

# Commercialization and Launching

By: Prof Tassadaq Hussain Cheema



# Valuable?

- Education => Knowledge
- => Observation and Problem Identification
- => Financial Support (R&D Funding)
- => Scientific Evidence
- => Technology
- => **Technology Transfer (Commercialization)**
- => Usage => \$\$,

# Requirement of Commercialization

## MVP



Ready: Grading  
Standardized  
Regularize  
Compliances

## Advertisement

Branding  
Marketing  
Publication



## Production



MQO  
Quality Assurance  
Packaging

## Ownership (IP)

Patent,  
TM,  
CR,  
GI



## Agreements

NDA  
LA  
MTA  
TTA



## Sales



Dealers  
Suppliers  
Customers



# Ownership

**TradeMark:** A Trademark is a word, phrase, symbol, and/or design that identifies and distinguishes the source of the goods of one party from those of others.

**Patent:** A patent is grant of exclusive rights for an invention to make, use and sell the invention for a limited period of 20 years.

**Design:** An industrial design is the ornamental or aesthetic aspect of an article.

**CopyRights:** Copyright is a legal instrument that provides the creator of a work of art or literature, or a work that conveys information or ideas, the right to control how the work is used.

**Geographical Indications:** Word or Sign that identify a product originating from a particular place

# Marketing

- Branding
- Publication
- White-paper
- Video

# Industrial Agreements

ToT  
Transfer of  
Technology



MTA  
Material Transfer  
Agreement



NDA



Defining Worth of  
Solution



LA  
Licensing  
Agreement

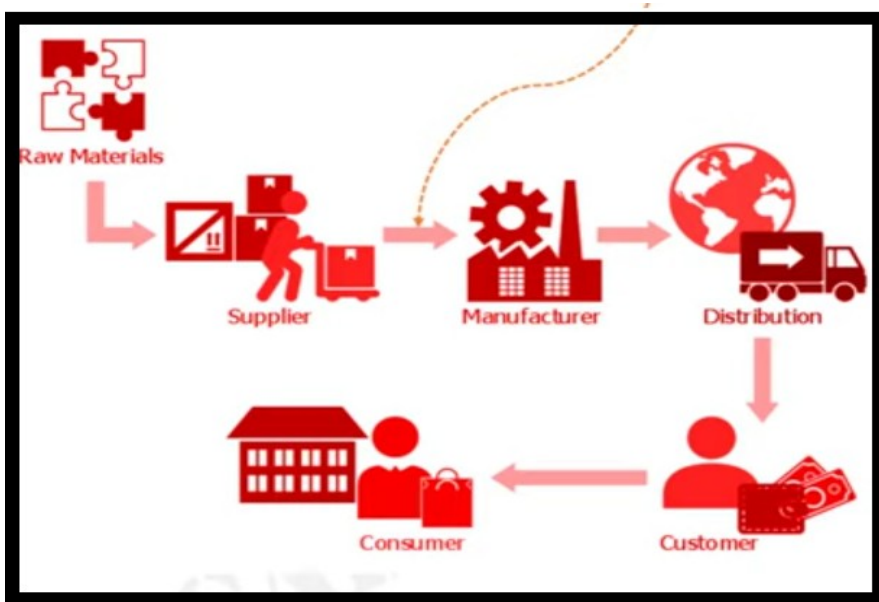


CDA

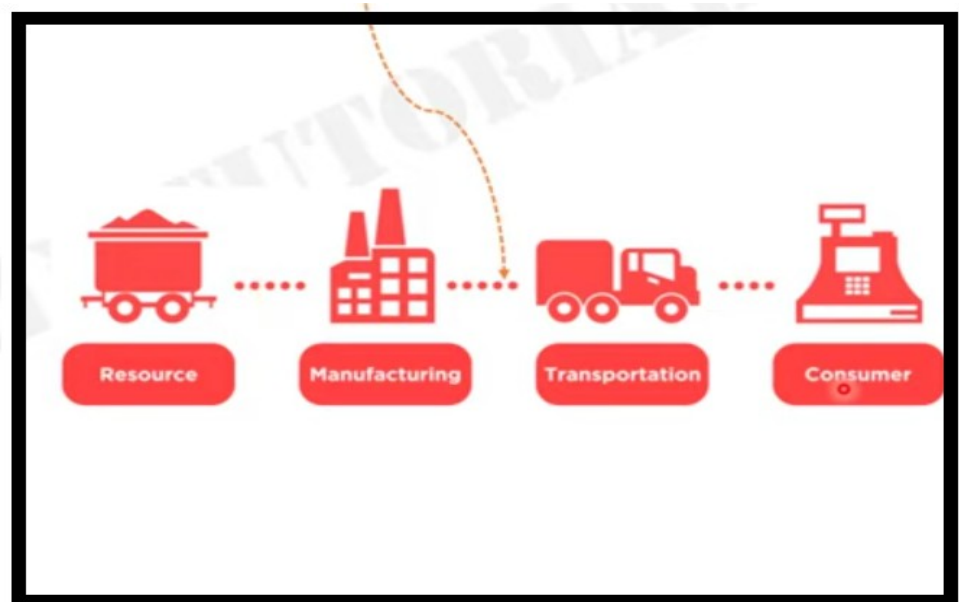


# Production and Sales

## Supply Chain



## Value Chain



# Patents ( 10 + 5 )

1. An Iris based Lungs Pre-diagnostic System
2. Synchronized Intermittent Mandatory Ventilation Mode Control Using Pulse Oximeter.
3. Real-Time System For Human Functional Movements Detection Using Brain-Computer Interface Data
4. A High Performance Edge Server System for IoTs
5. Flexible Data Acquisition System for Aerodynamics Applications
6. A Heterogeneous Multi-core based Biomedical Application Processing System and Programming
7. A Specialized Memory Architecture for Medical Imaging Applications.
8. A Pattern based Memory System Architecture for High Performance computing Applications
9. A High Performance Software Defined Radio System Architecture and Development Environment for a Wide Range of Applications
10. FPGA-Powered Supercomputer System



# Projects (12+10)

## **Computing**

Cloud Computing, Bare-Metal (Supercomputing), Embedded Computing

## **Data Science**

Data Analytic, AI, Software Applications

## **Animation, Simulation and Modeling**

Virtual Reality, Augmented Reality, Simulations

# Technology Transfer Experience

- **Intellectual Property**

- › TTA (2), MTA (2), Licensing (1), Patents (10 ), Startup (3).

- **Market**

- › Benefit to Society and Industry

- › Marketing

- Create Industry

- **Negotiation Discussion**

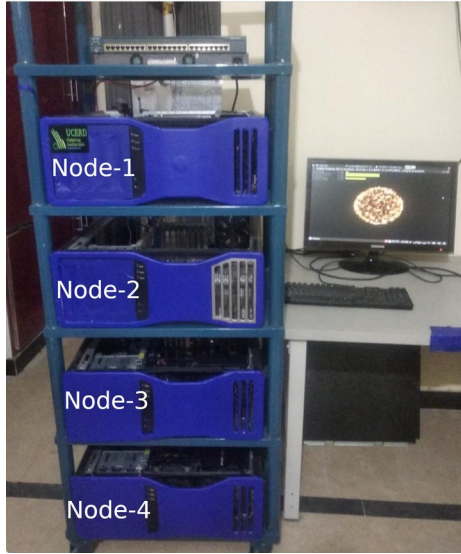
- › Industrial issues and solutions.

- **Commercialize Product & Service**

- › Technology, Tool, Technology (Process, Product, Procedure)

- › Business Community, Anticipated Customer,

# Technologies Developed



**The Nation**

The Nation, Islamabad, Friday, January 22, 2016

Riphah team develops supercomputer architecture

OUR STAFF REPORTER  
REDAUNDRAGE

have developed the supercomputer architecture. When performance of this supercomputer is compared with the existing systems in Pakistan, the results show that the p

**BUSINESS RECORDER**

Founded by M.A. Zuberi

BUSINESS RECORDER KARACHI TUESDAY 19 JANUARY 2016

RIU engineers successfully develop Super Computer architecture

KARACHI: A team of engineers at Faculty of Computing and Applied Science (FEAS), Riphah International Univer successfully developed the Super Computer architecture that is significantly complex architecture than ordinary comput

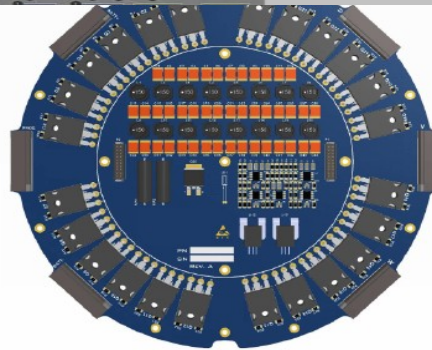


Figure: Drive PCB (unscaled image)

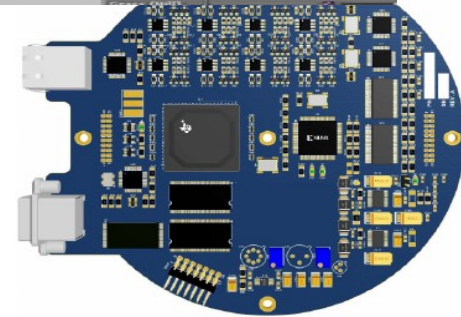


Figure: Control PCB (unscaled image)

CARD Size: 150 x 100 mm