

IT structural reform strategy

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Post-"e-Japan strategy"

- IT strategic headquarter formed in the cabinet issued "IT structural reform strategy", in January, 2006
- So far,
 - e-Japan strategy, 2001 → construction of broad band infrastructure
 - e-Japan strategy, 2003 → full use of IT infrastructure Main applications are e-Government and e-Health
 e-Gov almost completed, e-Health not well advanced



Basic understanding

- Short term (up to 2007) target
 - Reduction of social cost through structural reform
 - Driving PDCA cycle \rightarrow KPI should be defined properly
 - Service providers are classified into 3 categories
 - 1. Public sector in a narrow sense \rightarrow e-Government
 - Other public sector → Both public and private service providers are working such as healthcare and education ← Main Focus
 - 3. Private sector \rightarrow e-Commerce
 - Reduction of administration cost in all public sector

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Basic understanding

- Middle range (up to 2010) target
 → Toward a matured and intelligent society
 - Realization of simple and transparent institution
 - Grand design for the total optimization of computer
 systems used in the central government → replacement
 of legacy by open system, unification, abolition and so on
 - Exclusive release of the privacy data to the personhim/herself including social insurance as well as healthrecords \rightarrow Requirement of eID



IT structural reform strategy

- Structural reform enforced by ICT as leverage
- Solution to the foreseeing social dilemma
- Focus on Healthcare and e-Government
 - Healthcare
 - Construction of National database for EBH, EBM and personal EHR
 - Supporting home medical treatment and consultant using ICT etc.
 - e-Government
 - Establishment of GPMO, PMOs to optimize the total e-Government
 - Establishment of IT governance

etc.



Administration cost reduction

- Every Japanese citizen is supported by medical insurance
- Medical costs is about 32 T yen (300 B US\$) and increase 1 T yen every year
- Medical expense settlements give rise to more than
 1.5 B paper transactions/year ⇒ IT could reduce
 the administration cost
- New goal ⇒ 100% paperless by 2010 through EDI



e-Government

- e-Government moving its stage from construction to steady operation
- More than 96% of applications and declarations become on-line by the end of March, 2006
- The ratio of on-line users is about 0.7%
- Problems to be solved
 - Digital signature is not yet well popularized \rightarrow needs eID
 - Some applications require additional paper documents such as receipt

 \rightarrow Starting the review process



e-Government

• Through system optimization using EA, e-Government system operation cost will be reduced from 10 to 9 Billion US\$/year

 \rightarrow Saving should go to next IT investment

- GPMO in the cabinet office and PMO in every ministry to enhance IT governance → CIO, Assistant CIO, e-Gov assessment committee to evaluate, advice and order
- Promotion of on-line use of application and declaration
 → More than 50% by 2010 → More than 60M IC cards
- Promotion of IC card with digital signature

→ <u>Requirement of eID</u>



Social back ground in Healthcare

- Japan is very rapidly becoming so called an aging society
 - Increase of average life span and decrease of birthrate
 - \Rightarrow Decrease of the labor population rate
 - \Rightarrow Shortage of funds
 - \Rightarrow Raising a social problem; dilemma
 - \Rightarrow Could IT solve this problem?



Promotion of IT in Healthcare

- Introduction of personal healthcare record system (EHR) to enable retrospective examinations (personal benefits) and to establish a preventive medicine (public benefits)
- Home healthcare using digital TVs
- Exclusive release of the personal data to the person him/herself including health records

→ <u>Requirement of eID</u>



Home healthcare service using digital TVs

Internet, Digital TVs





Medical Doctor

Accurate reproduction of facial color

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Resident registration card; eID

- Mutual authentication between CS and smart card through an asymmetric encryption
- Password will be set depending upon applications





Status of current eID; RRC

- Popularization of the resident registration cards
 - The number of issued RRC is much less than expected,
 about 1,000,000, since Aug., 2003, mainly because of the
 shortage of convenience
 - There are several areas where the popularization of RRC is more than 25%; Naganuma town, Miyazaki city, etc
 - They are providing additional services; healthcare service, automatic certificate issuance service, etc.
 - Should enhance the convenience \Rightarrow Healthcare and payment
 - Card is ISO compliant and supports GP standard ver. 2.2



Discussion about new eID

- 2 activities are taking in parallel at present
 - 2nd version of Resident Registration card
 - One unified social security card for national pension, health insurance, labor insurance, etc.
- Common function is eID
 - IC card with printed facial photo + PKI
- Each application uses different ID number



Discussion about eID

- Fundamental functions of eID; IAS
 - Identifier; Identify the card holder by either ID# or 4 information, name, address, birthday and sex
 - Authentication; Identifier shall be guaranteed by the government
 - Signature; Digital signature should be supported
- Difference would depend on whether ID number of each application is recorded or not in IC card
 - Back-office system surely knows the ID number
 - Then, no need to store the ID number in IC card
- One card to reduce the issuance cost of eID



Additional information

- In the updated e-Japan strategy, use of IC card at boarder control is clearly stated → Through a bilateral treaty, South Korea, Singapore and other Asian countries.
- Japan's immigration act requires stamps to record the date of embarkation and disembarkation

 \rightarrow IC card does not have the space for stamps

- Ministry of justice will start to review the current act
- Then, eID will be <u>IC card + two sets of PKI + e-pass LDS</u>



Conclusion

- IC card with eID function is indispensable for both healthcare and e-Government
- Ground work is taking progress in Japan
- Decision will be made by the end of 2006FY
- Full compatibility of all country's eIDs certainly gives rise to a lot of benefits and enhances the convenience