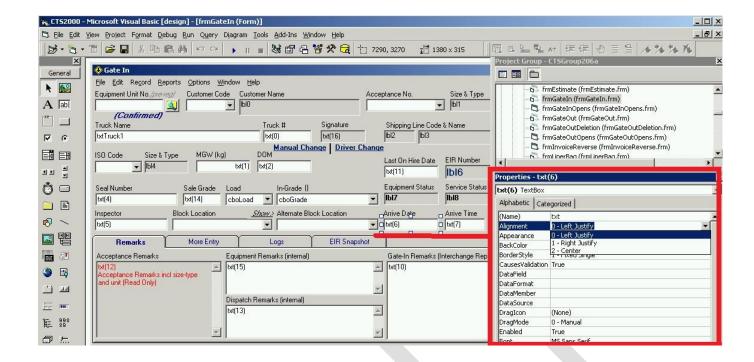


Common, generic components and AI infrastructures specific to law enforcement services could be shared by the national registry. This in turn would be integrated and extended in local systems. The system integration with the registry could allocate national funds to local department.

This is the architectural concept I was employing to the CTS.x system.

B. HSBC (Hongkong Shanghai Bank of Canada): EFT Department (1997)

This was another Visual Basic application. Applying property of element idea to the application was something the users greatly appreciated. This feature enabled flexibility.



C. Vancouver General

Spinal Clinic (1995 to 2000)

Blackberry integration.

Scheduler for patient appointment booking and surgeon scheduling.

Orthopedic Clinic (1997 to 2000)

Patient surgery records National registry