



Competency Measurement Model

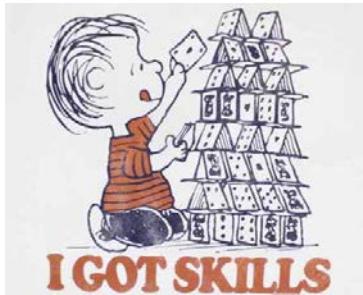
36 – SPECIAL SESSION: Competence Management in Statistics

Dario Russo

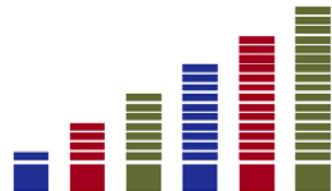


Madrid, May 31 - June 3

Agenda



PART 1 – Building the model
PART 2 – Measuring competency
PART 3 – Using the model



Competency Measurement Model

Building a Process Model

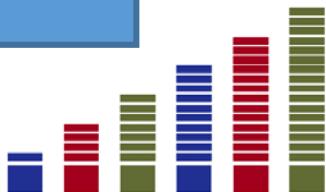
The Process X took 300,63 days of work in the year 2012

PROCESS X RESOURCING - YEAR 2012 (*sample*)

process/employee	Employee1	Employee1	Employee1	Employee1	Employee1	INPUT
percentage	15,12%	15,34%	100,00%	45,76%	3,54%	
employee time	223	245	124	213	222	
Process x work time	33,72	37,58	124,00	97,47	7,86	300,63



Employee1 worked on the Process X for 15,12% of his time in the year 2012



Competency Measurement Model

Competency Definition

KNOWLEDGE (examples)

- knowledge of IT internal regulations
- knowledge of security procedure
- knowledge of training management procedure
- knowledge of regulations on business travel and assignments
- knowledge of staff services IT procedure
- ...

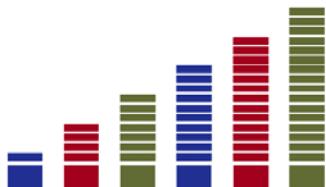
SKILL/KNOW-HOW (examples)

- know-how of business project management
- know-how of organizational analysis
- know-how of English language
- know-how of application development techniques
- know-how of website management techniques
- ...

BEHAVIOUR (examples)

Category	Competency	Definition	Demonstrated behaviour
People management competencies	Building team spirit	Provide team members with the excitement and desire to cooperate with each other, contributing to common goals	<ul style="list-style-type: none"> • Encourage help and respect to other team members • Create a common mission and a feeling of belonging to a team which aims at that
	Developing people	Help team members to reach their potential in personal development	<ul style="list-style-type: none"> • Provide mentoring and experience transfer • Provide feedback on strengths and weaknesses of the team members

COMPETENCY – “A specific, identifiable, definable, and measurable knowledge, skill, ability and/or other deployment-related characteristic (e.g. behavior) which a human resource may possess and which is necessary for the performance of an activity within a specific business context”.



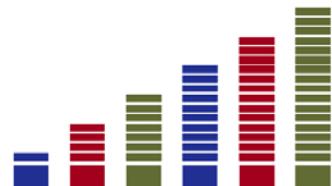
Competency Measurement Model Development and Use of the Model

a. to build up the model:

- Create the process list
- Detect the process roles
- Create the matrix process/role vs. required competencies with appropriate rating
- Integrate the competencies taxonomy including the owned competencies not included in the required competencies set
- Create the matrix employees vs. owned competencies
- Create the matrix process/role vs. employees reporting the employees' effort figures
- Calculate the competency gaps

b. to use the model:

- Analyze the data
- Plan corrective actions
- Repeat the measurement on a regular basis (e.g. yearly)

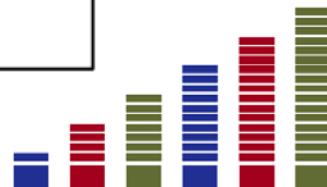
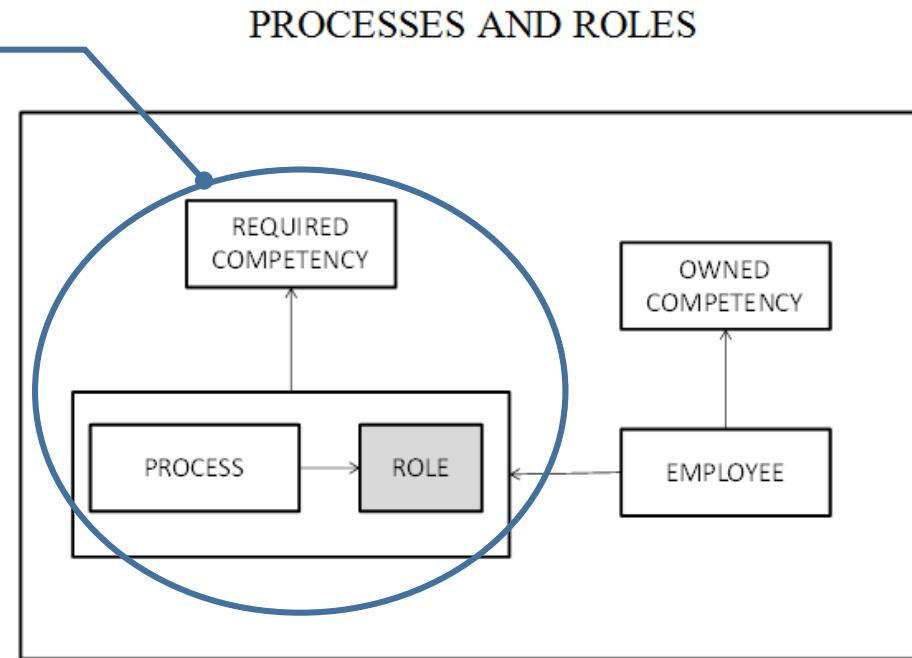


Competency Measurement Model

Process Requested Competency Measurement

The Process Requested Competency

The Process requires specific competency depending on the role the resources play



Competency Measurement Model

Process Requested Competency Measurement

The Process Requested Competency

0. None

- No competency required for the process

1. Limited

- Limited competency required for the process
- Competency has been minimally demonstrated
- May have had limited opportunity to apply the competency
- May have limited understanding of the competency

2. Basic

- Basic understanding or knowledge needed for the process
- Basic understanding and knowledge sufficient enough to handle routine tasks
- Requires some guidance or supervision when applying the competency
- Understands and can discuss terminology and concepts related to the competency

3. Proficient

- Detailed knowledge, understanding, and application of the competency
- Ability to handle non-routine problems and situations
- Requires minimal guidance or supervision / works independently
- Consistently demonstrates success in the competency
- Capable of assisting others in the application of the competency

4. Advanced

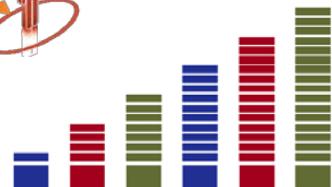
- Highly developed knowledge, understanding, and application of the competency required to be successful in the job and organization (total mastery)
- Can apply knowledge outside the scope of one's position
- Is able to coach or teach others on the competency
- Has a long-term perspective
- Helps develop materials and resources in the competency

5. Expert

- Specialist/Authority level knowledge, understanding, and application of the competency required to be successful in the process.
- Recognized by others as an expert in the competency and is sought out by others throughout the organization (expert in the area)
- Works across team, department, and organizational functions
- Applies skill across multiple projects or functions
- Able to explain issues in relation to broader organizational issues
- Creates new applications or processes
- Has a strategic focus



5 (+1) LEVEL SCALE



Competency Measurement Model

Owned Competency Measurement

The Owned Competency



0 - None: You are aware of information, ideas and situations related to this competency but have not yet had an opportunity to practice it.

1 - Limited: You've just started to find opportunities to work on this competency. You make initial assessments of what is expected of your role. Your understanding of the impact of your actions is limited. Your actions meet some performance expectations but you know that you could improve.

2 - Basic: You've demonstrated this competency and think about how to develop it further. You engage in conversations with others about how you can best contribute and how this competency is important.

3 - Proficient: Your actions usually meet the expectations of yourself and others. You look for opportunities to apply this competency in other areas of your life.

4 - Advanced: You've reached your overall goals and often think about opportunities to use and practice this competency. You consistently meet the expectations of yourself and others. You consider your learning and appreciate the significance of this competency in relationship to your experiences. You demonstrate high quality work that has a positive impact.

5 - Expert: You have an overall mastery of this competency. You understand and demonstrate it in all areas of your life. You are considered to be a role model by others and regularly exceed expectations. Your work is of a very high or exceptional quality and has significant impact.

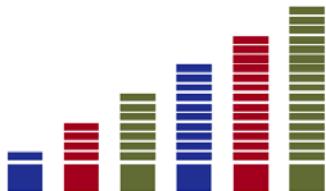
5 (+1) LEVEL SCALE



Competency Measurement Model

Owned Competency Measurement

I demonstrated my teamworking skills as part of an elite assassination squad but if I told you any more I would have to kill you.



Competency Measurement Model

Competency Assessment



“self-assessment”



structured test

assessment center

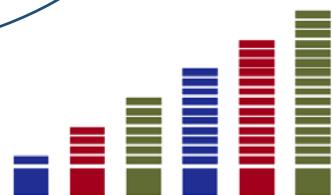


manager's evaluation



- Evaluation**
- OUTSTANDING
 - Excellent
 - Very Good
 - Average
 - Below Average

manager's assessment



Competency Measurement Model

Competency Gap

Analysis of the gaps



A. W. Smith



Example 1

OWNED COMPETENCY LESS THAN REQUESTED COMPETENCY

Resource: A. W. Smith – Process: x

competency	c_r – requested	c_o - owned	G - Gap
Process x	5	4	1

Fig. 13

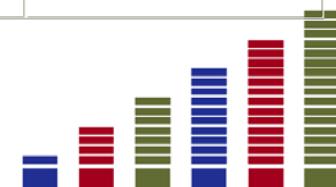
Example 2

OWNED COMPETENCY GREATER THAN REQUESTED COMPETENCY

Resource: A. W. Smith - Process: x

competency	c_r – requested	c_o - owned	G - Gap
Process x	3	5	0

Fig. 14



Competency Measurement Model

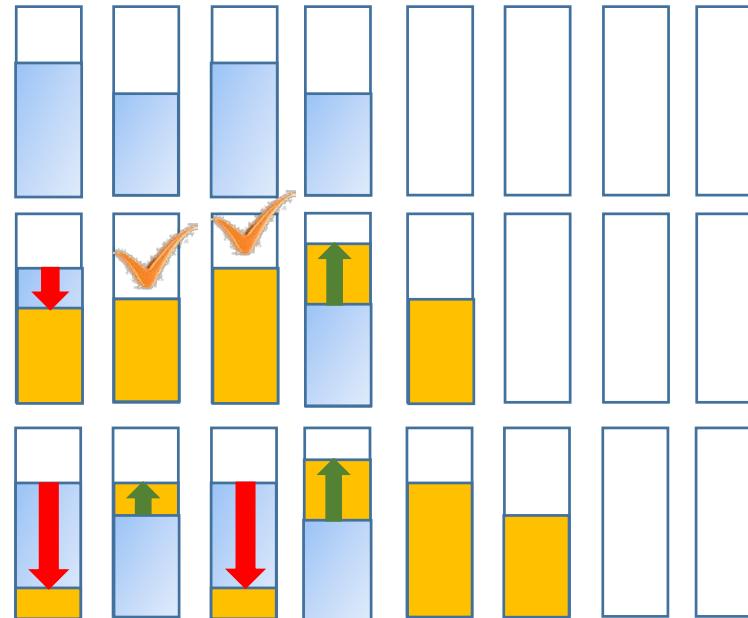
Using the Model

Analysis of the gaps

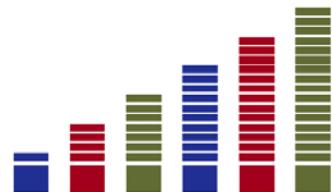
process



competencies



↓ = gap



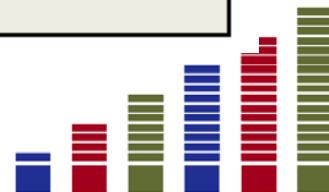
Competency Measurement Model Using the Model



PROCESS/ROLE REQUESTED COMPETENCY SET

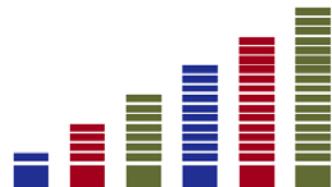
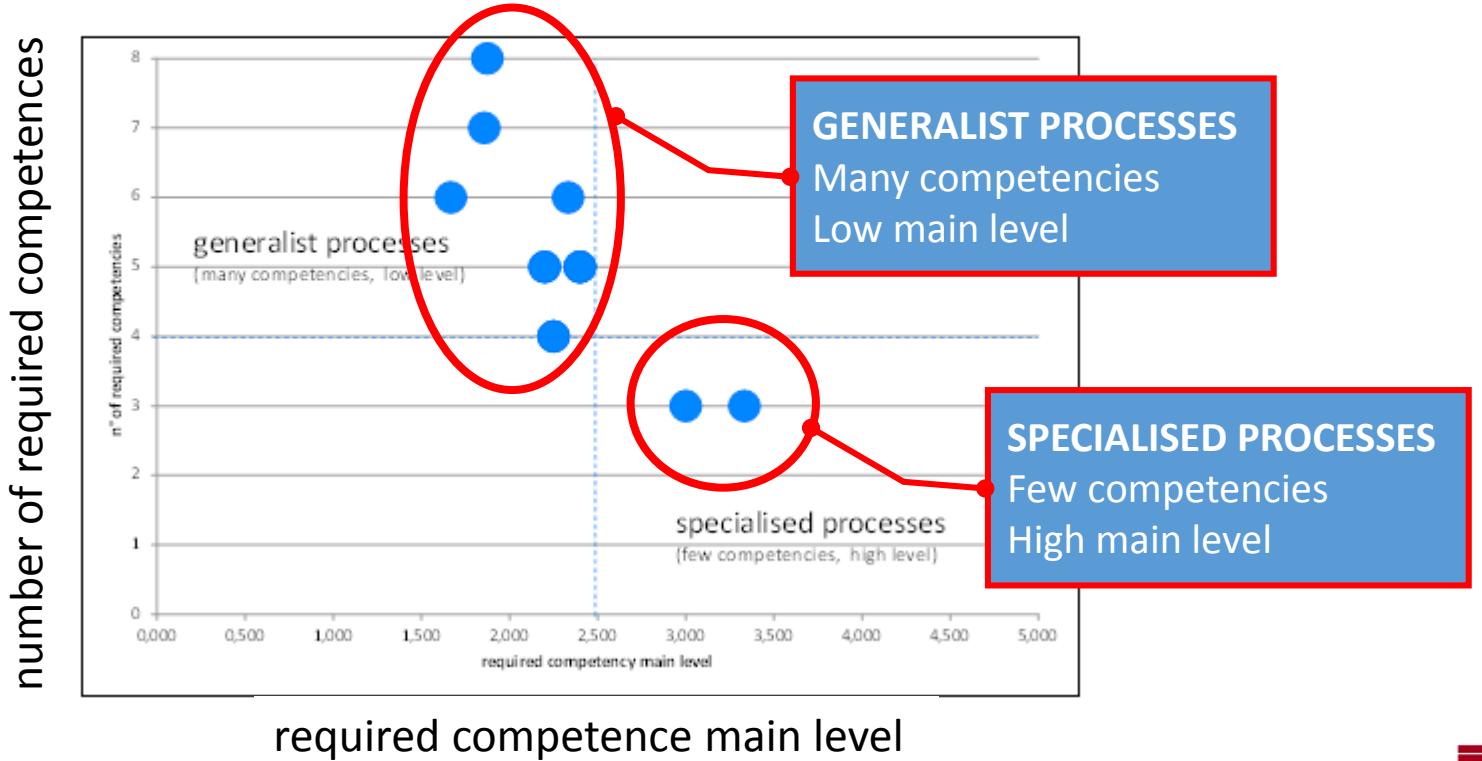
process/ competencies	Competence 1	Competence 2	Competence 3	Competence 4	Competence 5	Competence 6	Competence 7	Competence 8	required main level	no. of required competencies
Process 1 Role 1.1	5	4	1	0	0	0	0	0	3,333	3
Process 1 Role 1.2	3	1	5	0	0	0	0	0	3,000	3
Process 2 role 2.1	4	2	1	4	1	1	1	1	1,875	8
Process 2 role 2.2	2	2	0	3	4	0	1	2	2,333	6
Process 3 role 3.1	2	2	0	0	0	5	1	1	2,200	5
Process 3 role 3.2	4	2	0	0	0	1	4	1	2,400	5
Process 3 role 3.3	4	2						0	2,250	4
Process 4 role 4.1	4	1						1	1,857	7
Process 4 role 4.2	4	1						0	1,667	6
Process 5 role 5.1	5	4						1	2,400	5
Process 6 role 6.1	2	2						1	2,200	5
Process 6 role 6.2	4	2						1	2,400	5
Process 6 role 6.3	4	2						0	2,250	4
n° of involved processes	13	13	6	4	2	9	11	8		

Process 1 - Role 1.1
Requires
Competence 1
at Level 5 (expert)



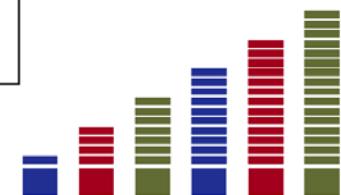
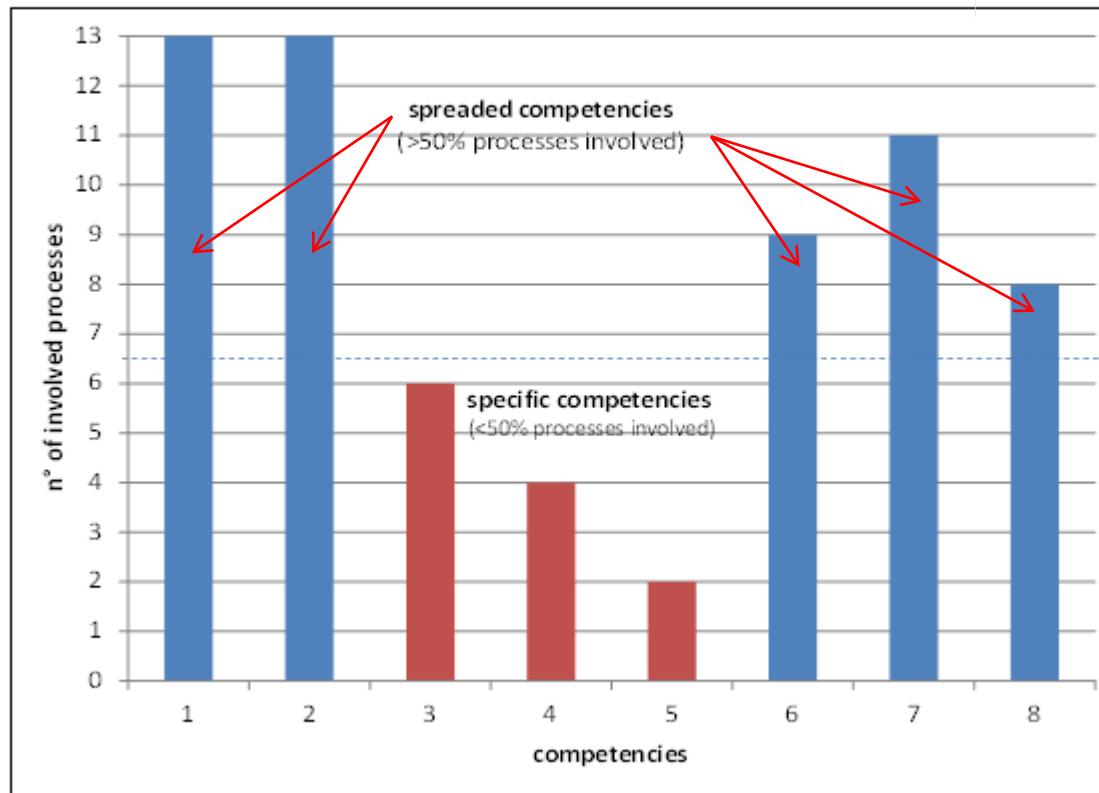
Competency Measurement Model Using the Model

PROCESS CLUSTERING BY REQUESTED COMPETENCY



Competency Measurement Model Using the Model

KEY COMPETENCIES

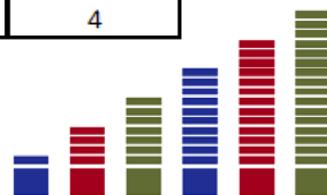


Competency Measurement Model Using the Model



OWNED COMPETENCY SET

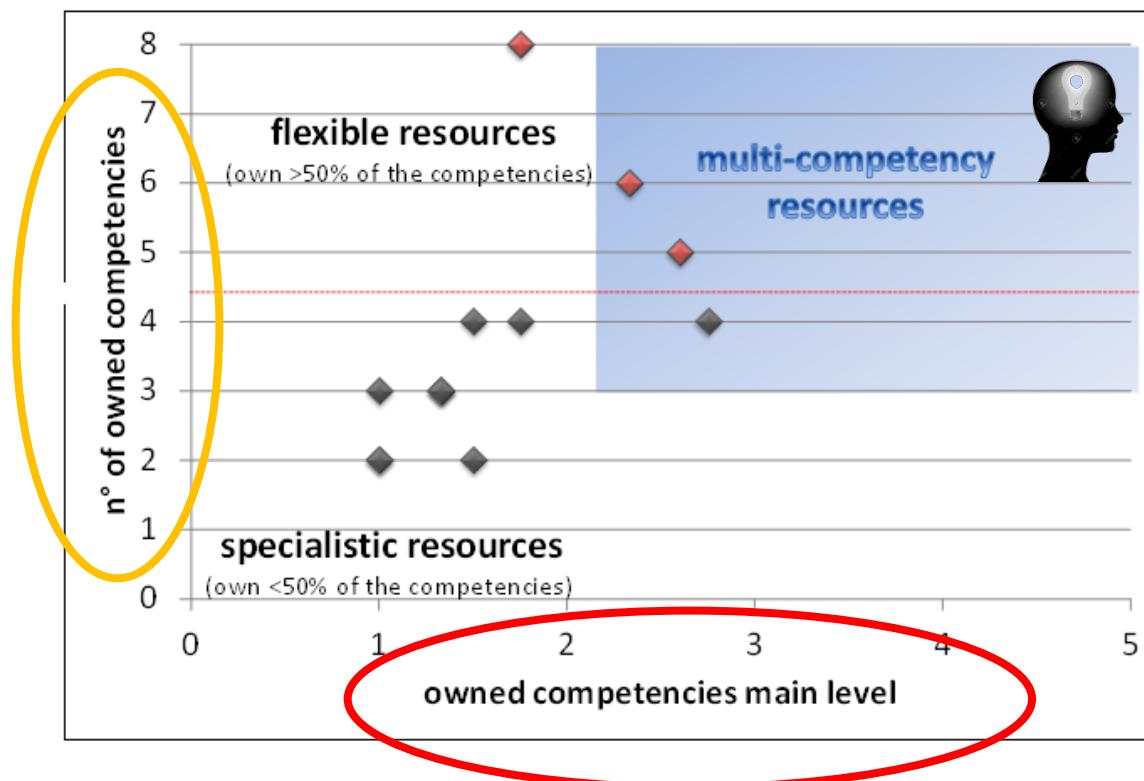
employee/ competency	Competence 1	Competence 2	Competence 3	Competence 4	Competence 5	Competence 6	Competence 7	Competence 8	main level of owned competencies	no. of owned competencies
Employee 1	5	5	0	0	1	1	1	0	2,600	5
Employee 2	3	1	5	0	0	0	2	0	2,750	4
Employee 3	2	2	1	4	1	1	2	1	1,750	8
Employee 4	3	2	0	3	2	0	2	2	2,333	6
Employee 5	1	2	0	0	0	1	0	0	1,333	3
Employee 6	2	0	0	0	0	0	0	1	1,500	2
Employee 7	2	0	0	0	1	1	0	0	1,333	3
Employee 8	0	1	0	0	0	0	0	1	1,000	2
Employee 9	0	0	0	1	1	1	0	0	1,000	3
Employee 10	2	0	0	0	1	0	0	1	1,333	3
Employee 11	0	2	0	0	1	3	1	0	1,750	4
Employee 12	0	0	0	0	0	1	0	1	1,000	2
Employee 13	3	1	0	0	0	1	1	0	1,500	4



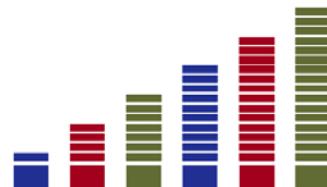
Competency Measurement Model Using the Model



flexibility



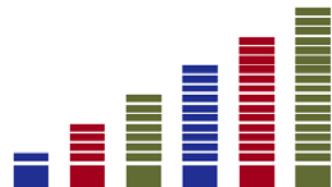
specialization



Competency Measurement Model Conclusions

What can I do?

- have a comprehensive picture of
 - organization skill map
 - development needs
 - potential leaders
 - critical resources
- identify the gaps
- place resources in the right roles
- plan the training
- assess the change impact of movements of individuals
- improve recruitment and selection practices
- improve individual, organizational and career development programs
- improve performance management





The End



Thank you for your attention!

