



TURKISH MINISTRY OF NATIONAL EDUCATION



Towards the education of information age...



PRESENTATION PLAN

- * 1. RATIONALE AND BACKGROUND OF THE FATİH PROJECT
- * 2. WHAT IS THE FATİH PROJECT?
- * 3. LESSONS LEARNT AND RECOMMENDATIONS



RATIONALE AND BACKGROUND

“Do you think me a learned, well-read man?”

“Certainly” replied Zi-Gong, “Aren’t you?”

“Not at all” said Confucius

“I have simply grasped one thread which links up the rest”

Sima Quian, Confucius







facebook

JAN
2014

TURKEY: DATA SNAPSHOT



80,694,485

TOTAL POPULATION



72%

URBAN

28%

RURAL

35,990,932

INTERNET USERS



45%

INTERNET PENETRATION

36,000,000

ACTIVE FACEBOOK USERS



45%

FACEBOOK PENETRATION

68,000,000

ACTIVE MOBILE SUBSCRIPTIONS



84%

MOBILE PENETRATION

**JAN
2014**

TURKEY: INTERNET INDICATORS

AVERAGE TIME THAT INTERNET
USERS SPEND USING THE
INTERNET EACH DAY THROUGH
A DESKTOP OR LAPTOP



4H 51M

MOBILE INTERNET
PENETRATION AS A
PERCENTAGE OF
TOTAL POPULATION



36%

AVERAGE TIME THAT
MOBILE INTERNET USERS
SPEND USING MOBILE
INTERNET EACH DAY



1H 53M

RATIONALE AND BACKGROUND

- Current age is characterized by the ability of individuals to transfer information freely, and to have instant access to information that would have been difficult or impossible to find previously
- **“If we change the way we communicate, we change the society”**

Change is inevitable now...



RATIONALE AND BACKGROUND

The demographic picture of Turkey

- * 0-14 years: 25.5%
- * 15-24 years: 16.8%
- * 25-54 years: 42.9%
- * 55-64 years: 6.7%
- * 65 years and over: 6.6%



RATIONALE AND BACKGROUND

危機

Danger

Opportunity

RATIONALE AND BACKGROUND

YOUNG POPULATION
An opportunity?
A risk?



RATIONALE AND BACKGROUND

Our students/children have changed radically in the last decade. Today's students are no longer the people our educational system was designed to teach. They are “**digital natives**”

Children today are all “native speakers” of the digital language of computers, video games and the Internet.



It's a beautiful day. I really want you to go outside and play.





*"No, you weren't downloaded.
Your were born."*

RATIONALE AND BACKGROUND

How they learn,
Where they learn,
When they learn
What they should learn
Have changed a lot.

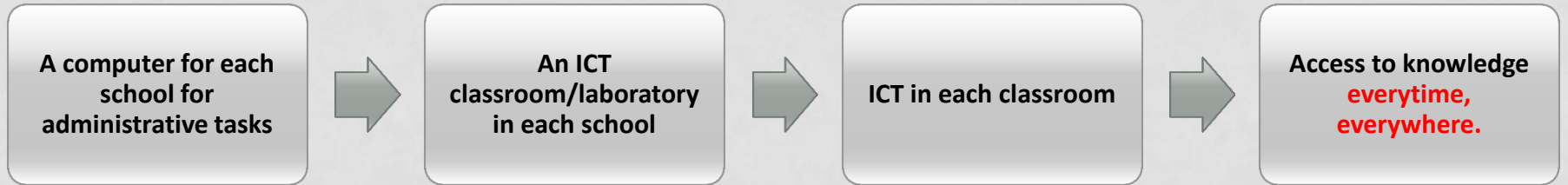
SO

How we teach
Where we teach
When we teach
What we teach
Should be changed.



RATIONALE AND BACKGROUND

The paradigm shift



RATIONALE AND BACKGROUND

* **Turkey's Vision for 2023 includes:**

- * In terms of gross domestic product (gdp), to become one of the 10 most strongest economies in 2023.
- * A country exporting “Information and Technology”
- * Equal opportunities for all.
- * **“To be in the first 10 most strongest countries in 2023”**
- Just “working hard” is not enough to achieve this vision. One of the inevitable steps should be:
 - **Investing in Education**

**HERE COMES
THE FATIH PROJECT**



2000's

IT classes in primary schools and secondary schools (computers, internet connection, printer, scanner and projector...)



With FATİH, 2010 and next years

Interactive LCD boards, tablet PCs, Printers and high-speed internet connection in all classrooms. Tablet PC for students and teachers

WHAT IS THE FATİH PROJECT?

- **“Movement of Enhancing Opportunities and Improving Technology”**, known as FATİH, is among the most significant educational investments of Turkey.
- FATİH Project proposes that “Smart Class” project is put into practice in all schools around Turkey.
- Furthermore, nearly 11 Million students and 800 thousand teachers will have easy access to internet, the educational information, knowledge, e-contents and e-lectures with their tablet PCs everywhere, everytime.



WHAT IS THE FATİH PROJECT?

- **All in all, FATİH Project aims at:**
 - “Opening” a new age for the Turkish Education System
 - **Preparing the future generation from today**



WHAT IS THE FATİH PROJECT?

42.000 schools, 570.000 classrooms,
11 M Students and 800K teachers

Will be equipped with ICT
equipments so as to

Improve educational opportunities
and quality for each and every one
of the students throughout Turkey.

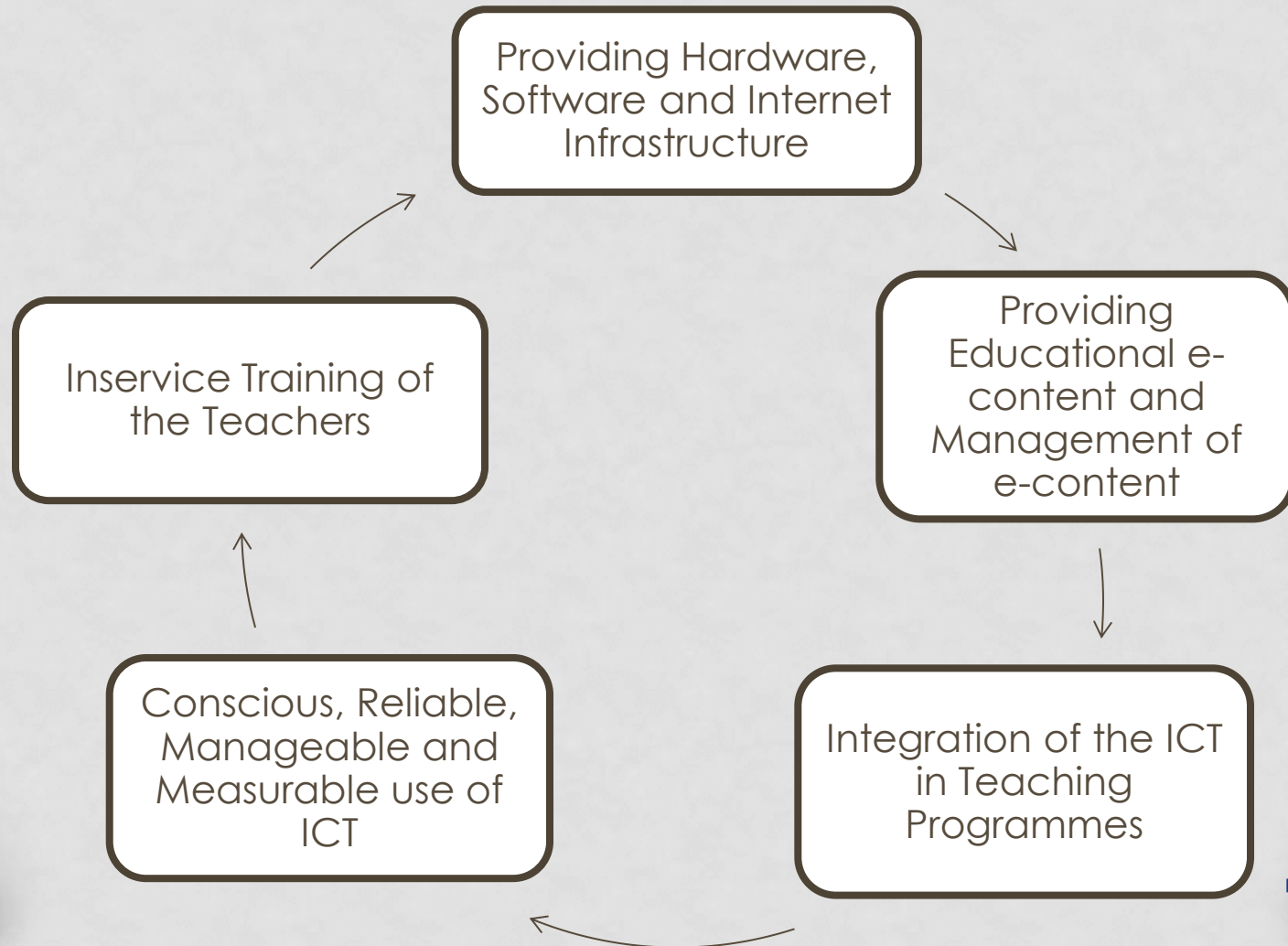
And to equip more than 18 Million
stutents and 800.000 teachers with
21st Century Skills.



DURATION OF THE PROJECT



5 KEY COMPONENTS



EQUIPMENTS OF FATİH

For each school

- A multi-function printer
- A document camera



For each class

- Interactive LCD Board
- Internet Connection with cable

For each teacher

- Tablet PC



For each student

- r-Book (in Tablet PC)



A. Providing Interactive LCD Boards

43.000 schools and 570.000 classrooms in Turkey

- Implementation of the interactive boards, multifunction-printers and document cameras in **3.657** high schools (except the Vocational High Schools) has been completed.
- Implementation of high-speed fiber internet connections of these schools has been also completed.
- At the beginning of 2014, the tender process for **350.000** Interactive LCD boards and **43.000** printers was finalized.
- In 2014, **100.000** Interactive LCD boards are currently being installed in Vocational High Schools. The remaining **250.000** will be implemented in Primary and Secondary schools in 2015.



B. Providing Tablet PCs

- In 2012, pilot application for tablet PCs was started in 53 schools from 17 cities. **13.800** Tablet PCs were distributed among the teachers and students.
- In 2013, **49.000** tablet PCs were distributed in **243** schools from 81 cities.
- The tender process for **675.000** tablet PCs was finalized at the end of 2013.
- With the participation of the Prime Minister Mr. Recep Tayyip Erdoğan, the distribution of **675.000** tablet PCs were started at the beginning of 2014.
- The tender process for **10.600.000** tablet PCs was started in July 2013 and still continuing. **Tablet PCs will be given to 5th-9th grade students**



C. SOFTWARE

MEBBİS

ID Management

Personal
Cloud

EBA Portal

E-book reader
and editor

Office and
Board
software

Analytic
Applications

Mobile Device
Management

Classroom Management

- Roll call, Board- Tablet interaction
- Homework, worksheets, Lecture Notes
- Application for lesson: Annual plan-template Content use and management of educational attainments

Software and
Content
download
center

In-school
Gateway
Software

Logging and
log
management

Command-
control



D. NETWORK INFRASTRUCTURE

- 1st Phase Local Area Network (LAN) Infrastructures for all the High Schools except for the Vocational High Schools were finished in 2012.
- Tender process for the 2nd Phase LAN was finalized on July-2013.
- The implementation of the LAN infrastructure will have been finished for all the Vocational Schools by July-2014.
- The implementation of the LAN infrastructure for all the primary schools will have been finished by July-2015






D. NETWORK INFRASTRUCTURE



D. NETWORK INFRASTRUCTURE

Time Schedule

SCHOOL TYPE	DURATION
2013 – Vocational High Schools	
2014 – Secondary Schools	
2015 – Rural Primary Schools	

2. PROVIDING EDUCATIONAL E-CONTENT AND MANAGEMENT OF E-CONTENT

- www.eba.gov.tr
- 965.901 Registered Users
- 2.777 News
- 54.835 Pictures, 5.493 Videos, 3.176 Audios
- 11 Public Portals
- 47 Open-Portals
- 27 Portals for Teachers
- 1.229 e-journals
- 1.433 e-books



3. INSERVICE TRAINING OF TEACHERS

Goals of Teacher Training

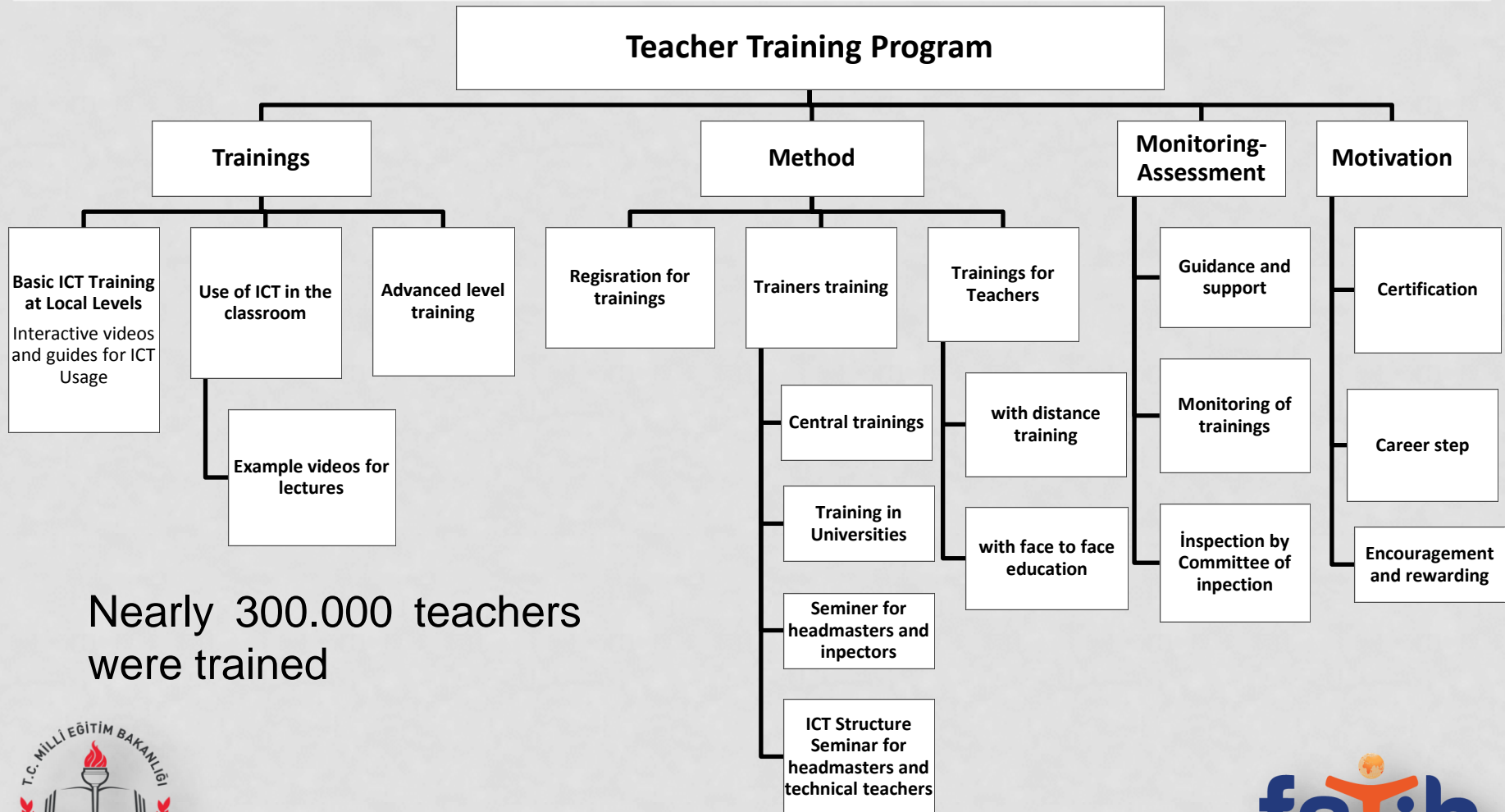
Effective use of project equipments,

Use of e-Contents in the lessons,

Providing information-rich educational environments for students.



3. INSERVICE TRAINING OF TEACHERS




Nearly 300.000 teachers were trained



3. INSERVICE TRAINING OF THE TEACHERS

- Implementation of 110 distance training centers in 81 cities of Turkey.
- For hands-on synchronous trainings
- HD- Video-conferencing
- Interaction
- Interactive LCD boards.
- Laptop PCs at the desks.





Technology is just a tool. In terms of getting the kids working together and motivating them, the teacher is the most important.

General Overview



Tablet PC

4,8 M High School students
5,1 M Secondary School students
0,8 M teachers

Total: 10,7 M tablets



Network Infrastructure

1 Million terminals
27 K Schools in Province/subprovinces
16 K schools in rural areas.

Total: 43.000 schools



System Software

Student-Teacher
Information Sharing
Classroom Management
Mobile Device Management



Interactive FATİH Board

317.000 Classrooms
38.000 Preschool classrooms
45.000 Laboratories
40.000 Workshops
30.000 Teachers' Room

Total: 570.000



In-service training of teachers

800.000 Teachers
110 Distance Training Centres



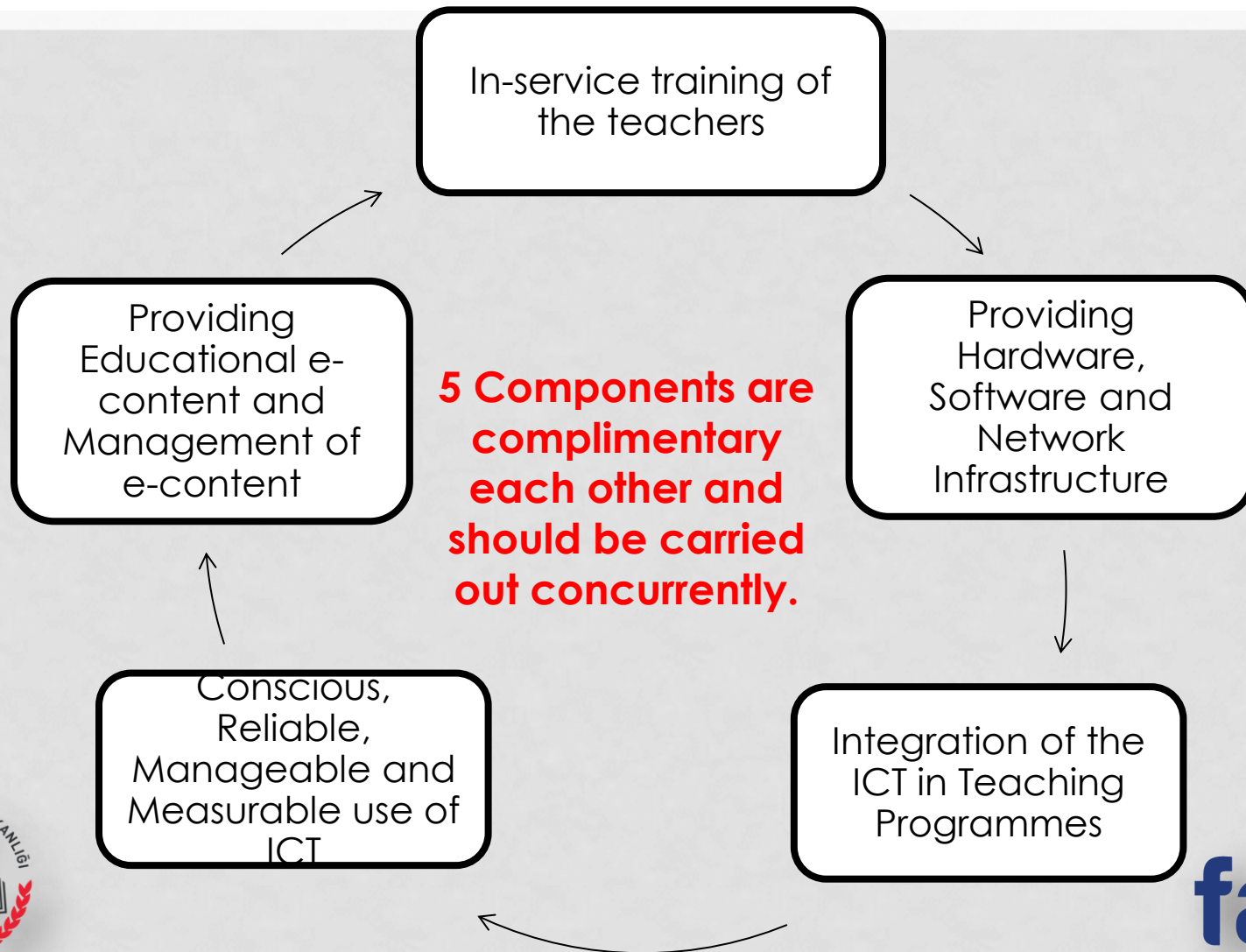
e-Contents

1062 High-School Lessons
51 Secondary School Lessons
41 Primary School Lessons



LESSONS LEARNT AND RECOMMENDATIONS

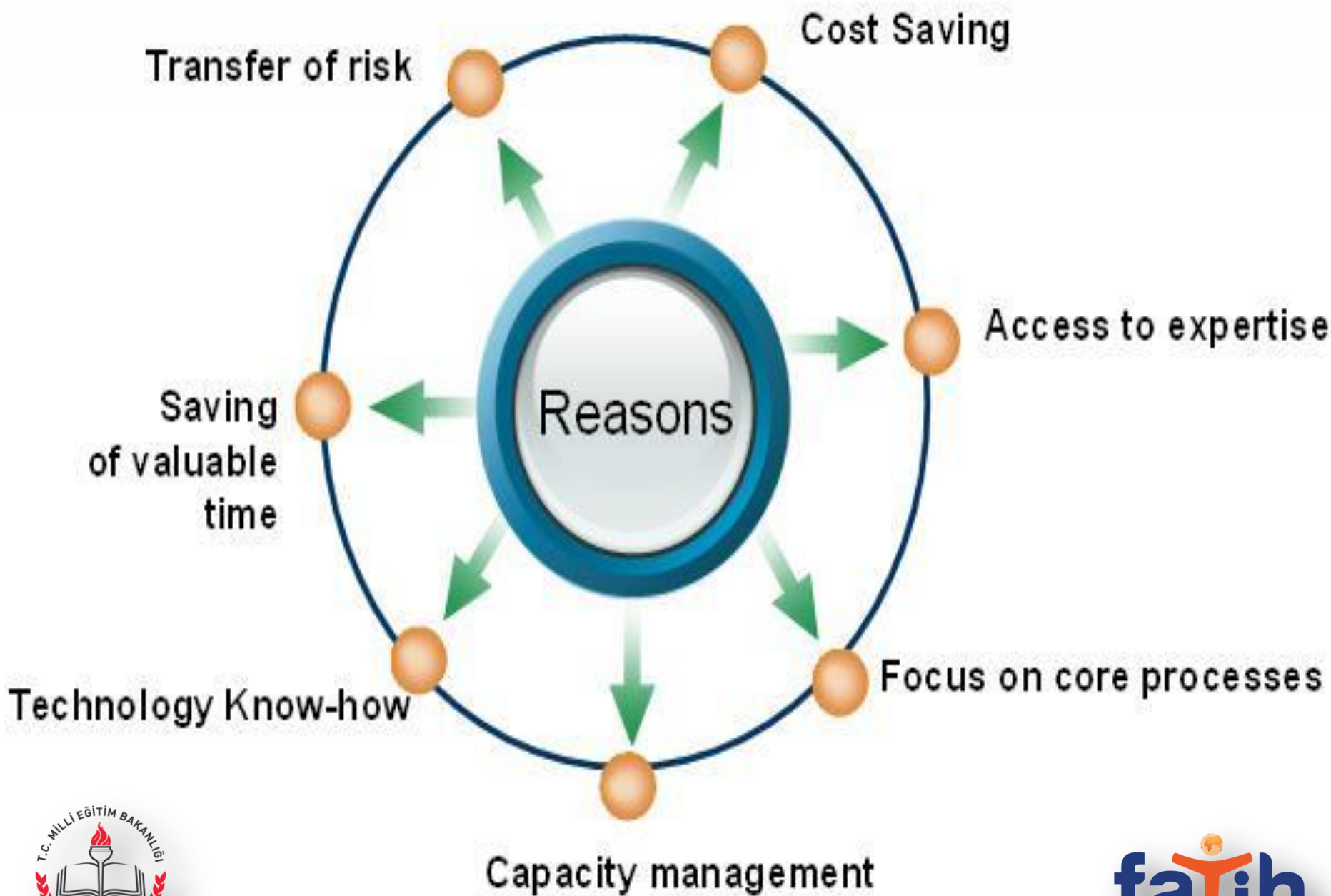
SYNCHRONOUS IMPLEMENTATION



PROJECT MANAGEMENT

- **New Public Management**
 - **Restructuring** the organizational structure of the Ministry to decrease the response time.
 - **Tendering**
 - Specific tendering rules.
 - National companies having wide service networks are privileged.
 - Know-how transfer
 - **Outsourcing**
 - Ready e-contents prepared by the professional companies were collected in EBA portal.
 - Further e-contents (animations, information rich teaching objects, video tutorials... etc) and software were mostly outsourced.





NATIONAL PRODUCTION

- National Production- Interactive LCD boards.
- Interactive LCD board is a unique national product. Its patent belongs to the Turkish MoNE.
 - A specific R&D process. Study visits to other countries.
 - A learning organization- Discussion with the main manufacturers (ODMs).
 - Close collaboration with national manufacturers in design process.
 - Technical specifications prepared by technical “teachers”. The key point is **“Teachers” designed the technology for “teachers”**





NATIONAL PRODUCTION

Adapting national tendering rules so as to prioritize the national manufacturers. Why?

- New job descriptions and opportunities
- Increase the employment rate.
- Increasing the popularity of vocational education.
- Mobilizing the national economy.
- Commercialization of the products of the FATİH project and decreasing the current deficit for sustainable growth.



KNOW-HOW TRANSFER

FATİH Project also presents opportunities in such a scale that a technology firm can potentially leap ahead of its competitors. It carries an enormous market value.

Approximately **11 million** tablet PCs would be distributed to students nationwide within the first four years, to be followed by 1.5 million units per year afterwards.



KNOW-HOW TRANSFER

- Turkey does not want to be a technology consumer. With FATİH, we intend to transfer the know-how of Tablet PC production cycle.
- A win-win strategy for both sides (Government&Firm)
- Transferring the know-how from foreign manufacturers or implementation of new factories for national production. And national employment.
- The same process is adopted in other large-scale projects (Building nuclear power stations)



IN-SERVICE TRAINING

- Traditional in-service training approach is not enough to train the teachers about 21st century skills. So that,
 - 110 UZEMs- Distance Training Centers in 81 cities. All the centers are connected to each other.
 - Teacher Networks- Collaborative peer to peer learning communities for teachers. eTwinning, iTec, Scientix and EBA portals.



LEADING CHANGE

- **Change should be “leaded”**
 - Such transformations require change in the target groups’ behaviours. And the people should be convinced enough to change their behaviors.
- **Ambassadorial leadership can be used**
 - Each city, each school should have a competent and well-trained transformation leaders. They will assist the other teachers.
- **Political support is vital.**
 - Direct support from the Prime Minister and Minister of Education and Board of Council.



FROM KNOW-HOW TO DO-HOW

“If know-how is knowing what to do to make change happen, do-how is what needs to be done. There is a big difference”

Do-how is turning knowledge into reality.

Sharing experiences is very important but, one size does not fit all. Each country should have its own specific implementation and transformation notion shaped by their specific characteristics, culture, experience and tacid knowledge.



BALANCE VIRTUAL & REAL LIFE



Integrate outdoor activities with IT lessons!

THANKS