Creating Knowledge-Based Ventures in Qatar

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Outline

• About QMIC

• Innovations In the Digital Economy

• Product Innovations Strategy

• Knowledge-Ventures in the Making
About QMIC @ Qatar Science & Technology Park

• **QMIC is the First Independent Regional Innovations Center:**
  – Innovative partnership between QU and QF/QSTP
  – A strong team of +50 dedicated colleagues
  – Autonomous Operating and Financial Model

![Diagram with circles representing Utilizing Emerging Mobility & Technologies, Unique in Region: Mandate and Business Model, National & Global Partnerships, and Global R&D Network]
Strategic Goals

- Introduce locally-engineered innovations to market
- Engagement of local entities
- Create new companies & joint ventures
- Create employment opportunities
- Create a self-sustaining business model
QMIC’s Role

Develop and deploy intelligent platforms and innovative applications & services that utilize mobility technologies to address needs of different sectors (Transport, Environment, Utilities, Health) in Qatar and the region

A new Category in Market

Innovations-Driven : Customer-Minded : Market-Focused
Key Challenges

• Poor R&D market culture

• Predominantly buyer/trader mentality

• Gaps between strategic national priorities and short-term operational needs

• Successful models needed
  – Close the loop: idea to market

• Low tolerance to risk especially for knowledge-based ventures

• Need more doers and less cheer leaders
Innovations in the Digital Economy

• Forms of Innovations
  • Products & Services
  • Processes and Partnerships
  • Business Models

• Build an Innovations Eco-System
  • Entrepreneurs/Innovators
  • Universities
  • R&D Institutions
  • Financiers: VC, Angel
  • Government Support & Policies
Integrated Approach for Innovations Delivery

- Clear product & technology strategy
- Strong, dedicated multidisciplinary Team
- Create knowledge-based partnerships
- A disciplined business dev approach
- Create innovation engines and opportunities portfolio

Institutionalize Innovations Creation and Delivery
# QMIC’s Activities: R + D + C

| Applied Research (R) | • Create IP assets  
|                      | • Med-long term projects (2-3 years)  
|                      | • Develop new tech/product concepts  
| Innovative Solutions Development (D) | • From Idea to Market  
|                                   | • Demo → Pilot → Deploy  
| Commercialization (C) | • Deliver Solutions/Services to Market  
|                       | • Creating Spin-offs, JVs  

Creating Local Knowledge and Technology/Product Assets
Value Creation Strategy

1. **Assets Creation**
   - Create Differentiated Intelligent Platforms and Applications and Products in Key Market Segments (the IP, Systems and Know-How)

2. **In Qatar**
   - Create Service-Based ventures with strategic partners
   - Offer applications/services using cloud-based model

3. **In Region**
   - Local JVs or distributor model
   - May use same companies/JVs created in Qatar

4. **Globally**
   - Execute an IP licensing strategy

QATAR: A Living Lab for the World
QMIC’s Strategic Partnerships

Local Partners

International Partners & Memberships
Products Innovations Portfolio

QMIC Intelligent Platforms, Smart Services

QMIC Proprietary
Key Emerging Global Trends

Smart Cities: A World of Sensors?

QMIC

Internet of Things, M2M Communications

Converged Services

Mobile Applications: The NEW Web
National Priorities in Action

QMIC’s Initiatives Addressing Key Market Segments:

- Transport & Logistics
- Environment
- Digital Content Delivery Platform
- Mobile Apps

Intelligent Platforms, Smart Apps & Services

Enabling Smart Living
From Data to Smart Applications Services

SMART LIVING SERVICES

Proven: Processing millions of data records a day

QMIC’s Labeeb™ Intelligent Sensing & M2M Services Platform

Enabling Smart Living QMIC Proprietary
Connected Life- Significant Opportunities

• $4.5T: Global Impact of Connected Life in 2020

• HOT 10 Connect Life Applications:
  – The Connected Car
  – Clinical Remote Monitoring
  – Assisted Living
  – Security
  – Pay as you Drive Car Insurance
  – New Business Models for Car Usage
  – Smart Meters
  – Traffic Management
  – Electric Vehicle Charging
  – Building Automation

*GSMA study by Machina Research in Feb. 2012
KNOWLEDGE VENTURES IN THE MAKING: MASARAK™
ITS: A National Priority

International Transport Systems (ITS)

- Sustainable Development
- Environmental Protection
- Economic Growth

- Mobility & Efficiency
- Road Safety & Health

Reduced Congestion, Increased Safety & Traveler Convenience
What is MASARAK™?

A comprehensive 100% locally built platform, and an integrated suite of Intelligent Transport and Logistics applications and services enabled by real-time traffic info

– Utilizes the most significant M2M platform built in Qatar (Labeeb™) that collects millions of data records a day
– Position Masarak as the national ITS services platform in Qatar
– Part of an integrated long term innovations roadmap leading to 2022
– A framework for introducing new road safety applications

Significant IP Assets Created, Leadership Mindshare Claimed
MASARAK™: Intelligent Transport & Logistics Services

- Traffic Monitoring System & Apps
- Intelligent Dispatching System
- Intelligent Fleet Management & Telematics
- Intelligent School Bus Monitoring Safety Apps
- Traveller Info & Navigation Services
- Intelligent Veh Tracking Services
- Crowd Management and Planning Tools
Masarak™ is a suite of Intelligent Transportation and Logistics services made in Qatar by Qatar Mobility Innovations Center (QMIC), formerly known as QU Wireless Innovations Center (QUWIC), located in QSTP. Masarak is one of QMIC’s smart living services built on top of QMIC’s intelligent sensing and services platform (Labeeb™). Masarak relies on collecting real-time traffic data from various input sources like GPS devices fitted in vehicles, bluetooth sensors, smart phones and other sources, then passes the traffic raw data through the Labeeb platform to refine it, infuse it, and produce useful real-time traffic information.
Intelligent Traffic Monitoring

Real-time monitoring of traffic congestion

Historical playback of traffic conditions
Traffic Forecast

Traffic Forecast
Street: All Streets

11:50 PM - 12:00 AM
12:00 AM - 12:10 AM
12:10 AM - 12:20 AM

Last Refreshed:
Mon, 01 Oct 2012, 11:52:28 PM

Congestion Calculation Algorithm
- Basic
- Advanced

Enabling Smart Living QMIC Proprietary
Business Eco-System
Where Are We?

• Key and significant IP assets created (more under way)
• Key partnerships established (more underway)
• Early deployment and commercialization started
• Planning to Create a Masarak Entity in Mid 2013:
  – International Consultant created investor-ready business plans
  – Looking for strategic equity investors
  – Key national personnel targeted for management
QMIC: Enabling a Knowledge-Based Economy

Localization of Know-How

Technical Platform Assets

Service Offering – Local and Unique

IP Creation & Ownership

Enabling Smart Living
Innovations Delivered, Made in Qatar