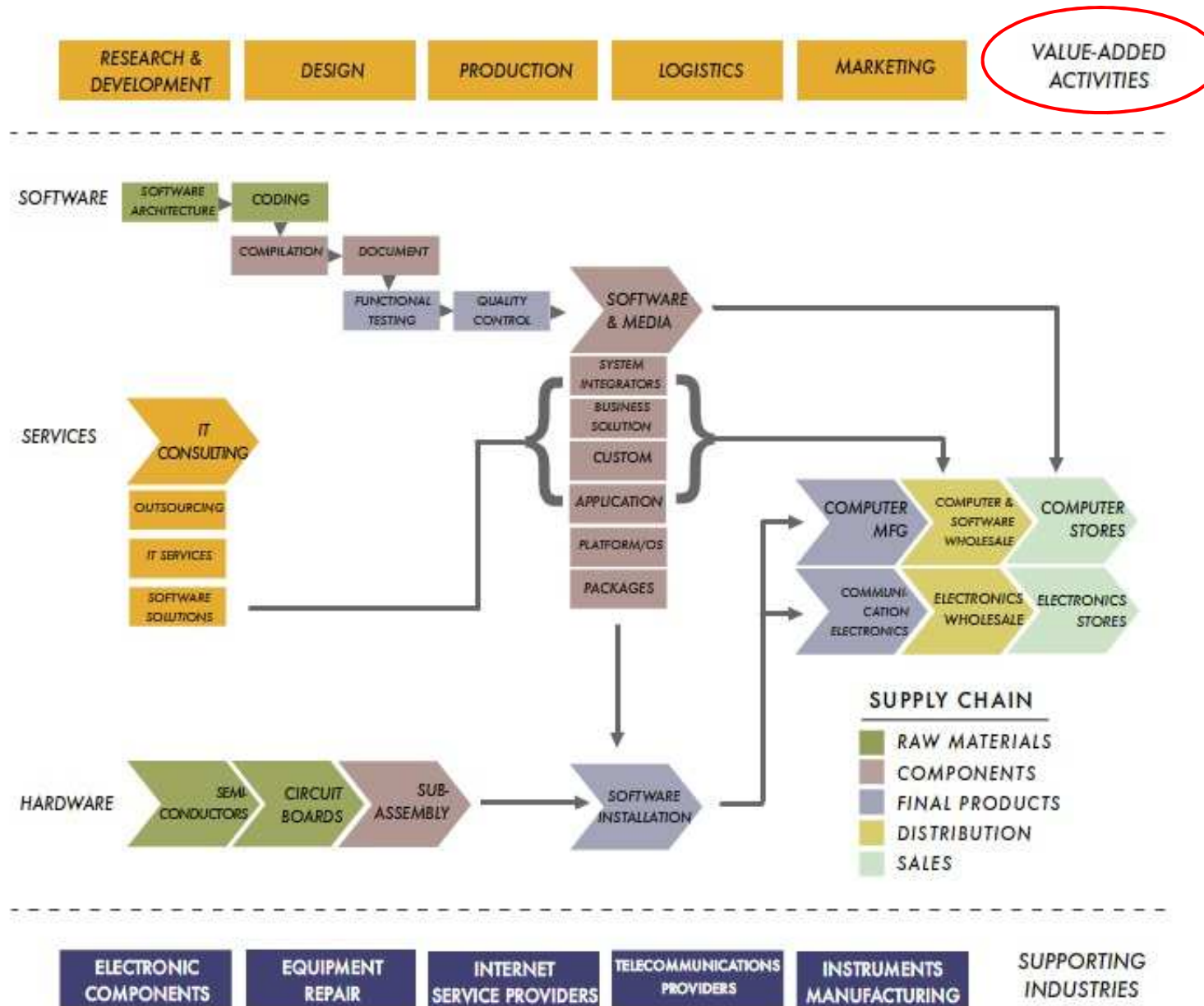


MEASUREMENT PROBLEMS IN VALUE CHAIN

N.S.VISWANATH

1. **Value addition is a process, a stream of activity and a necessity**



Source: CGGC (<http://www.cggc.duke.edu>), More Information:
Global Value Chains (www.globalvaluechains.org)

**2. Value addition begins with the
produce / product / service.**

**3. Value addition acquires significance
by developing technology.**

**4. Technology ensures rise of multiplication
and size or volume of output.**

**5. Value addition creates value, hasten
up creation & creates utility.**

6. Research & Development activity supports value generation. This is a long term investment.

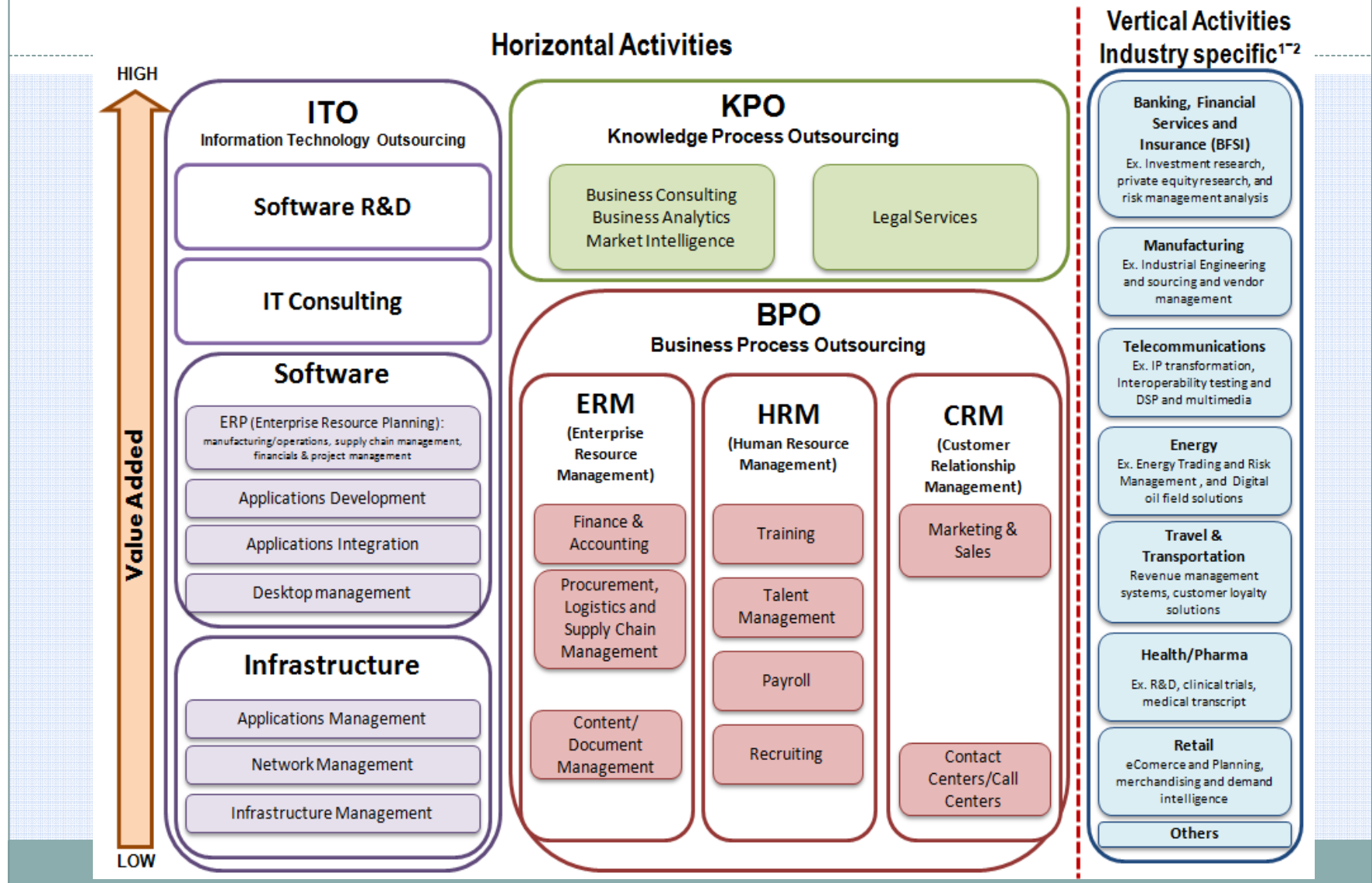
7. Value addition happens at the

a. Unit level

b. Organization level &

at c. the Global level

Offshore Services Value Chain



8. Measurement of Value chain at each trigger point is essential.

As such it is

a. An Accounting problem – drawing from current & real accounting statements.

b. A problem in generation of numbers or statistics.

9. Physical value chain where in physical transformation process of a product or service is recorded.

10. Counting or assessing value created at each trigger point.

- Counting Value Chain!

11. Thus value chain involves supply chain coupled with counting chain.

12. Measurement is normally done at current prices. This is acceptable at the organizational level from accounting point of view.

13. The problems remain of assessment of real numbers

- ❖ One method is to use deflators.**
- ❖ Another is to calculate costs & factored in.**
- ❖ Yet another is to compute Economic Value Addition (EVA).**
- ❖ Assess although Balanced Score Card (BSC).**

14. Measure efficiency by application of

- a. PDCA (Plan-Do-Check-Act).
- b. Six Sigma.
- c. Total Quality Management (TQM).
- d. Statistical Quality Control (SQC).
- e. Statistical Product Control (SPC).
- f. Experience Quality Management (EQM).
- g. Adaptation of Best Practices.
- h. Search for Next practices.

15. The basic question remains:

- **How to factor in the effect of these techniques on the final product?**
- **How to discover value at the market place?**

16. Measurement problems are not a part of production process alone.

It begins at four stages:

- a. Backward linkage.**
- b. Process linkage.**
- c. Forward Domestic Linkage.**
- d. Forward Transnational Linkage.**

17. Backward Linkage is in two phases:

a. Domestic

b. International

18. Measurement of costs, margins are restricted to a single currency in domestic backward linkage.

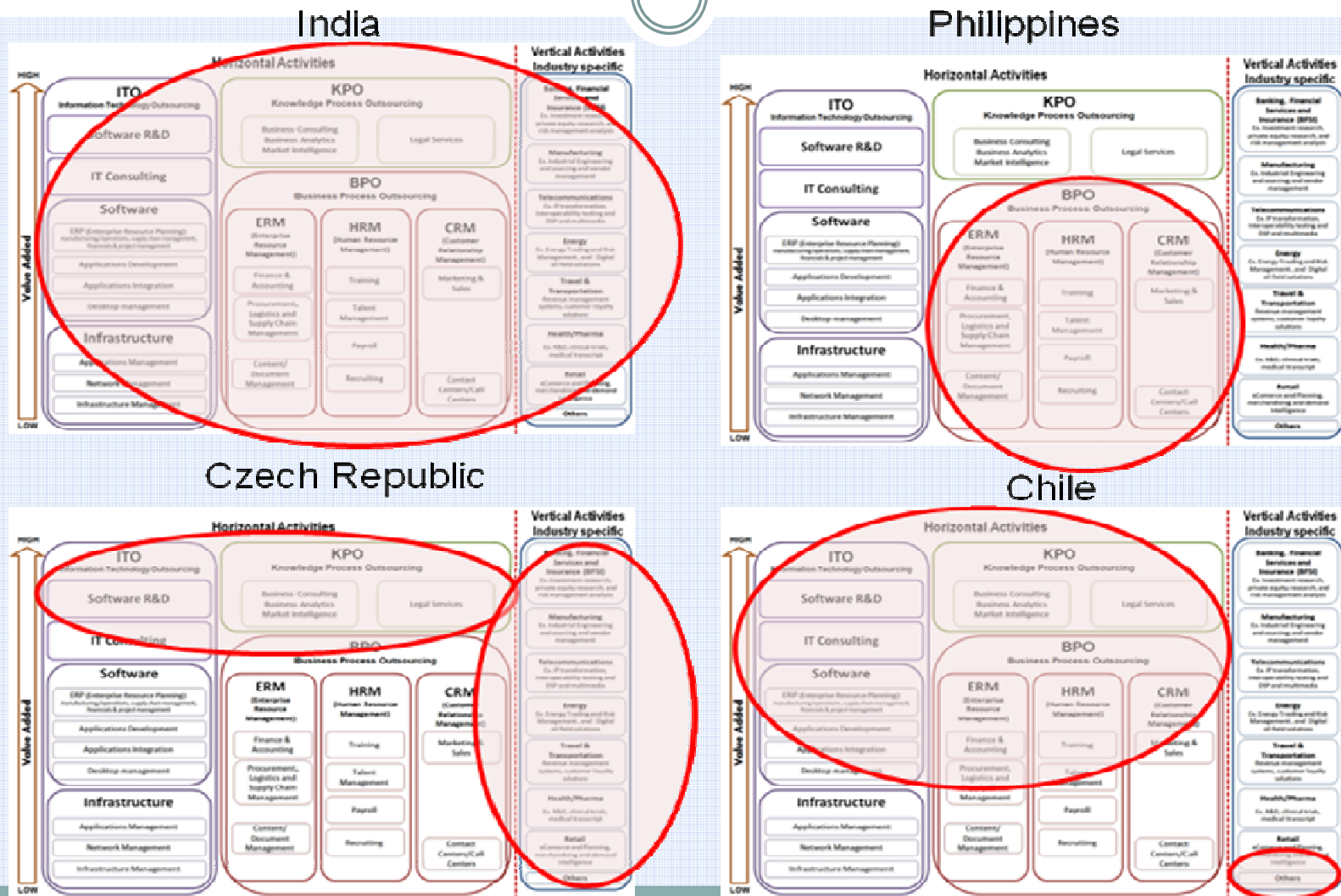
**19. Backward Transnational linkage
poses problem of estimation by
currency.**

20. Process linkage makes its complexity by the problems of several component manufacturers.

**21. Forward Domestic linkage has
itself costing issues under a single
currency.**

**22. Forward Transnational linkage
inducts complexity of currency
and duties to be incurred.**

Mapping Selected Countries in the Offshore Services Value Chain



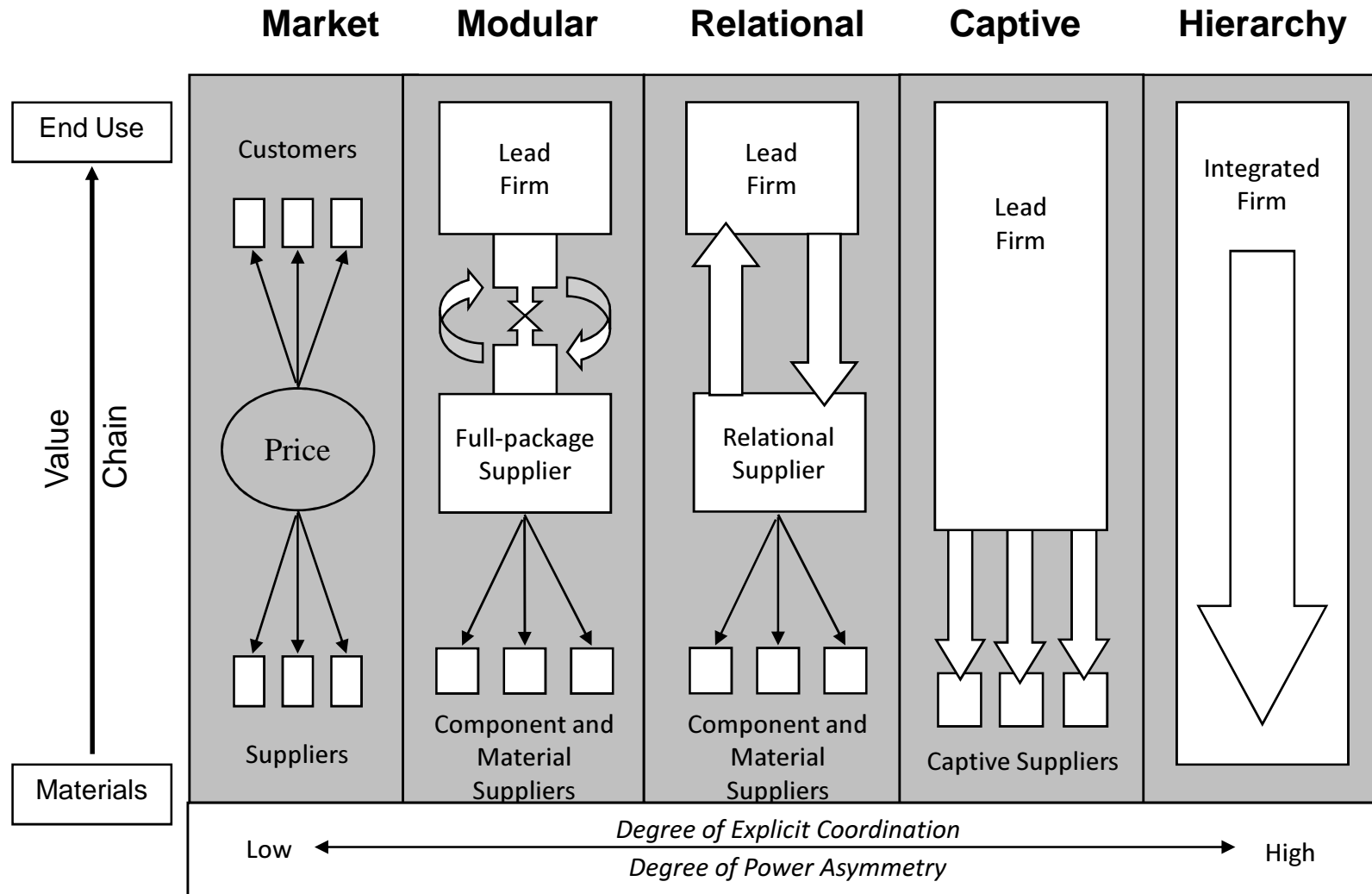
23. Generation of National Accounts in another big challenge.

- **Trade Statistics.**
- **Out sourcing issues to be factored in.**
- **Process and product outsourcing.**
- **Accounting linkage from R & D, Design,
production, logistics and marketing.**
- **Linking up with service industries –
support.**

24. Governance type matters in complicating measurement

- a. Market**
- b. Modular**
- c. Relational**
- d. Captive**
- e. Hierarchy**

Five Global Value Chain Governance Types



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Global Forum on Trade Statistics
Measuring global trade - Do we have the right numbers?
 Geneva, Switzerland
 February 2, 2011

**25. How to solve such measurement
problems at different levels?
How to aggregate these numbers?**

26. Any Questions??????

A close-up photograph of a bouquet of daisies in various colors including yellow, pink, and red. A white card with the words "Thank You" in a black cursive font is placed among the flowers. The card is slightly tilted and partially obscured by the petals of a large pink daisy in the foreground. The background is softly blurred, showing more flowers and green foliage.

Thank You