

Knowledge Transfer for New Nuclear Power Programs



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The Challenges of today!

➤ **Nuclear power “market” behaviour**

- High upfront capital costs
- Sensitive to interest rates
- Long lead times (planning, construction, etc) payback periods
- Regulatory / policy risks
- Market risks
- Political risk

➤ **Security concerns**

- Access to proliferation sensitive parts of the fuel cycles

➤ **Public concerns – acceptance?**

- HLW, Radiation impacts of severe accidents

➤ **Nuclear infrastructure!**

- Knowledge, competence and skilled labour force
- Understanding Nuclear Quality
- Safety Culture!!!!

Nuclear education

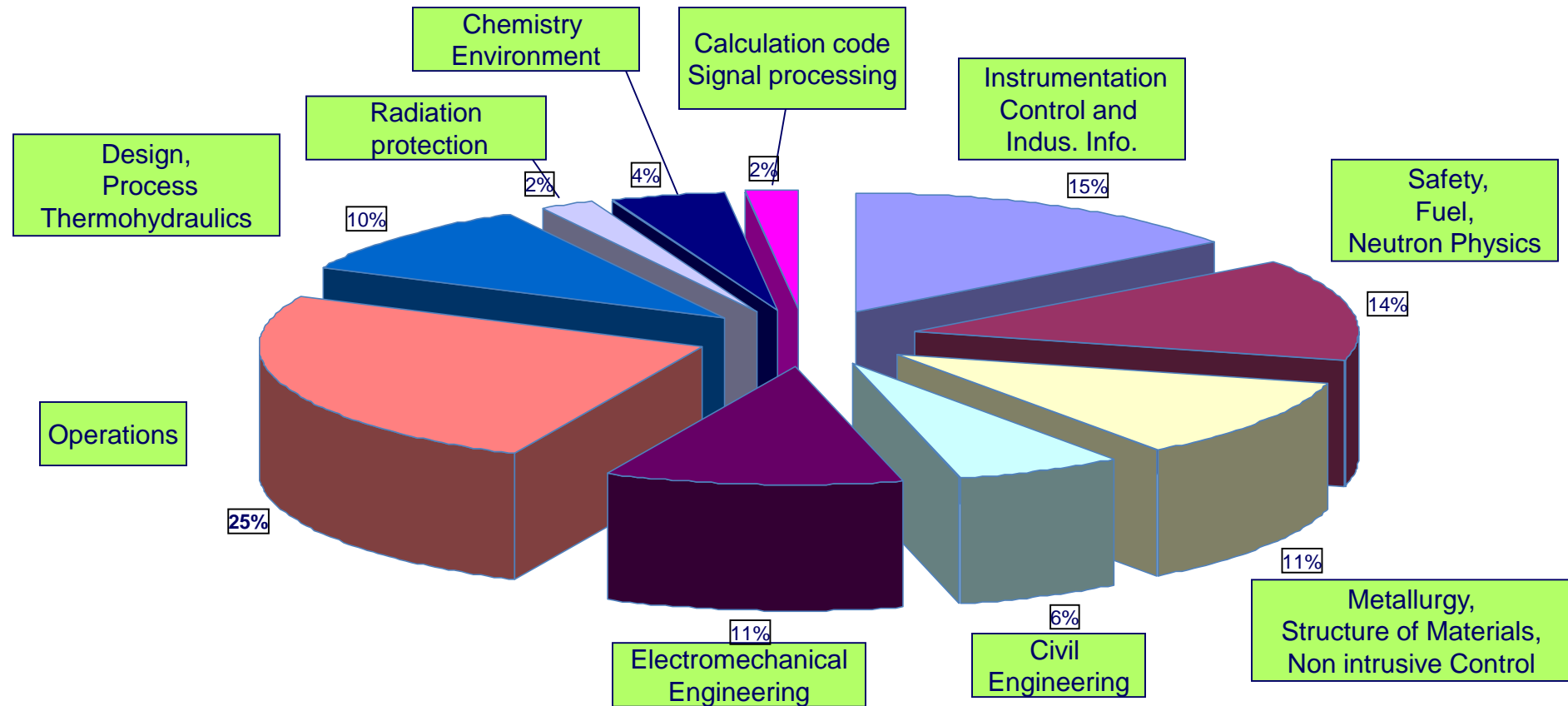


- ❖ *The Students*
- ❖ *The Teachers*
- ❖ *Courses and textbooks*
- ❖ *Infrastructure(R&D)*
- ❖ *Nuclear facilities*
- ❖ *Outreach to society*

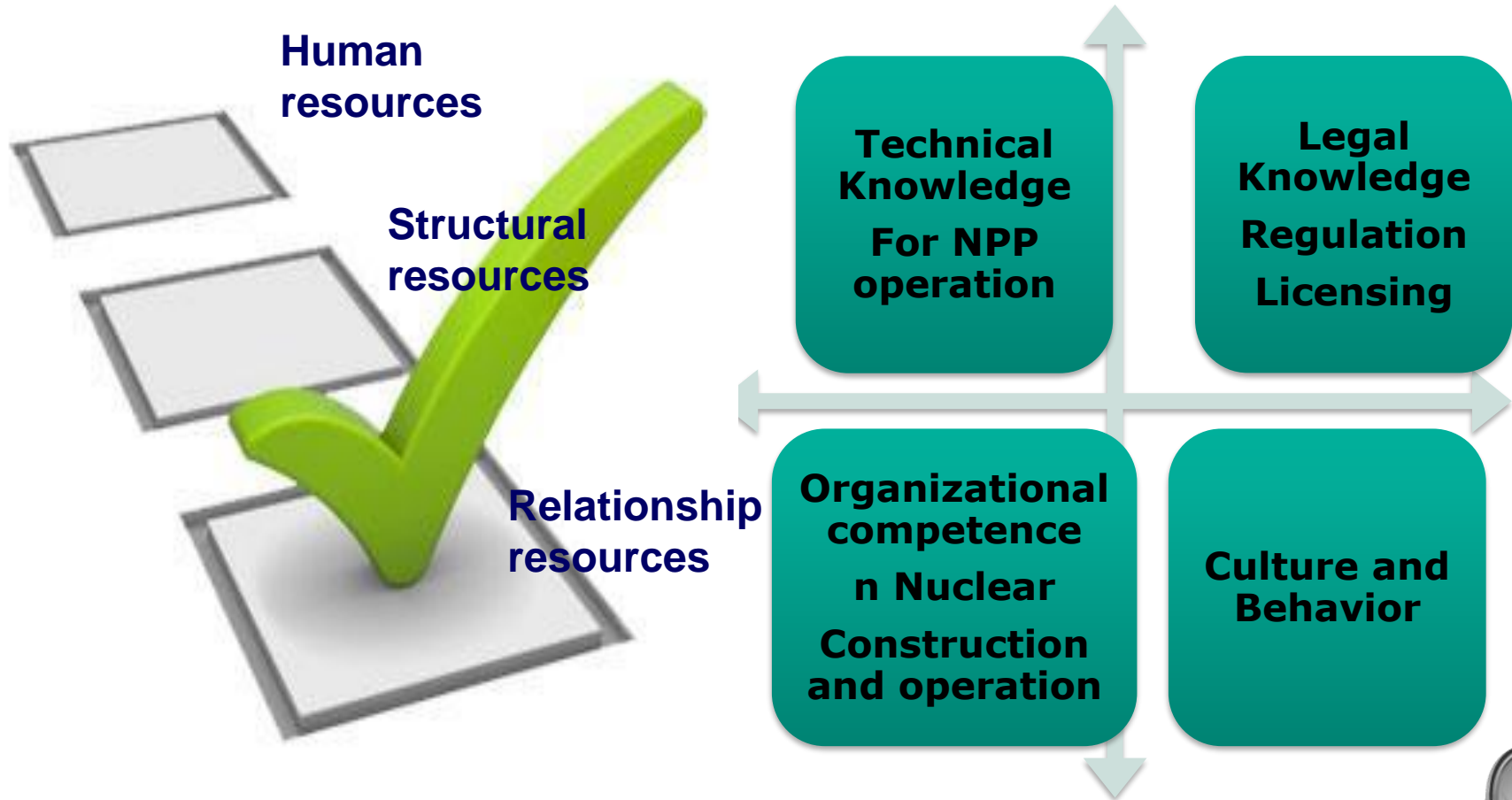
Knowledge for whom and what?



Academic and Practical Education

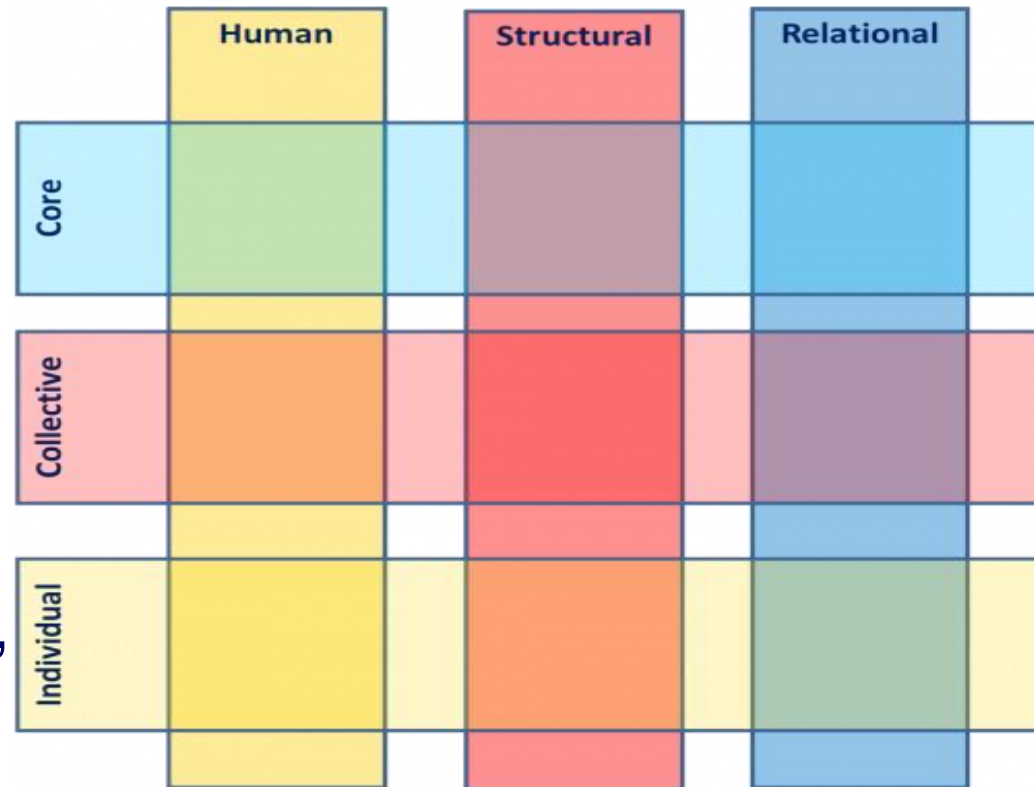


The Knowledge Resources Matrix



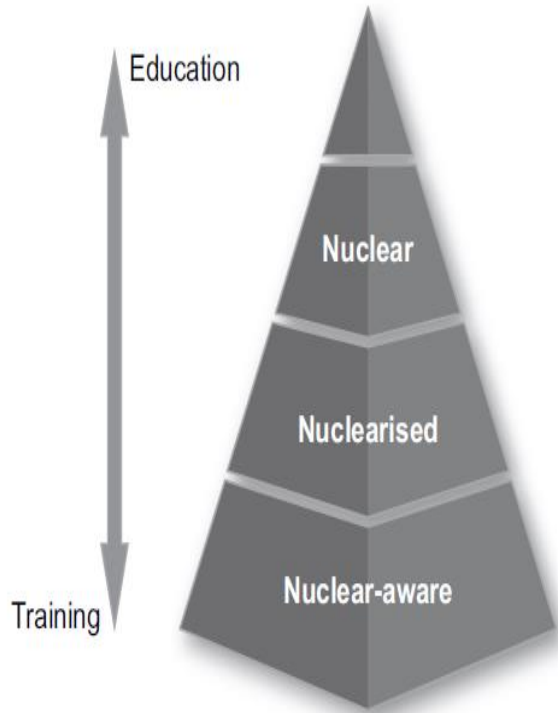
Management competence

- The ability of the organisation to meet its objectives effectively and efficiently through the interaction of
 - people having the appropriate knowledge and skills,
 - processes, procedures, systems and technology
 - behaviours and culture,



Knowledge resources

Nuclear Competence



- ❖ **Nuclear** – Profound understanding of nuclear science and technology..
- ❖ **Nuclearized** – Good knowledge of nuclear implications of other competencies.
- ❖ **Nuclear aware** – Basic knowledge for safety rules and practices in nuclear area.

Harmonization



- ❖ High quality education
- ❖ Nuclear educational standards,
- ❖ Learning objectives,
- ❖ Curricula,
- ❖ Training materials,
- ❖ Methodology,
- ❖ Providing a uniform global educational approach between the vendor countries.



Thank you

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