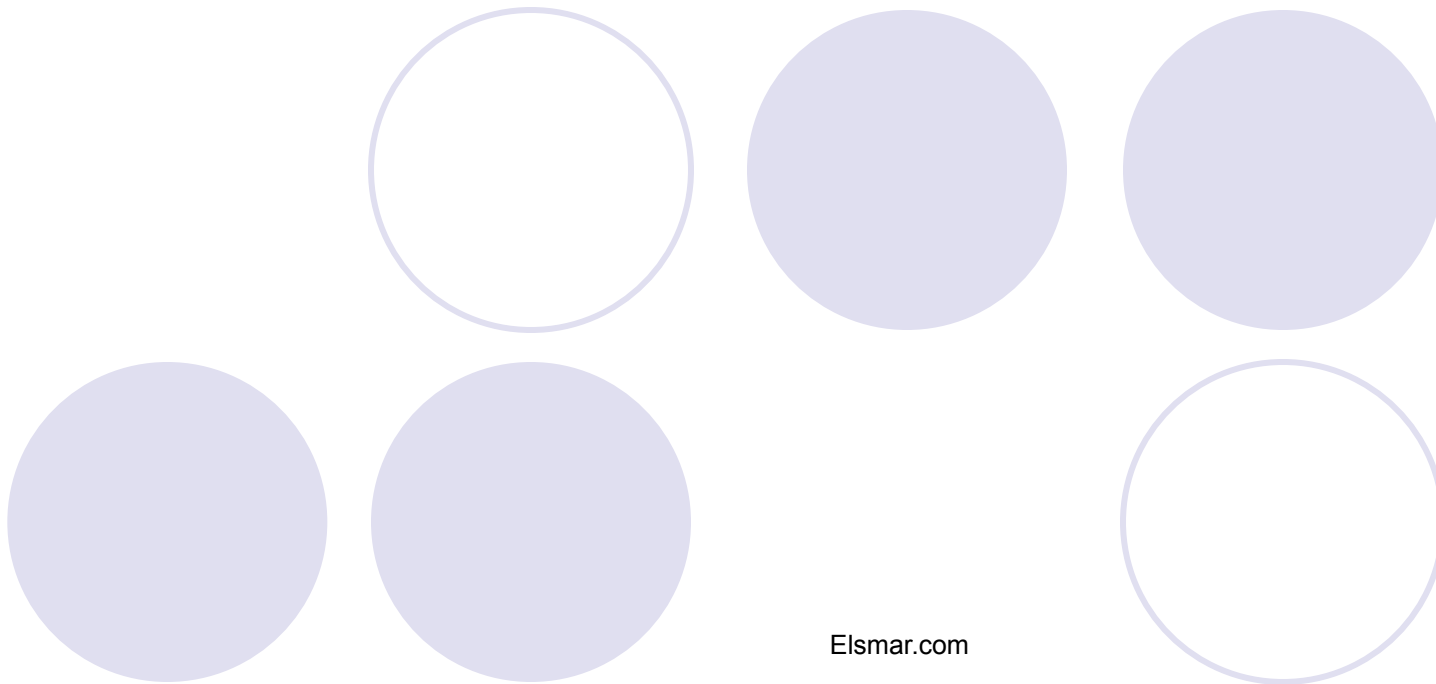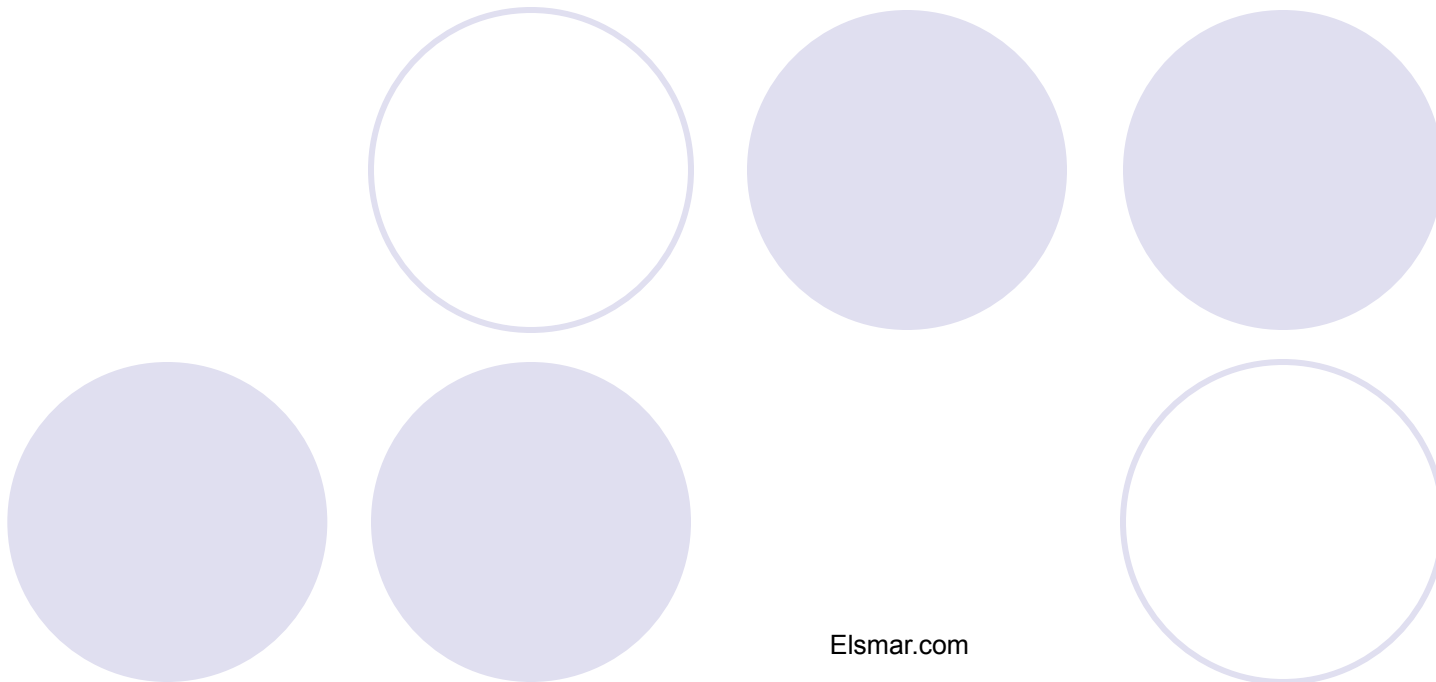# Process Auditing

- Identification of Processes

- Turtle Diagrams

- Approach

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Process Auditing

- Identification of Processes
  - Customer Oriented Processes (COPS)
  - Customer Identified Processes

Process Auditing

- Identification of Processes
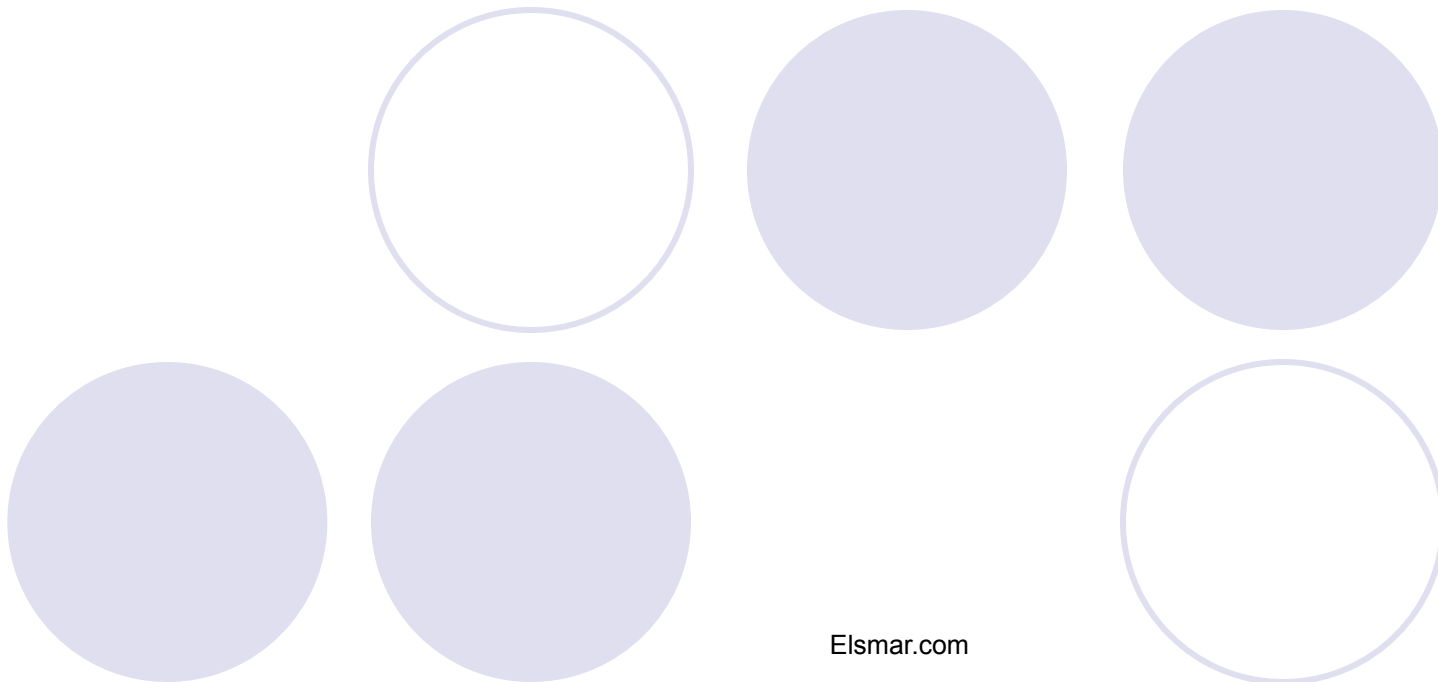 - Customer Oriented Processes (COPS)
    - Market Analysis / Customer Requirements
    - Bid/Tender (RFQ and Quote)
    - Order/Request (Customer Order)
    - Product Design
    - Process Design
    - Product Verification / Validation
    - Process Verification / Validation
    - Product Production
    - Delivery
    - Payment
    - Warranty / Service
    - Post Sales / Customer Feedback

Process Auditing

- Identification of Processes
  - Customer Oriented Processes (COPS)
  - Customer Identified Processes

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Process Auditing

- Identification of Processes
  - Customer Oriented Processes (COPS)
  - Customer Identified Processes
- Six Process Characteristics
  - Has on owner
  - Is defined
  - Is documented
  - Linkages are established
  - Is monitored
  - Has records maintained

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Process Auditing

▪ Turtle Diagram – Key Questions About a Process

With WHAT? (Equipment, Materials) 3		With WHO? (Training, Knowledge, Skills) 4

INPUT 7 → PROCESS 1 → OUTPUT 2

HOW MANY? (Performance Indicators) 6		HOW? (Instructions, Procedures, Methods) 5

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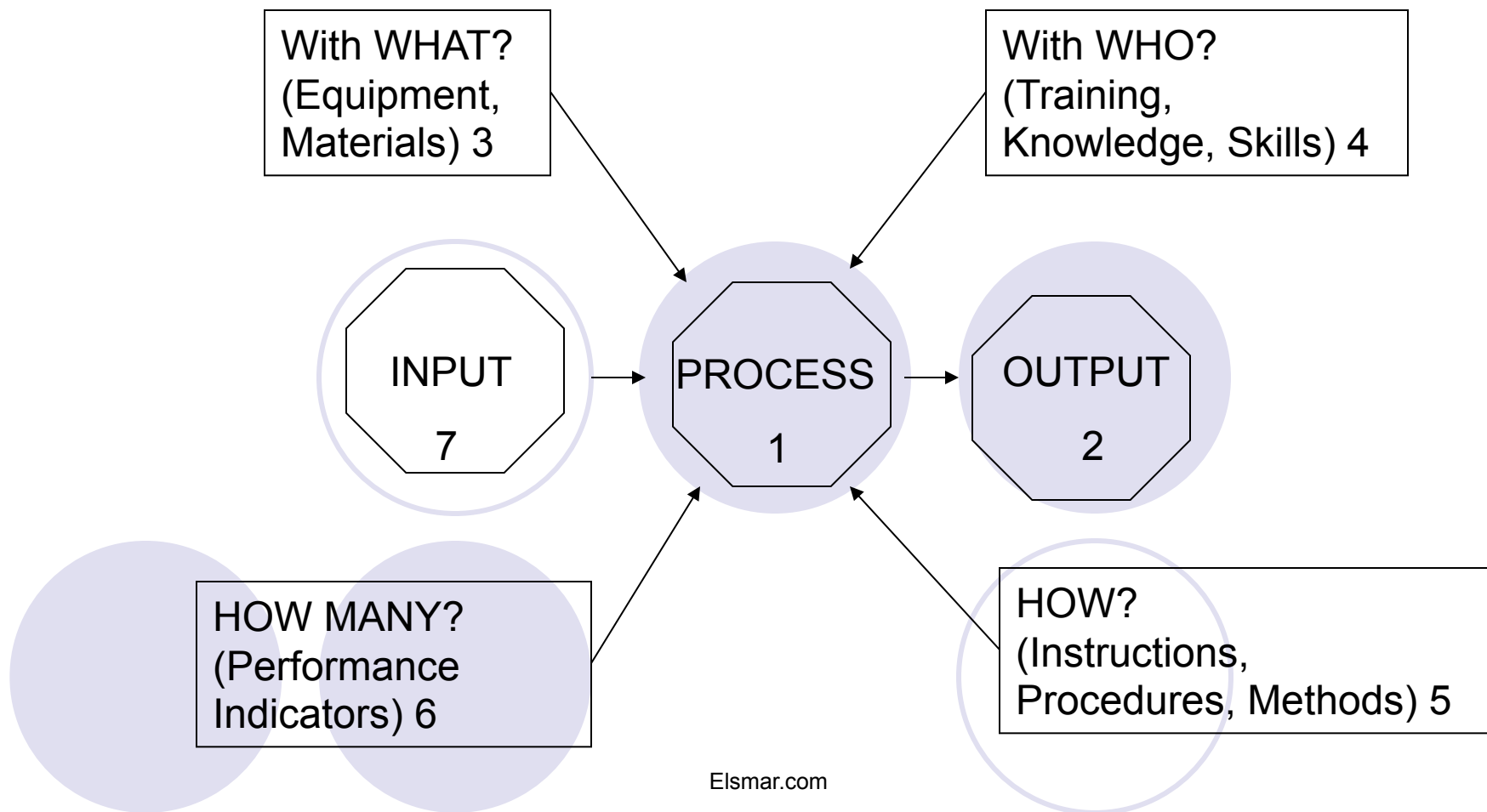
Process Auditing

■ Turtle Diagram

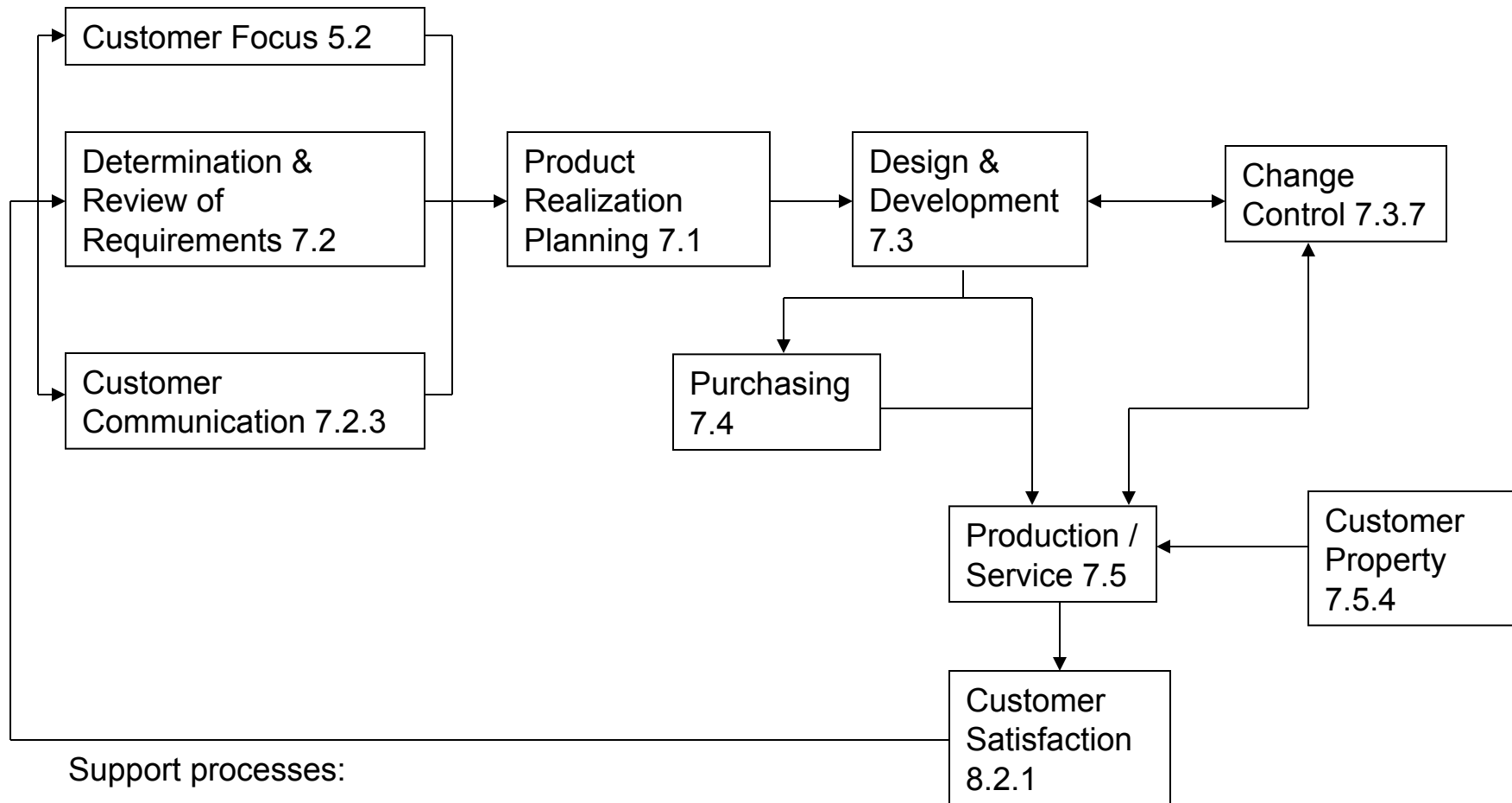| Sect #	Details
1 PROCESS	Enter Process name. A process has an owner, is defined, is documented, linkages are established, is monitored, has records maintained.
2 OUTPUT	Enter details of the actual output. This may be a product, document, and should be to actual measure of effectiveness.
3 WITH WHAT?	Enter details of the machine, materials (including test equipment), computer systems, software used in the process
4 WITH WHO?	Enter resource requirements, pay particular attention to required skills and competence criteria, safety equipment, etc.
5 HOW?	Enter details of linked process controls, support process, procedures, methods, etc.
6 HOW MANY?	Enter the measures of process effectiveness
7 INPUTS	Enter details of the actual input. This may be a document, materials, tooling, schedule, etc.

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Process Audit Approach – Example

Customer Focus 5.2

Determination & Review of Requirements 7.2

Customer Communication 7.2.3

Product Realization Planning 7.1

Design & Development 7.3

Change Control 7.3.7

Purchasing 7.4

Production / Service 7.5

Customer Property 7.5.4

Customer Satisfaction 8.2.1

Support processes:

Measurement, Analysis & Improvement 8

Resource Management 6

Control of Documents 4.2.3

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Control of Records 4.2.4

Process Audit Approach – Example

```
┌─────────────────┐        ┌─────────────────┐      ┌─────────────────┐     ┌─────────────────┐
│ Customer        │─────►  │ Planning        │────► │ Special         │───► │ Production /    │
│ Focus 5.2       │        │ Production /    │      │ Processes       │     │ Service 7.5     │
└─────────────────┘        │ Processes /     │      │ 7.5.2           │     └─────────────────┘
                           │ Service 7       │      └─────────────────┘
┌─────────────────┐        └─────────────────┘
│ Identification /│
│ Traceability    │
│ 7.5.3           │
└─────────────────┘

┌─────────────────┐
│ Customer        │
│ Communication   │
│ 7.2.3           │
└─────────────────┘
```

| Outsourcing 4.1 | Monitoring & Measuring of Product 8.2.4 | Control of NC Product 8.3 | Preservation of Product 7.5.5 |

| Purchasing 7.4 | Control of Mon & Meas Devices 7.6 | Corrective Action 8.5.2 | |

Customer Satisfaction 8.2.1
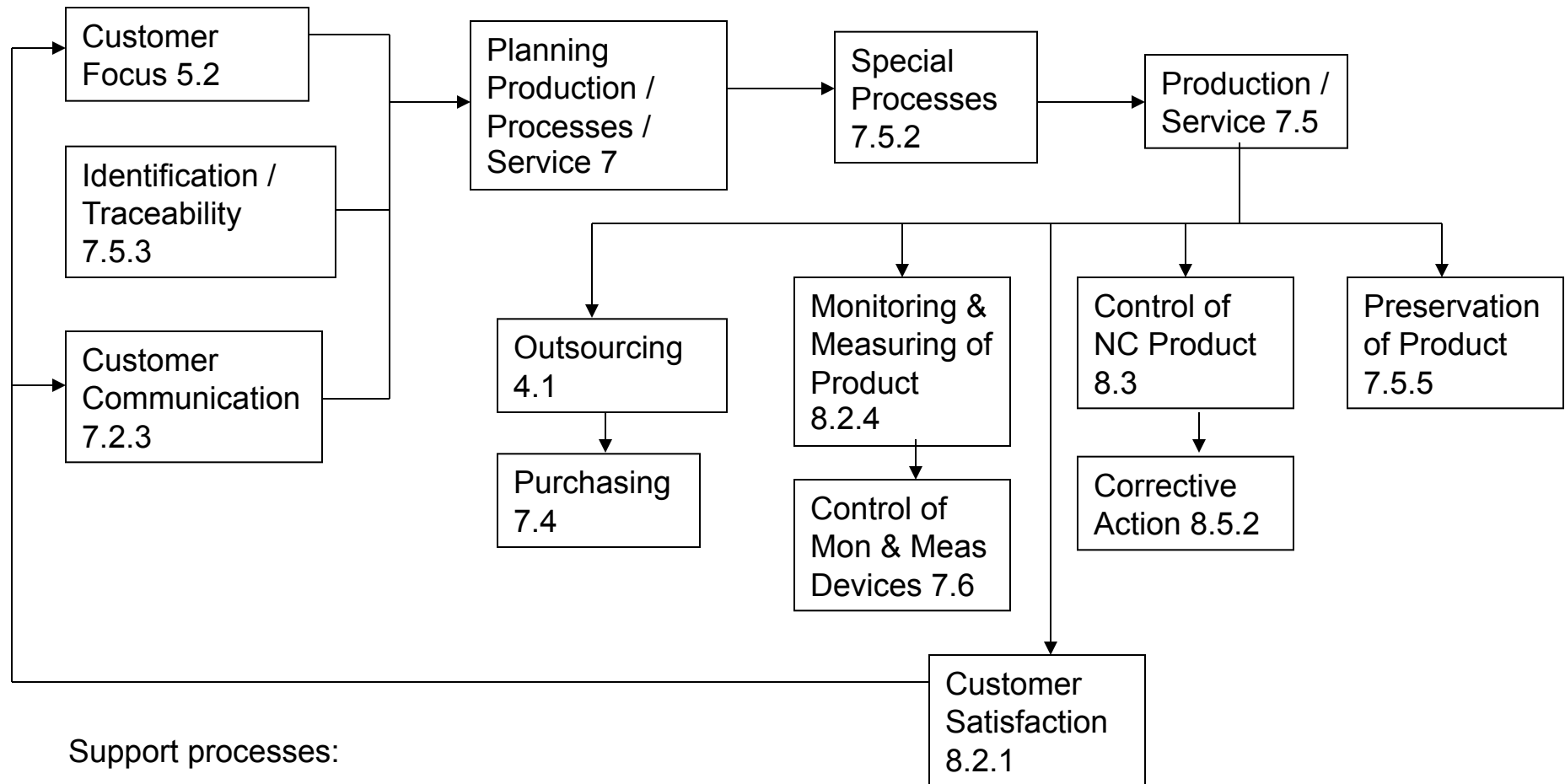
Support processes:

Measurement, Analysis & Improvement 8

Resource Management 6

Control of Documents 4.2.3

Control of Records 4.2.4

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Process Audit Approach – Example

Customer Focus 5.2

Customer Satisfaction 8.2.1

Continual Improvement 8.5.1

Internal Audits 8.2.2

Corrective Action 8.5.2

Preventive Action 8.5.3

Management Commitment and Responsibility 5.1, 5.6

Quality Manual 4.2.2

Quality Policy 5.3

Quality Objectives 5.4.1

Internal Communications 5.5.3

Monitoring and Measuring 8.2

Resources 6.1

Quality Management System 4

Support processes:

Control of Documents 4.2.3

Control of Records 4.2.4

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