

The State and High Tech&Quality Jobs

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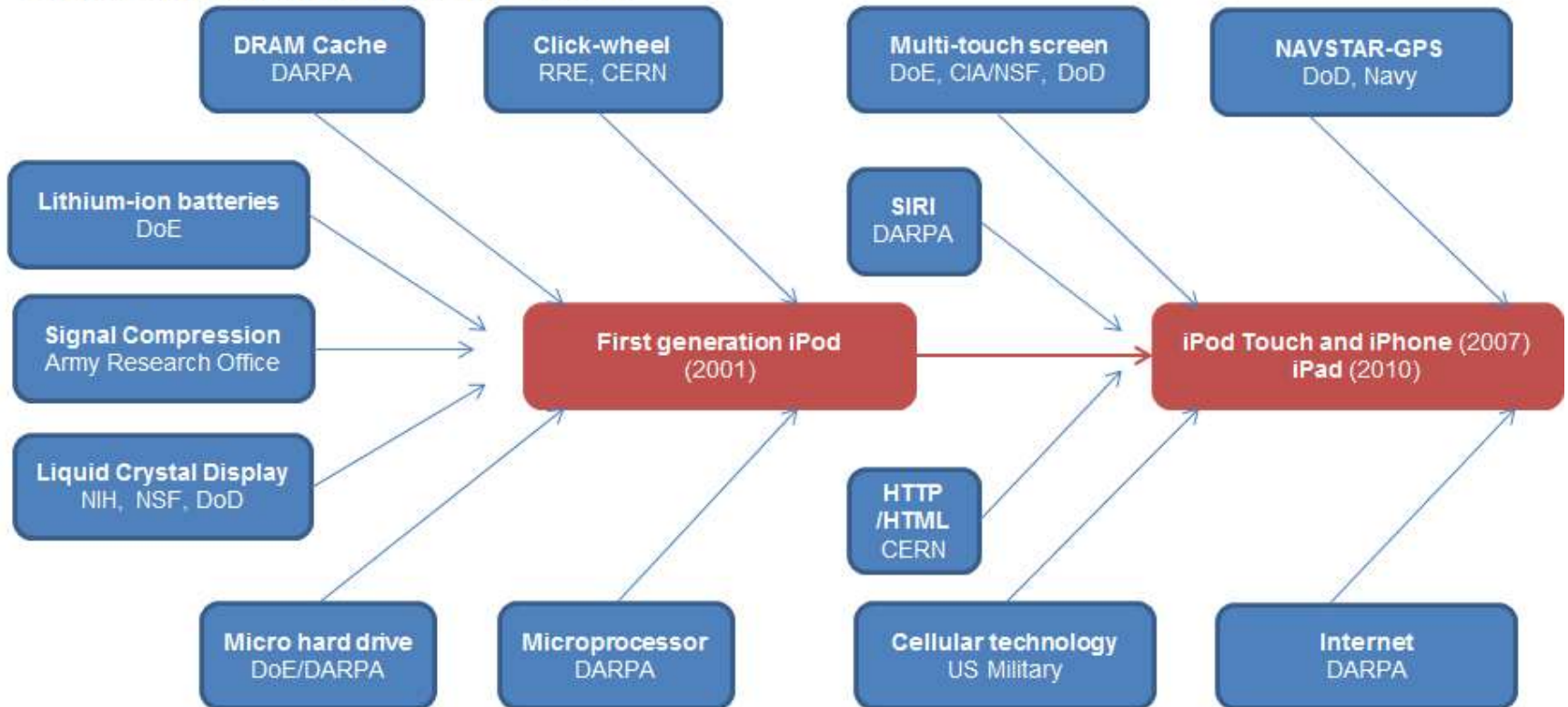
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Whom do we need?



Who made the iphone?

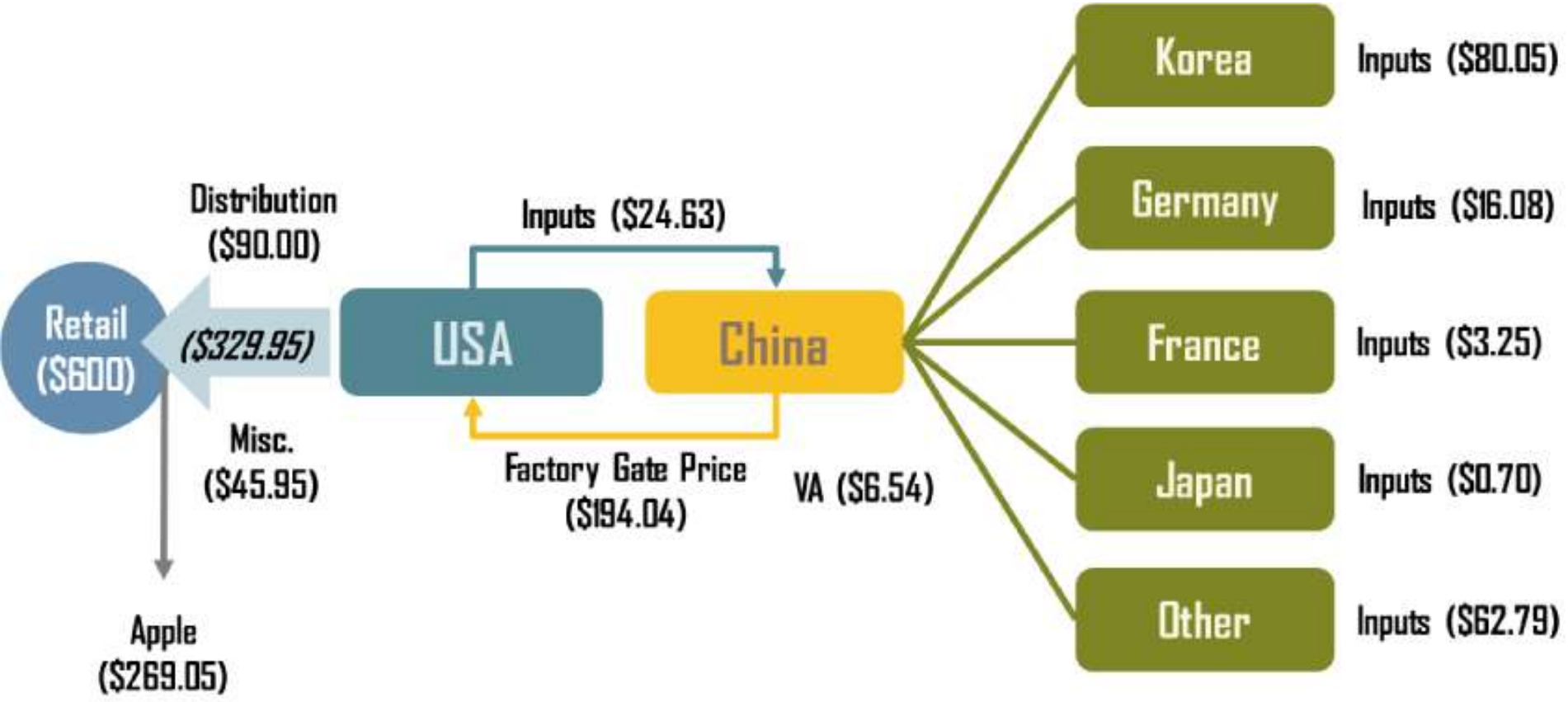
Origins of popular Apple products



Source: Author's own drawing based on the OSTP diagram "Impact of Basic research on Innovation"

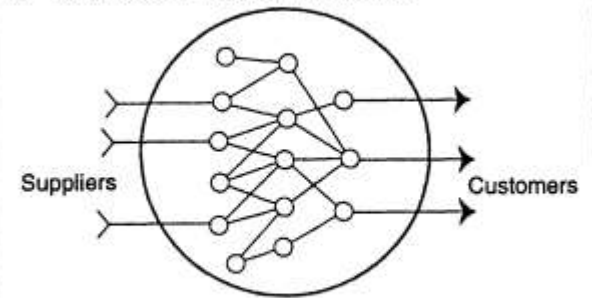
Source: Mazzucato 2013

High tech – an elusive concept

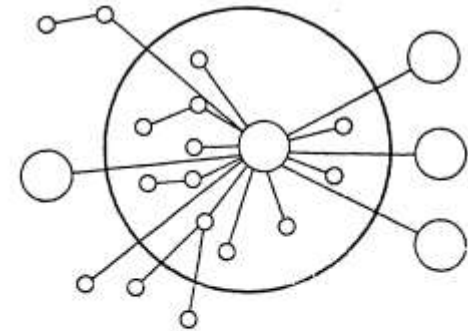


Some places are sticky, others not

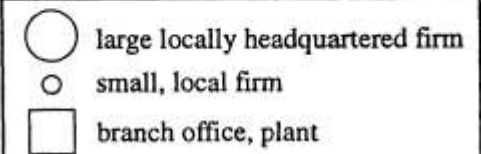
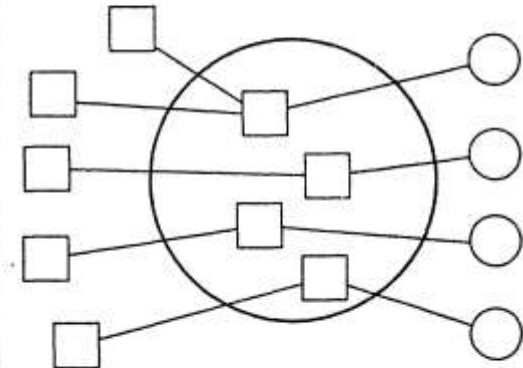
A. Marshallian Industrial District



B. Hub-and-Spoke District



C. Satellite Platform District

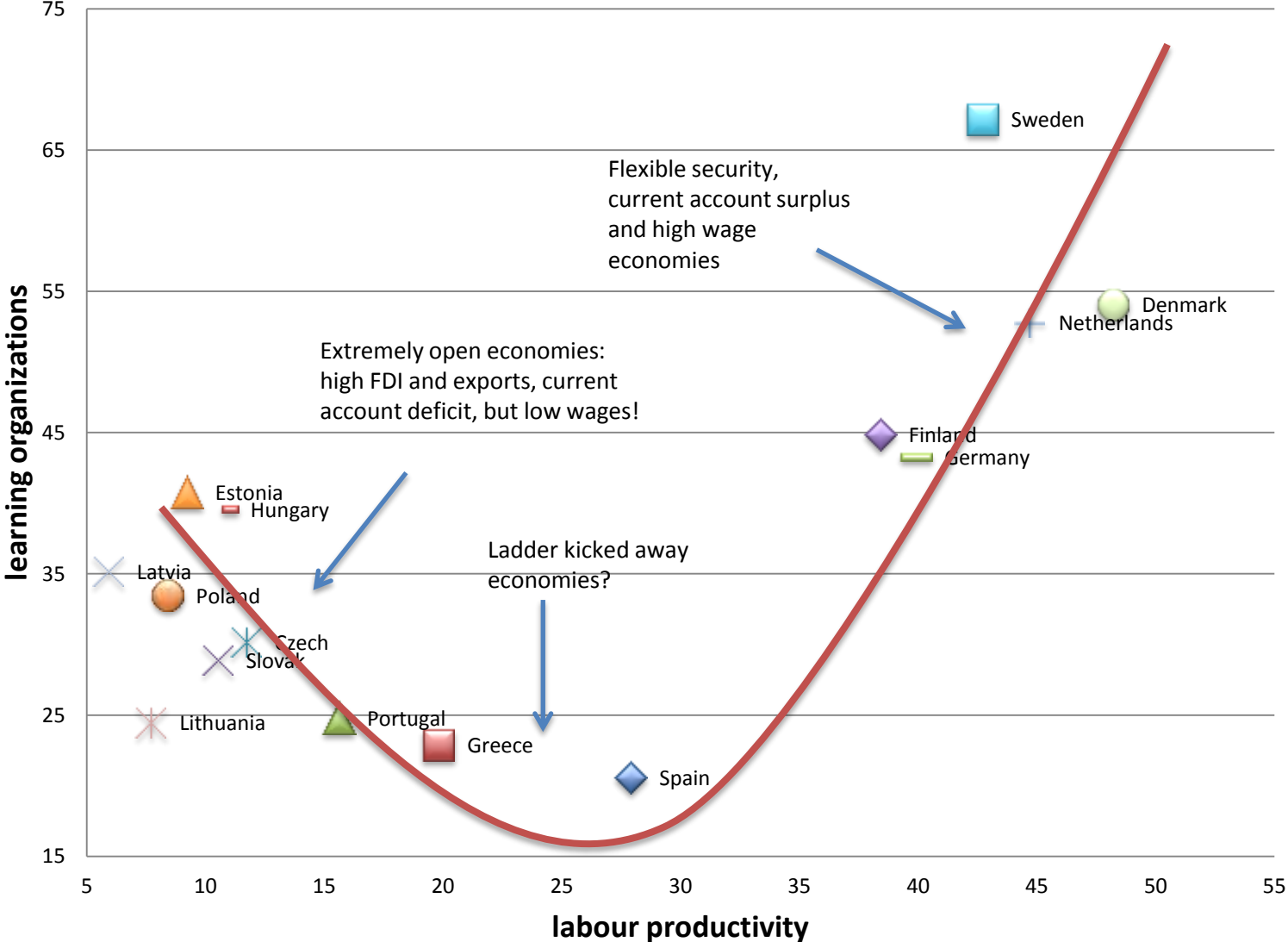


Source: Markusen 1996

Table 1 Work organization across the classes: EU-27 and Norway: 2005

	Classes of work organization forms				
	Discretionary learning	Lean production	Taylorist	Traditional or simple	All
Learning new things	87.7	89.3	38.1	27.1	68.3
Problem solving activities	96.4	92.7	53.2	47.5	78.9
Complexity	79.1	83.7	34.8	18.1	61.4
Monotony	21.9	61.3	73.9	36.7	44.5
Repetitiveness of tasks	10.2	41.5	40.4	17.7	25.3
Task rotation	41.2	78.8	40.8	27.8	48.5
Teamwork					
Members decide on task division	33.8	47.9	13.2	19.0	31.0
Members do not decide on task division	24.9	40.4	45.6	17.5	31.4
Quality					
Self assessment	81.7	91.5	56.9	25.5	69.9
Norms	77.7	95.7	91.8	35.3	77.8
Autonomy in methods	88.8	66.4	9.8	45.4	60.6
Autonomy in speed or rate of work	87.7	66.3	20.8	53.6	63.6
Work pace constraints					
Automatic	3.8	46.4	59.9	5.9	25.8
Norm-based	42.2	76.1	73.8	14.6	52.2
Hierarchical	24.6	65.7	69.7	30.0	44.6
Horizontal	36.0	85.0	64.2	24.8	52.0
Sample	38.2	25.7	19.0	17.1	100.0

Valley of death? Learning organizations vs productivity 2005



Source: Holm et al 2010; Eurostat

Firm capabilities

- Goals of firms and public policy are the same in one thing: learning is key for firm's and country's competitiveness
- Evolution of firm level capabilities needs
 - Firm level activities (management, new machinery/technology, finance, networks)
 - Public policies
 - Supply side (education, training, capital)
 - Demand side (procurement, standards®ulations, higher wages)
 - =complex coordination mechanisms

What should governments do?

- Diffuse new knowledge and create markets at the same time – **new industrial policy**:
 - Skills requirements via regulatory standards
 - Procurement of innovations
- **Diversity** of home markets:
 - Labour market policies
 - High wage strategy + Employer of last resort programs
- Who pays for long term investments? Financial reform:
 - Public financial institutions (public venture capital, development banks)
 - Segment banking sector
 - Public guarantees for investment functions of banks