

# When Worlds Collide - Making Star Trek Happen!

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## Abstract

James Martin was famous for explaining ICT developments and the future world. This poster explores recent forecasts towards a broad picture of the world ICT in a few decades.

## Keywords

*Mega Trends, ICT Future*

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## 1978: Telematic Society (James Martin)

| Re integration of telecommunications and computing:  |   |
|--|---|
| "New ICT facilities"                                 | "IMPACTS"   |
| Wired world, New highways, Satellite age, Spiderwebs | Industry: Medical Facilities, Education, Substitute fuel, Industry re-engineering, 3½ day work week |
| Radio Devices, Telephone with pictures, Instant Mail | Knowledge Intensive: News (media & meaning), Invisible money, Info deluge, Who pays?                |
| New uses of TV, Marriage TV & computer               | Personal: Human goldfish, Home, Public response systems, 1984                                       |

## Mega Trends world perspectives

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| <u>Broadly</u> : Getting more for less, Personal touch re people, Divergent demographics, On the move (mobility), Our world change due to ICT, Possible mega shocks (incl. ICT – Breakdown of critical ICT, Nanotechnology risks ("getting in wrong"), Data fraud/loss |
| <u>"ICT world"</u> : Online social networking increase, e-Commerce, IP6 changes, Remote sensing, Computing and Network "power" capabilities, Cloud computing   |
| The many classical/"traditional" views re the future world, as well as -   |
| <u>Major industry-specific trends</u> : Healthcare, Environment, Chemicals & Materials, Automotive, Energy & Power, Information and Communication Technologies   |
| <u>ICT</u> : Faster internet, Convergence of virtual and physical payment, Online & mobile, Levels of realities, Wearable computing, 3DVOD, Cloud portability  |

## Trends in ICT

|   |  |
|---|--|
| <p><b>Ambient network access:</b><br/>More "always on &amp; connected", Ad hoc networks, Personal body areas, Moving networks</p>   | <p><b>GRAND CHALLENGES:</b><br/>100% safe car/transport<br/>Multilanguage companion<br/>Service robot companion<br/>Pervasive communication jacket<br/>The everywhere visualiser<br/>Augmented personal memories</p> |
| <p><b>Home with "total connectivity":</b><br/>Many SIM cards, Intelligent leisure, Network applications, Biometric access control, Digital product memories, Cleaning robots, Health monitoring</p> | <p>Computer self-monitor &amp; -repair<br/>Internet police agent</p>   |
| <p><b>Internet capability growth:</b><br/>Web2.0 → Web 3.0, Imbedded</p>  | <p>Intelligent retail store</p>  |

## ICT 2020

|   |   |
|---|---|
| <p><b>Future prospects of ICT's:</b><br/>"Chips set the pace"<br/>"Nano modals run things"<br/>"More efficient software"<br/>"Intelligent networks"<br/>"Grids &amp; Supercomputers"<br/>"Sensor system&amp; internet"<br/>"Electricity issues"<br/>"Sensitised computers"<br/>"Sensitive robots"</p> | <p><b>Lead Innovations:</b><br/>Automotive electronics<br/>Healthcare ICT<br/>Safe mobility comm.. tech.<br/>N/W intelligent objects in logistics</p>                                       |
|   | <p><b>Technology Alliances:</b><br/>Digital product memory<br/>Standards re future comm..<br/>Virtual technologies real products<br/>Ambient intelligence to autonomous network systems</p> |

## Future Technologies

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| <p><b>Multimodal interaction</b> by people via imbedded ICT: Speech, Gesture, Biometrics, Physical, Facial expression &amp; body language, Graphics</p>  |
| <p><b>"Smart spaces"</b> anywhere people are relevant: Factories (Production), Shops (Distribution), Homes (Consumption &amp; Personal), Cities (organization), "Class rooms" (wherever knowledge is created and skills developed)</p> |

## Thinking of well-known movies and TV series?

Star Trek series (all of them): Radical technologies, gradually announced...!  
2001 Space Odyssey : Computerized sensors management & regulation  
By Will Smith - I Robot (Robot servants) and Men in Black(Info control)  
By Bruce Willis: The Fifth Element – Living in computerized world  
By Jackie Chang: The Tuxedo - Using a special gadget-laden tuxedo!  
Minority Report? Robocop? Total Recall? Planet of the Apes? (!)  
Many others, often to be taken with much more than a pinch of salt!!!

## Conclusion about "2050"....

Continued disrupt-change via ICT dissemination "into" industries!  
More personal & official life changes! (*Even to be able to just function in world!*)  
Radical ICT beyond "linear extensions"? (*Who forecasted nanotechnology?*)  
Interdisciplinary training 50/50? (*ICT expert plus other industry proficiency?*)  
"Mega-shocks"? (*Eg. Continent disappears, Power shifts, ICT disasters*)

"One big machine!" (Kevin Pelly on Youtube).

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