

Continuous Quality Improvement

Dr.T.V.Subramanian



A Few Questions to Ask...

- Services provided in timely manner?
- Was necessary care provided?
- Efficient provision of care?
- Was the expected outcome achieved?
- Are patients, clients and customers satisfied with provided services?

Success is achieved through meeting
the needs of those we serve.



Quality Assurance

“The planned and systematic activities implemented in a quality system so that quality requirements for a product or service will be fulfilled.”

American Society for Quality

*All Standards like ISO 9000, NABH are
QA methods*



Quality Control

“The observation techniques and activities used to fulfill requirements for quality.”

*American Society for
Quality*



Quality Improvement

“Continuous improvement is an ongoing effort to improve products, services or processes. These efforts can seek “incremental” improvement over time or “breakthrough” improvement all at once.”

American Society for Quality



Core Concepts of CQI

- Quality defined as meeting and/or exceeding expectations of customers.
- Success is achieved through meeting the needs of those we serve.
- Most problems are found in processes, not in technology.
- CQI does not seek to blame, but rather to improve processes.



Putting It All Together

**QA + CQI + Peer Review +
Consumer Satisfaction =
TQM**



Why focus on process?

-To cope with complexity

- Sources of Complexity

- Volume increase
- Variety increase
- Employee increase
- Technology additions
- Increase in geographic locations



Models of Process quality improvement

- PDSA (or PDVA) approach
 - 7 QC tools ,Root cause analysis ,Process mapping, metrics
- Lean Thinking
 - 5S
- Six-Sigma approach

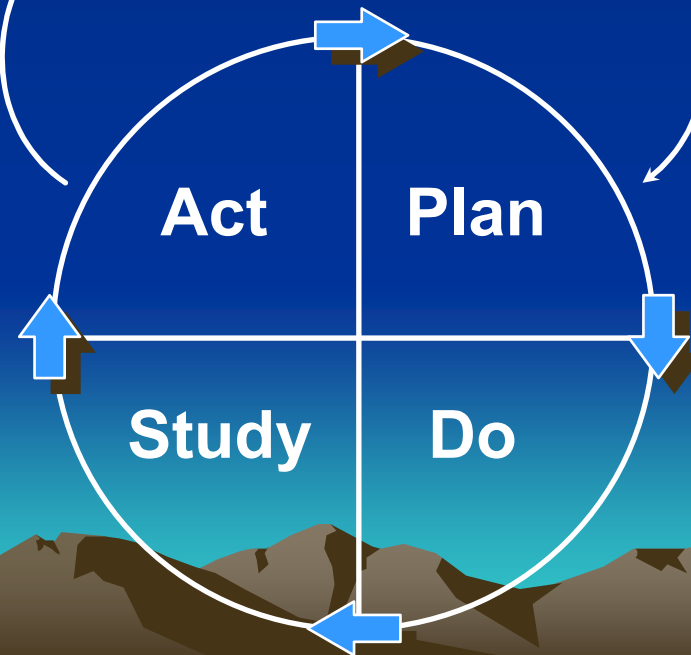
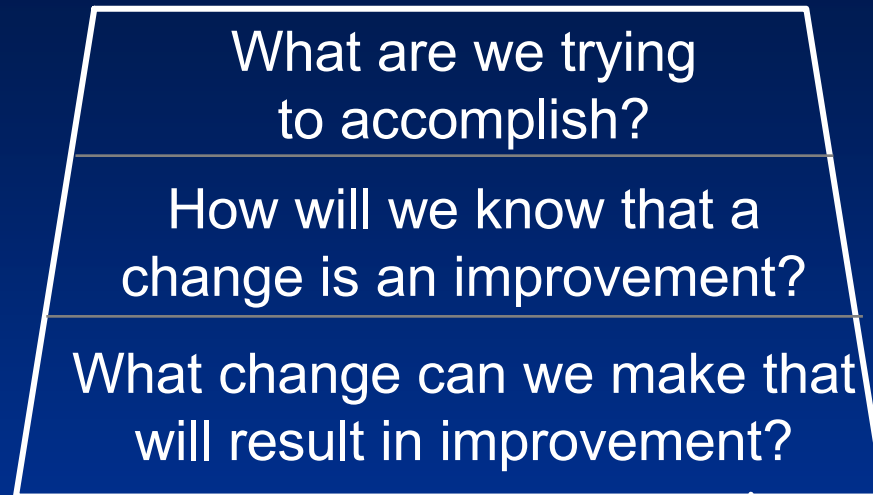


Common Themes among QI Models

- **Improvement is about learning**
- **Measure your progress**
- **Improvements thru continuous cycles of changes**
- **Leadership is needed**



Model for Improvement



**Model
for
Improvement**

Model for Improvement

**What are we trying
to accomplish?**

How will we know
that a change is an
improvement?

What change can we make
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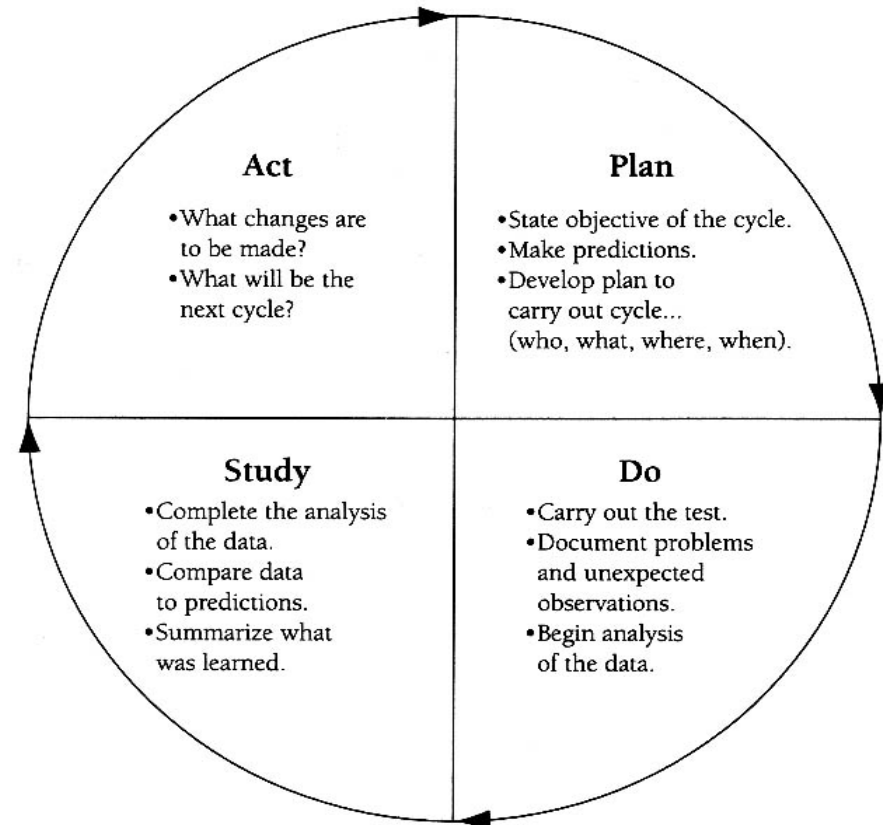
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PDSA CYCLE

- **Plan** - Plan a change
- **Do** - Try it out on a small-scale
- **Study** - Observe the results
- **Adopt, adapt, or abandon** - Refine the change as necessary



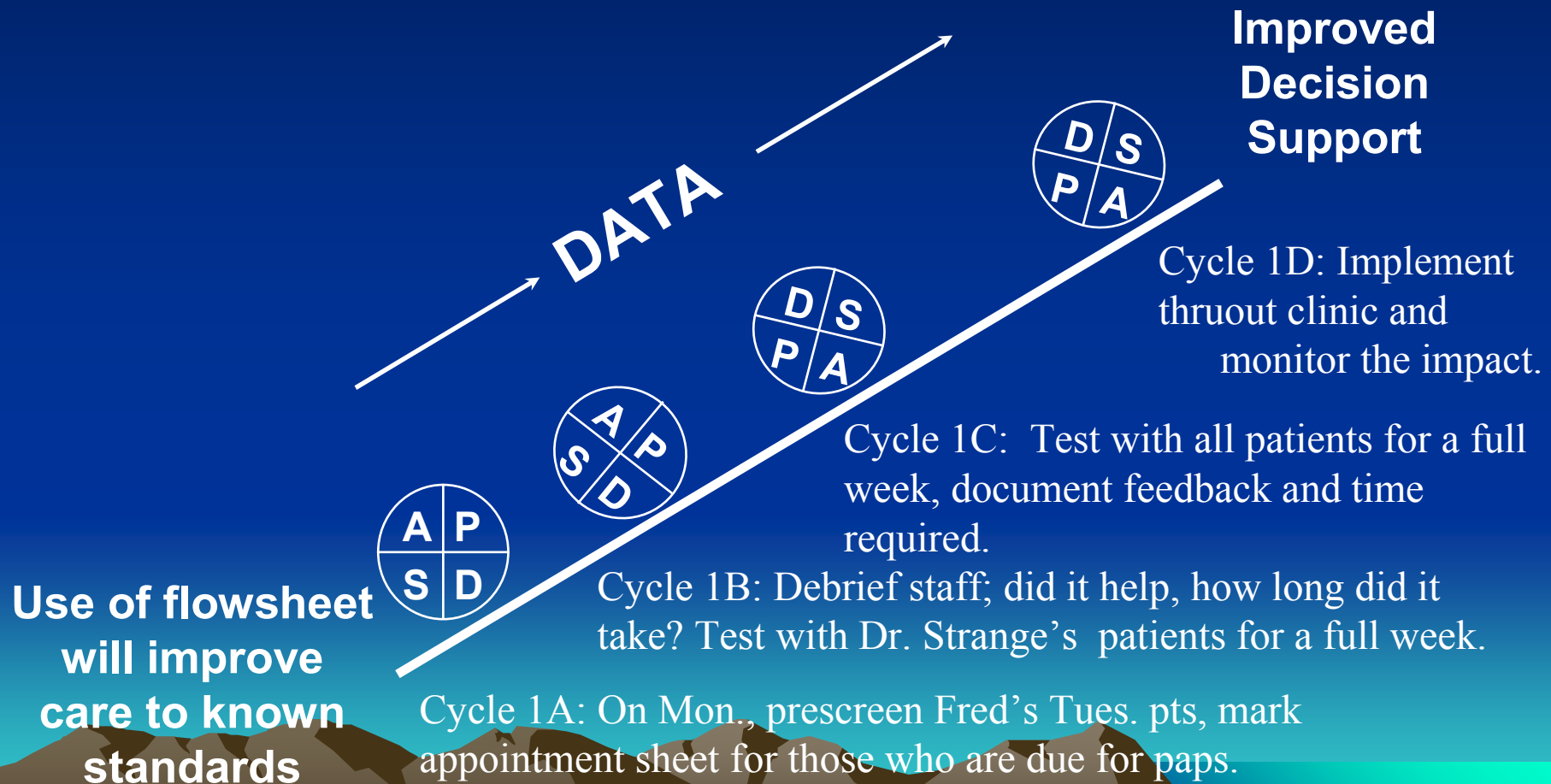
Elements of the PDSA Cycle.

PRINCIPLES OF PDSA CYCLES

- ✦ Short cycles of changes to accelerate rate of improvement
 - ✦ small scale tests (“What can you test till next Tuesday”)
 - ✦ collect just enough information
- ✦ Create flow of ideas, then emphasize implementation
 - ✦ increase frequency of tests
 - ✦ build knowledge sequentially - use multiple cycles to adapt a change to your system
- ✦ Adopt existing knowledge (“not more research but more application of existing knowledge”)
 - ✦ ‘Steal shamelessly, Share senselessly’
 - ✦ Promote peer learning



PDSA Cycles: Testing a pap Cuing Plan



Performance Measurement and Data



Why Measure?

- Separates what you *think* is happening from what is *really* happening
- Establishes a baseline
- Helps to avoid putting ineffective solutions in place
- To monitor improvements and prevent slippage



Lean Thinking

The Fundamental Insight & Objective:

Shift the focus of management from existing organization, technologies, and assets to the product!

Differentiate value from waste (*muda*)

Enhance value and remove waste by looking down, not up!!!



Lean Thinking Principles

- Accurately specify value by product
- Identify the value stream
- Make the product flow
- At the pull of the customer
- In pursuit of perfection



Six Sigma: A Philosophy

- A vision of process performance
- Tantamount to “zero defects”
- A “Management Mantra”



What is a Six Sigma process?

- DMAIC

Define, Measure, Analyze, Improve, Control

(fix existing processes)

- DMADV

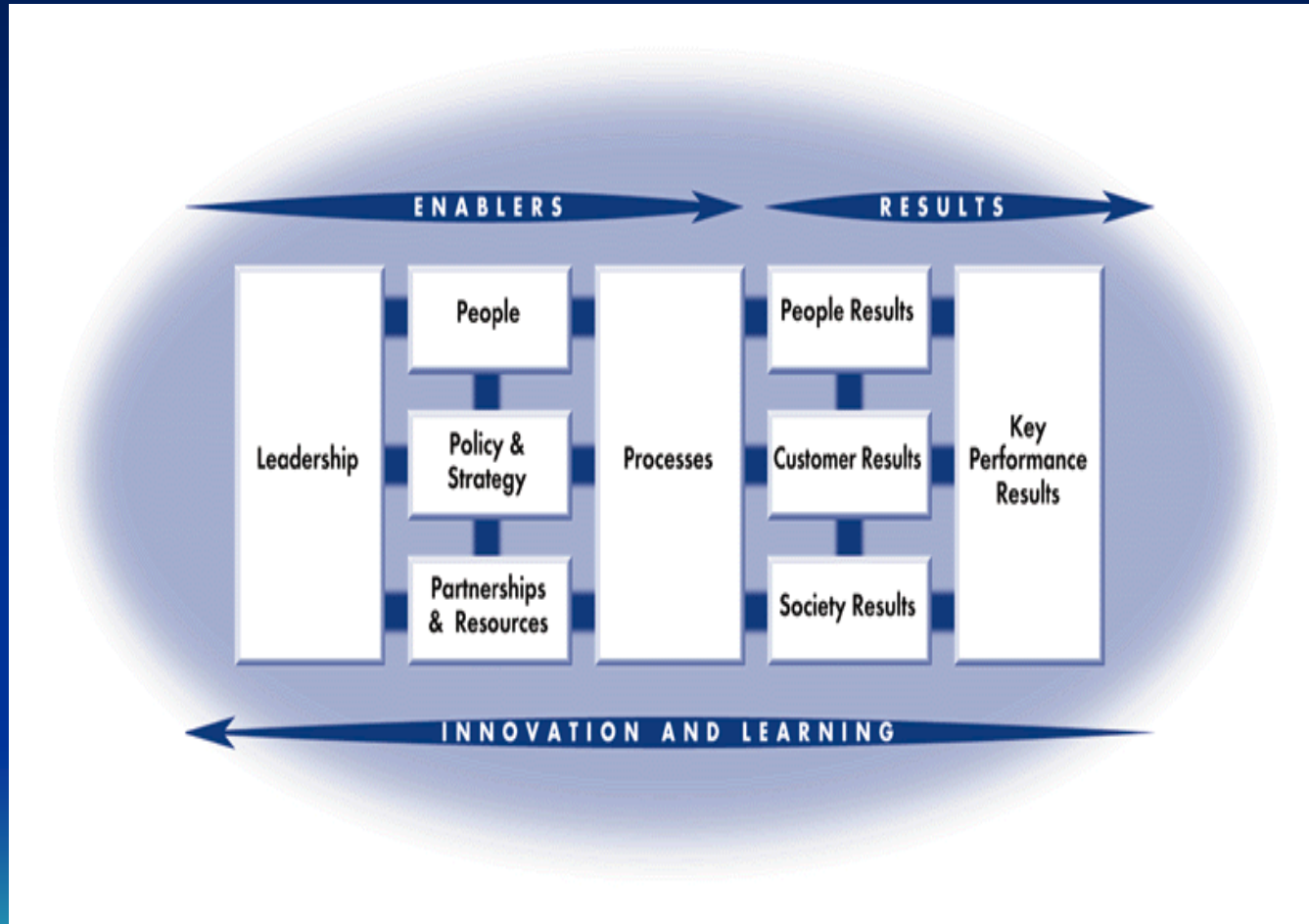
Define, Measure, Analyze, Design, Verify

(create new processes)



Business Excellence Model

on



- Back up slides



Analysis Tools: Flowcharts

Flowchart is picture of any process,

Flowcharts help visualize process

Easier to understand and easier to improve.

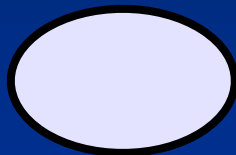
Identifies potential sources of problems and solutions



FLOWCHART

Flowchart symbols

Oval: shows beginning or ending step in a process



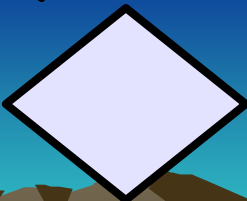
Rectangle depicts particular step or task



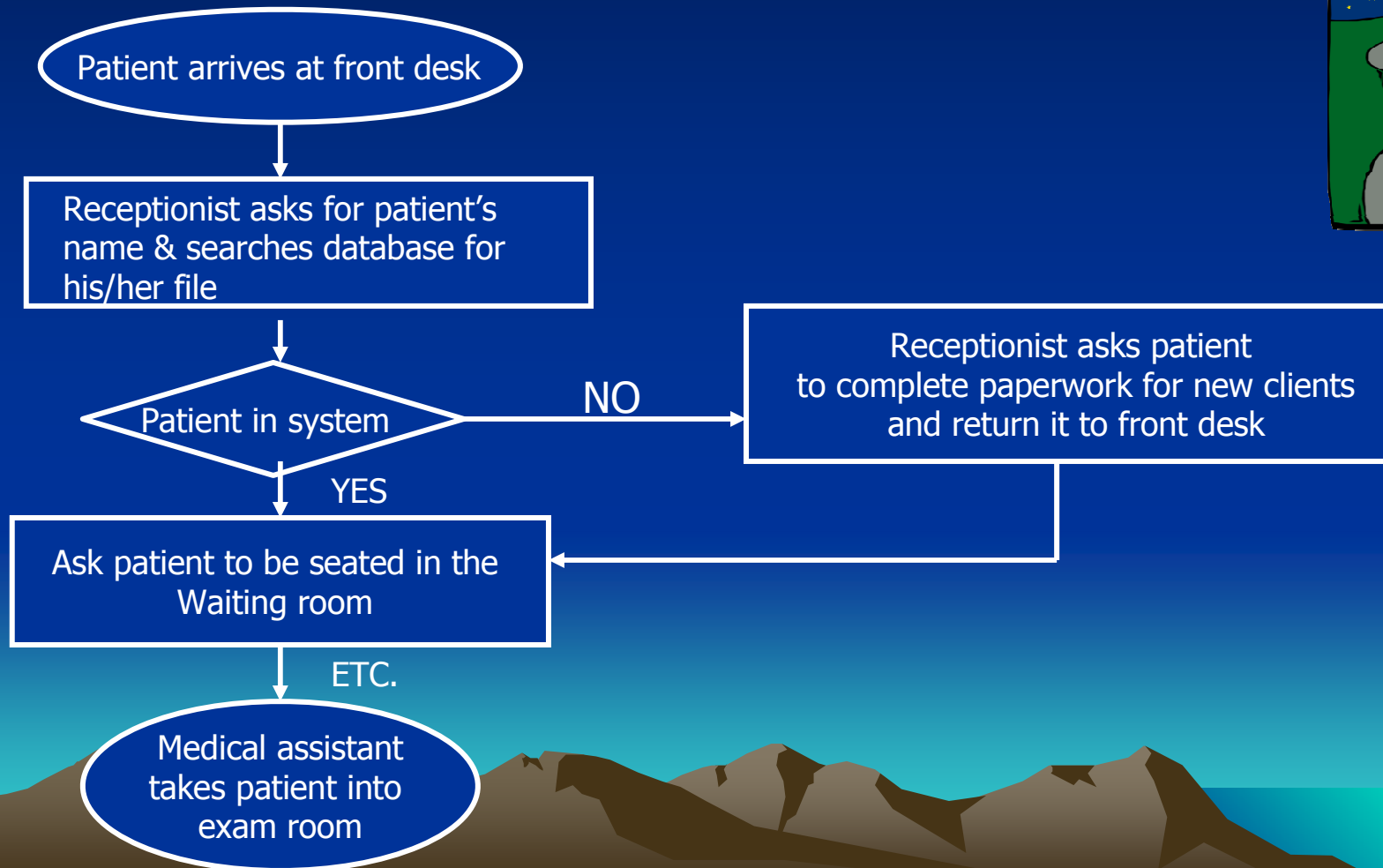
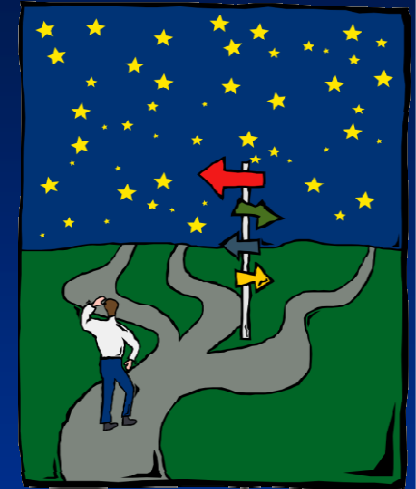
Arrow: shows direction of process flow



Diamond: indicates a decision point



FLOWCHART EXAMPLE



CAUSE-AND-EFFECT DIAGRAM

Used to map variables that may influence a problem, outcome, or effect

Also called:

Ishikawa diagram

Fishbone diagram



CAUSE-AND-EFFECT DIAGRAM CAUSES

The four M's

Methods, Materials, Machines, Manpower

The four P's

Place, Procedures, Policies, People

The four S's

Surroundings, Suppliers, Systems, Skills



CAUSE-AND-EFFECT DIAGRAM SAMPLE

