
The Electronics Knowledge Transfer Network
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Chief Executive
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Our Goals.....

- Establish the UK as the “global electronic design centre of excellence”.
- Create an electronics network in the UK that is visible to itself, government and the global market.
- Raise awareness of “new” and “new to me” technologies, processes and practises.
- Stimulate the “application” of technology to deliver new, innovative products.
- Establish routes to access markets, academia, collaborative partners, best practise.
- Connect technology “users” with technology “providers”.

Our Values.....

Independence:

- Making the necessary interventions for the benefit of the sector
- Influenced by the sector and the sector alone

Additionality:

- Add value over and above the current initiatives in the sector

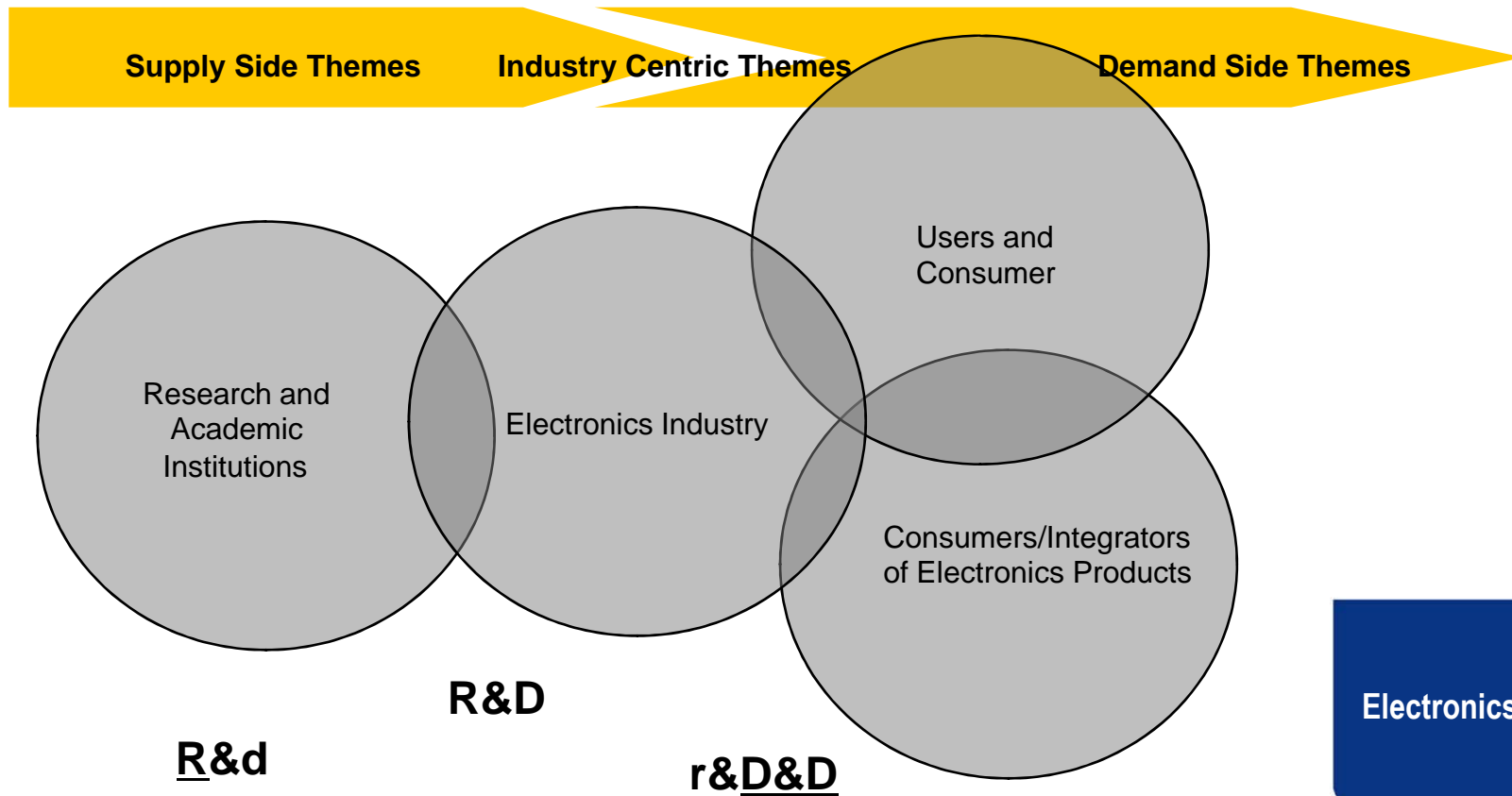
Growth through Leadership:

- Develop the business leaders in our sector to enable them to establish the UK as a leader for innovation

Electronics

Membership of the Electronics KTN....our customers

Any UK based organisation that develops or uses electronics technology

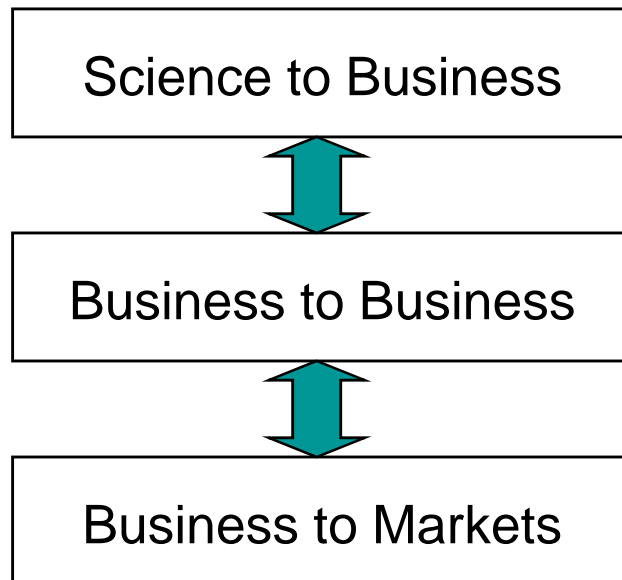


Electronics KTN....Knowledge for Growth



Knowledge Transfer ?

- *Why?* - transfer to stimulate innovation, stay competitive
- *What?* - “new” and “new to them” technologies / processes
- *Where?* -



Tools and instruments.....

- Networking
 - events / seminars / forums / interest groups / web/podcasts etc.
- Capability Directory
 - Detailing the capability of the sector across the value chain
 - Marketing our capability internationally
- Knowledge Pool and Collaboration tools
 - Signposts to best practice, roadmaps, information, technology providers, EKTN content, (Autonomy)
 - Access to secure collaboration tools (Interwise)
- Supply Chain Management Tools
 - Establish true landed costs, deliver competitive sourcing

Regional Networks

- How do we market to SMEs throughout the UK?
 - Establish regional EKTNs
 - Regional industry group, plus academia & RDA
 - Budget to fund delivery of regional content

- Outputs
 - Deliver KTN services into the region
 - Recruit membership

Capability Directory

- Promote the sector across the value chain
 - Attract international partners – establish the directory as the “tool of choice” for UKTI / FCO field agents
 - Resource to find collaborative partners, buy services or technologies
 - Establish UK strengths internationally

Whilst:

- Enabling sensible measurement and sizing of the sector to lobby for continued and further investment

Capability Directory - Attributes

Map position(s) on the value chain

Research & Innovation	Product Design & Development	Manufacturing & Production	After Sales	Services
University Commercialisation	ASIC Design Services	Contract Manufacturing & Assembly	Rework & Repairs	PCB Services
Research Institutions	BGA Technical Services	Test & Measurement	Supply Chain Management Services	Training Services
Research Intermediaries	Electronics Design Services	PCB Assembly / Manufacture	Reverse Logistics	Regulation & Legislation
	Embedded Design & Systems	Prototype Manufacturing	Recycling	Patents & IPR
	ESD Protection	Distribution & Logistics	WEEE Compliance	Quality Assurance
	PCB Design	Clean Room Equipment & Services		VAT & Duties
	Product Design	Calibration Equipment		Business Consultants
	RF & Microwave Design	Component Distribution		IT Services
	Prototyping	Semiconductor Manufacture		Software Applications
	Simulation Software	Injection Moulding		Sales & Marketing
	Software Applications & Integration	Warehousing & hubbing		Government Agencies
	Design & Test Capability			Finance / Funding providers
	Test Equipment			HR Consultants
	Concept Generation			
	3D CAD Design			
	System Integrators			
	Analogue Design			



Knowledge Transfer Network

Capability Directory - Attributes

Map capabilities

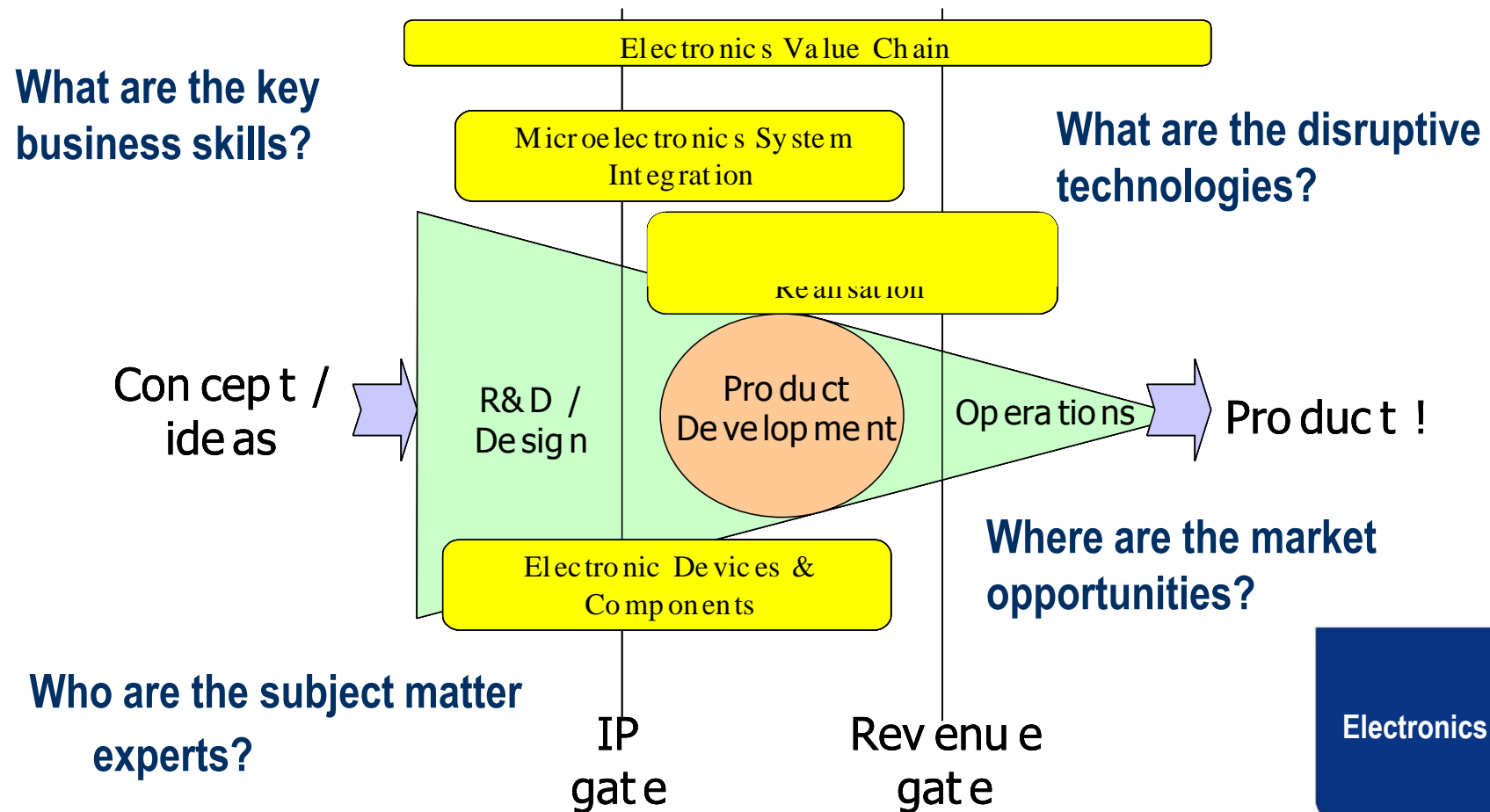
Technologies	Market Sector	Products
ASIC	Automotive	Antennas
Bluetooth	Broadcasting / Film & TV / Audio	Battery Chargers
Display Technologies	Data Communications / Telecoms	Cables & Assemblies
GPS	Medical / Healthcare	Circuit Protectors
GPRS	Retail	Connectors
Low Power	Energy	AC / DC Convertors
Optical / Vision & Image	Utilities	Enclosures
RF	Marine	Fasteners
Microwave	Aerospace	GPS Components
RFID	Space	Low Power Radio Modules
DSP	Defense / Military	Modems
FPGA	Oil & Gas	Power Convertors
Mobile / PDA Software	Digital Media / Games	Power Supplies
System In Package	Consumer Electronics	Resistors
System on Chip		Switches & Sensors
Analogue Devices		Vision Systems
		Wireless Modules
		Displays
		Motors
		RFID Tags / Readers
		Keypads
		Batteries
		Lasers
		Remote Telemetry Equipment
		Smart Cards
		Memory
		Microprocessors / DSPs
		Microcontrollers
		PLDs
		Analogue Components
		Electromechanical Products
		LEDs



Knowledge Transfer Network

Content - themes

Knowledge Themes - from Concept to Customer



Microelectronics and system Integration - topics

- Embedded Software
- System-in-Package (SiP)
- System-on-Chip (SoC)
- Design for re-use
- New Product Introduction
- Interconnection technology
- Heterogeneous System Integration
- Applications for markets
- System Architecture and Partitioning
- Mixed signal systems
- Digital systems
- RF systems
- Power systems
- Technology Platforms
- System performance trade-offs
- Packaging

Electronic Devices and Components - topics

- CMOS devices
- Bi-polar devices
- BiCMOS devices
- SiGe devices
- GaAs devices
- GaN and other emerging semiconductor devices (SiC, diamond, polymer devices)
- Power devices (IGBT etc..)
- IP and SW components
- Discretes
- Optoelectronic components
- Device processing technology
- Device packaging
- Wafer level packaging
- Passive components
- PCBs

Product Realisation and Design - topics

- Design Methodologies
- Design Tools
- Design tool access for SMEs
- Design partitioning
- Schematic-capture
- Simulation, Synthesis, Verification
- Digital design
- Mixed signal design
- RF and MM-wave design
- Design for manufacture, test, reliability
- Design for the environment, re-use
- Design for standards (EMC, Safety, CE)
- Hardware / Software co-design
- New Product Implementation
- PCB design
- DSP
- Design of manufacturing processes

Electronic Value Chain - topics

- Supply chain/value chain optimisation
- Procurement
- Off-shoring
- Subcontracting design and manufacture
- Service-based enterprises
- Exporting and establishing international electronics businesses
- Electronic materials & components
- Electronics manufacturing equipment
- Foundry services
- Assembly and packaging
- Test
- PCB procurement
- SMT assembly
- Logistics
- Industry business analysis and cycles
- Legal and IP issues
- Design and Supply Contract issues
- Available funding sources
- Leadership development

Content

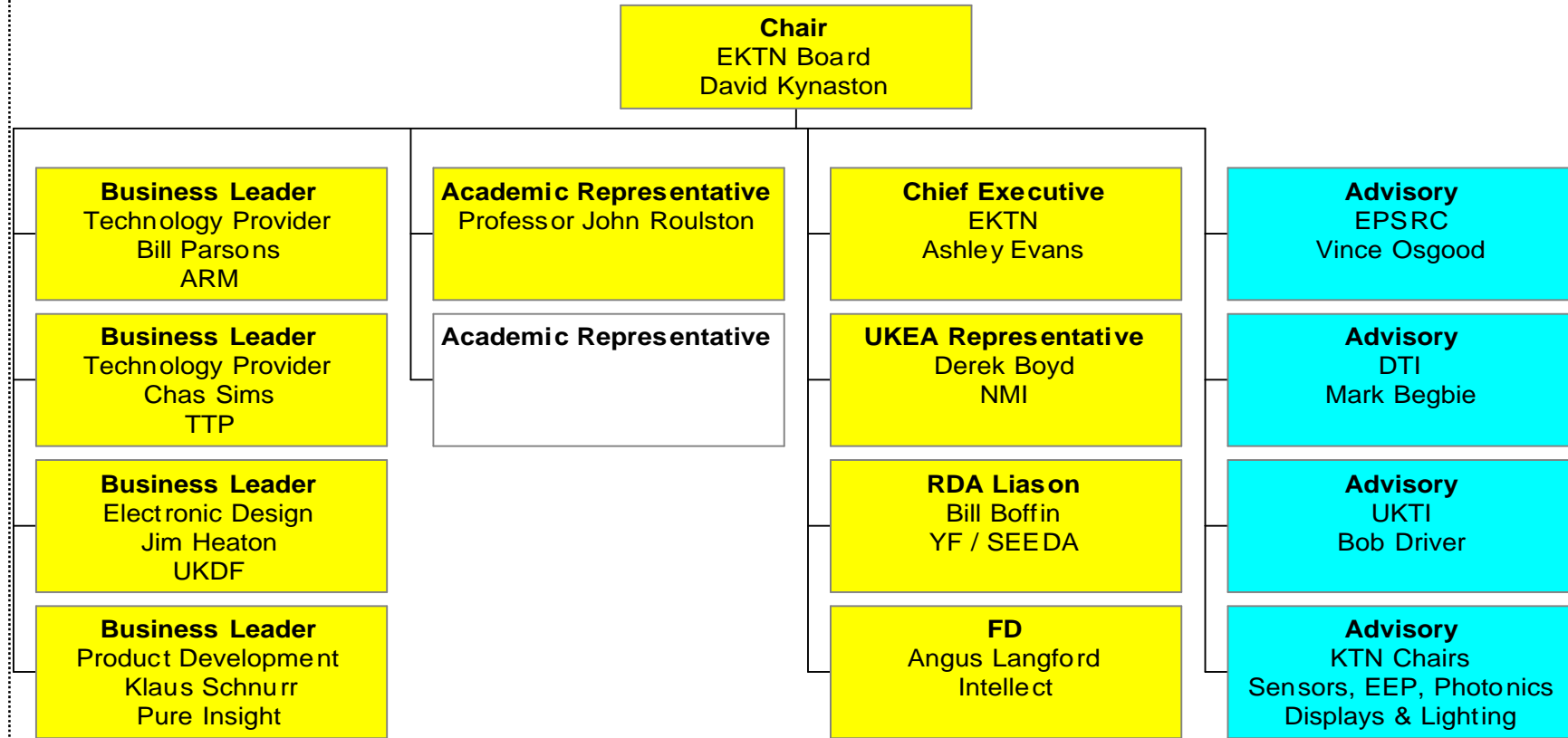
- Along list of topics !
 - how do we prioritise?
 - which have greatest impact?
 - how do we assess?
- National events – will be endorsed by the Board
- Regional events – will be endorsed by the Regional EKTN

Content – criteria guidelines

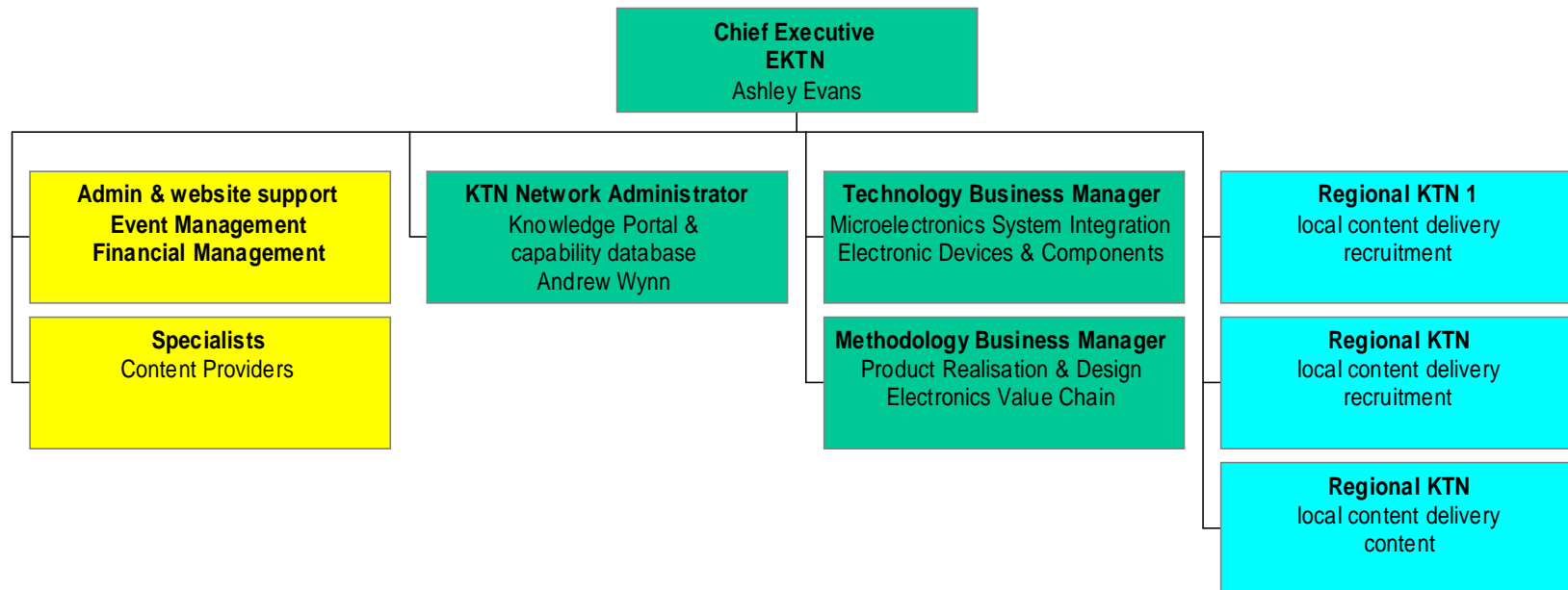
Assessing suitability of content	2012 Games
Guidance <ul style="list-style-type: none"> - has the topic wide appeal within the sector? - are statistics available indicating the number of companies currently engaged, or potentially engaged with this topic in the U - has the market for this technology / process / application been assessed? - is the growth curve known for the application of this technology / process? - does this topic represent knowledge where the UK is lagging, and improvement will result in a more competitive sector? - will this topic direct companies in the sector to funding or revenue streams - does this topic present new market opportunities for members of the sector - does this topic represent a disruptive technology or process - does this topic stimulate collaborative partnerships? - does this topic engage universities and industry in collaborative partnerships 	<p style="text-align: center;">Y</p> <p style="text-align: center;">N</p> <p style="text-align: center;">n/a</p> <p style="text-align: center;">n/a</p> <p style="text-align: center;">n/a</p> <p style="text-align: center;">Y</p> <p style="text-align: center;">Y</p> <p style="text-align: center;">N</p> <p style="text-align: center;">Y</p> <p style="text-align: center;">N</p>



Electronics Knowledge Transfer Network (EKTN) Board



Electronics Knowledge Transfer Network (EKTN) Management Team



Benefits of membership.....

Network with the electronics community across the sectors!

- Access to new markets, promote your company
- Learn, stay competitive
- Find collaborative partners
- Discover new technologies, applications, materials, processes
- Access to services, SCM tools, collaboration tools, knowledge pools, on line communities

Partnerships

- How can we work with the UK Design Forum?
 - proposals for content?
 - regional representation?
 - inputs relating to capability directory attributes?

dti

learn
promote **invent**
network
internationalise
collaborate



Electronics KTN

...knowledge for growth

Thank You!!



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