The COP National Framework

IRAN’s Children Cyber Space Ecosystem

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## Agenda

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Internet Access:

- **Achievement:**
  - In the past five years, Internet access in Iran has grown rapidly.
  - By 2017 broadband internet was almost available anywhere in Iran.
  - The average connection speeds exceeded 2Mbit/s.

- **Challenge:**
  - There wasn't readiness to facing this growth and easier access to internet services. So unaware users are expose to some threats and problems.
  - Timely awareness to prevent Internet threats to users, especially for children is one of the most needs.
Social Networks:

**Achievement:**
- In the past 3 years using online social networks (OSN) had dazzling growth so now we have more than half of our peoples (specially children) are members of OSNs.

**Challenges:**
- Fast Spreading of Malicious links, Misinformation, Wrong Trust, Impersonation, Gathering Valuable People's Information, ...
- We have many victims, most of them children.
- The technical tools can not be exploited to solve this problem.

**Solution:**
- The main tools and solution to mitigate these crimes is empowerment, awareness and digital literacy.
Mobile Apps

Challenges:

- Millions of foreign apps, more than 100,000 Apps have been innovated and developed by Iranian young entrepreneurs and more than 10 distribution center established in past 3 years.
- Beside the main functions of an Apps it is discovered that almost half of Applications get access to non related resources of the user’s mobile. For example:
  - GPS, WLAN, Accelerometer, Bluetooth, Cell tower ID, Call log, SMS log, Browser history, Contacts, Running apps, Installed apps, Screen state, Media battery status, ...

Solution:

- Publishing requirements for developers and distributors and control randomly applications, statically and dynamically.
- Awareness has main role to avoid these threats.
Games:

- Challenges:
  - Despite of global games which have many customers between children in Iran we have some local games with more than 7 millions subscribers. The main challenge in this context is waste of time and we have a huge waste of time in the best time of children growth. The formal education ministry’s statistics shows significant decreases in education failure.

- Solutions:
  - Awareness and alert to parents.
  - Supporting games developers to develop purposed games for strength of children for strategic decision power and question and response games for informative purposes.
Obstacles and Directions

- Problems and Obstacles:
  - Lack of cyberspace literacy among teachers, parents and their kids.
  - Lack of high quality contents and services for the kids in Farsi.
  - Lack of transparent and comprehensive law for production and distribution of the kids digital services and contents.

- Directions:
  - To organize and develop the market to offer more safer content, services, apps for families
  - Leading kids educational services and content in the official education and training system of the country
Cultural:
Children are the future makers of the country. Therefore, any kind of education and cultural education in the country will be effective in the country's long-term future. On the other hand, like environmental issues, due to long-term and sometimes non-reversible destruction, is the concern of many social activists, the construction of culture is a long-term process, and its reformation requires much more time and sometimes impossible.

Economical:
A sustainable development encompasses progress in all areas. Also, due to the importance of the economic field as one of the key factors for policy sustainability and the implementation of programs, the public sector should support and protect the development of the private sector active in providing, producing and supplying suitable content for children with the necessary supporting and supervisory policies. These measures take place with the least interference in the competitive mechanisms of the market and under the technical, financial and legal areas with the aim of facilitating and developing businesses in this area.

Security and Safety:
The "Citizenship Rights" Charter stipulates that every Iranian citizen must have the right to human dignity, the right to access cyberspace, the right to access true information, the right to have privacy and security. Article number 32 specifically emphasizes that "children have the right to access to appropriate information about their age and should not be subjected to immoral, violent or any content that overcomes fear or physical or psychological harm."
Challenges and Requirements

- Cyberspace penetration and ease of access to various content and services
- The scope of the cultural impact of cyberspace
- The need to preserve Iranian-Islamic values
- The Importance of Economics in Policy Sustainability
- The emergence of new businesses in the cyberspace
- Support for active businesses in the production and delivery of childcare services and content
- Change user behavior based on content and cyber services
- Lack of user experience in the child's age range relative to the risks of cyberspace
- The need for awareness and empowerment and increase of confidence
The document clarifies the requirements of the National Information Network

- The provision of health services for the provision of cultural security, including comprehensive refinement and sanitation based on Iranian-Islamic culture under the cyber space "Health and Safety“ regulation.

A strategic document for the security of the production and exchange of information in the country

- The creation of a technical and legal framework for health of contents, by Ministry of ICT, under the strategy of "Securing Health of communication and Preventing Content-Based Hazards"

World Summit on the Information Society (WSIS) and the Convention on the Rights of the Child

- Paying attention to the rights of children and protecting them in cyberspace. (COP)
• In order to protect children from the damages caused by the internet, ICT Ministry of Iran has compiled and published a "Supportive document and action plan for the development of children’s internet services."

• To achieve this document, the ecosystem of cyberspace of the child was first identified with the help of the elite, and then, during various meetings with ecosystem elements from the private and public sectors, the needs and challenges of each of the components of the ecosystem were identified.
Objectives for the development of child cyber services

1st Goal: Education and Awareness

2nd Goal: Production of Suitable Content

3rd Goal: Access to Suitable Content

4th Goal: Facilitate Production of Suitable Content

5th Goal: Stability Adjustment and Trusting
Components of the child's cyberspace ecosystem

- Users (Child)
- Parents and Teachers
- The content providers of child’s cyber space services
- Application developers for child’s cyber space
- Platform for the provision of content services for the child's virtual space
- Communication Services Providers for child’s cyber space
- Interface for access to child’s cyber space
- Regulatory and Governance

Business Sustainability Suppliers

Confidence and trust providers
Children’s Cyber Space Ecosystem in IRAN
Principles Governing Children's Virtual Space Ecosystem

- Step-by-step realization and focusing on development steps (activity, action and priority) on the main audience (children)
- Responsive to all communication and content needs of the main audience (children) and all interactive needs between the main audience with home and school environments
- Facilitate management (control and limitation) of child access to the services and content of virtual childhood services by parents (including parents and teachers)
- Maximized and Balanced Support from All Producers (Tools, Applets and Contents) and Service Providers (Communication and Content)
- Government Focus on Ensuring Business Sustainability and the Economy of the Children's Virtual Space Services Ecosystem
- Focusing on maintaining the trust of all elements of the ecosystem
- Facilitate and encourage self-regulation or co-regulation of relationships among stakeholders in the ecosystem
The role of the Ministry of ICT

Preparing and providing communication infrastructure and information technology and regulations for children's access to appropriate services and content as well helping to eliminate the barriers to business development and reduce the investment risks in this area.

- Responsible for the development of communication networks
- Responsible for the promotion of information technology and the dissemination of its applied culture
- Market regulator and business keeper of users and service providers and stakeholders
Visions, Strategies, Objectives and Metrics

Cyberspace for children with Islamic and Iranian identities
That has a share in the sector's economy and the production of Persian content, based on the development on the private sector and with the international constructive engagement

Education, culture and promotion of child cyberspace
- Upgrade knowledge, skills and expertise
- Promotion and culture

Provide communication, content and trust infrastructure
- Supply and provision of infrastructure for the preparation, production and presentation of content and product
- Supply and guarantee of trust

Market development and business reengineering
- Facilitating user access
- Facilitate the provision of content and services
- Create a healthy competition environment
Facilitate the provision and production of content and services
- Developing international relation
- Facilitate the provision and production of content and services
- Providing and developing international relations
- Supervision and legal support of activists

Increase child proprietary SIM cards
Increase the development and production of child proprietary App stores
Increasing sustainable employment
Increasing the number of active businesses
Investment growth
Increased production of child-specific content
To coordinate the action plan:

• a specialist working group composed of communications, information technology, security and policymaking researchers from academia was created.

• a working group of representatives from the affiliated organizations of the Ministry of ICT was formed.

• a Coordinating Commission including the representatives of the Ministers of Education, Islamic Culture and Guidance, the judiciary and the country, the Assistant Director of the High Council of the Virtual Space of IRAN, the cyber security police and the Radio and Television Organization was set up for coordinated actions.

• The Association of manufacturers and producer of the children’s products, content and services in the virtual space is created by the private sector.
The Islamic Republic of Iran, with its reliance on long-term rich culture and indigenous technical knowledge in the production of hardware, software platforms, applications and content such as cartoons, films, stories, music, poetry and legal regulation is ready to cooperate with countries in the region that share their geographical, cultural, religious and economic interests.
What are the top three most exciting technology trends currently?

1. Internet of Things
2. Social Media/Visual Social Media
3. Big Data

Other trends include:
- Artificial Intelligence & Machine Learning
- Cloud Computing
- Mobile Technology/Mobile Internet
- Educational Technologies
- ICT Access/Acquisition
- Robotics
- Block Chain
- Driverless Cars
- Gaming/Online Gaming
What are the top three challenges for children’s digital literacy that you envisage for the next five to ten years?

- Unequal ICT access/digital divide
- Online safety risks
- Digital skills and literacies of parents and teachers
- Fostering children’s critical thinking and evaluative skills
- Empowering children to maximise the benefits of digital media
- Needs of vulnerable children
- Prohibitive costs for users
- Rapid technological change
- Lack of reliable infrastructure
**FINDINGS**

**BARRIERS TO CHILDREN’S DIGITAL LITERACY**

What are the top three barriers to children’s digital literacy in your country?

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<th>Percentage</th>
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<td>Limited digital literacy of teachers</td>
<td>16%</td>
</tr>
<tr>
<td>Inadequate access to devices</td>
<td>16%</td>
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<tr>
<td>Resources for digital literacy</td>
<td>10%</td>
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<tr>
<td>Lack of digital curricula</td>
<td>8%</td>
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<tr>
<td>Weak or lack of reliable infrastructure</td>
<td>4%</td>
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<tr>
<td>Online risks</td>
<td>2%</td>
</tr>
<tr>
<td>Policy priority</td>
<td>2%</td>
</tr>
<tr>
<td>Cost of technology/connection</td>
<td>2%</td>
</tr>
<tr>
<td>Parental literacy/responsibility</td>
<td>2%</td>
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<tr>
<td>Socioeconomic barriers</td>
<td>2%</td>
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<tr>
<td>School infrastructure and equipment</td>
<td>2%</td>
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<tr>
<td>Rapid technological development</td>
<td>2%</td>
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<tr>
<td>Inadequate government initiatives</td>
<td>2%</td>
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<tr>
<td>Inadequate foundational skills</td>
<td>2%</td>
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FINDINGS

WHAT WORKS

• Intergenerational: parents, teachers, whole of community
• Flexible tools and programs, in languages children speak, that can move with the times
• Targeting very young children and girls/young women
• Teaching digital literacy as part of everyday learning
• Provision of technology in schools
• Using platforms children engage with and enjoy
• Collaborative/interactive strategies
• Strong leadership from government and the technology sector
• Cross-sector cooperation and coordination
• Developing and enforcing teacher competency standards
• Developing targeted teacher training
• Consistent national education policy targeting digital literacy
• Regular evaluation
360 Degrees of child Awareness

- School Curriculum
- Educational Video Games
- Workshops for students
- Interactive Magazine
- Teachers and Educators workshops
- Social Media campaign
- Workshops for parents
- Events and festivals
- Animated videos and short movie clips
- Contest and Competitions

Child
Thanks for your kindly Attention

More Information
And Questions

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