



## Benefits of Multi-Model Process Improvements in Small – Medium Businesses

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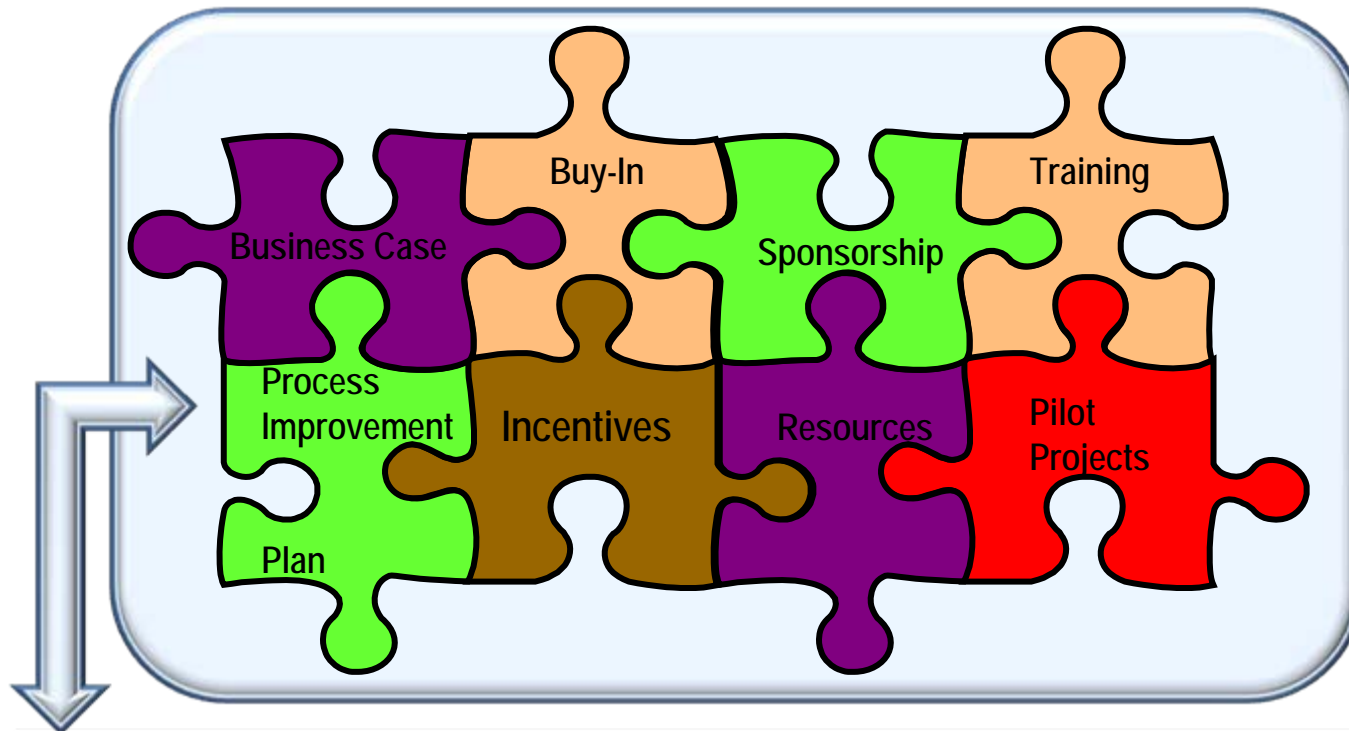
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- Process Improvement Factors in Small – Medium Businesses
- Multi-Model Process Improvement Scenarios
- Multi-Model Commonalities
- Multi-Model Process Improvement Staff
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Small – Medium Businesses
- Strategy Map for Using Audits and Appraisals
- Depth of ISO 9001-2000/CMMI-DEV v1.2 Coverage
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Factors for Small – Medium Businesses
- Lessons Learned



## Success Factors in Small – Medium Organizations

<p><b>Simpler organization structure</b></p>	<p><b>Efficient communication skills</b></p>
<p><b>Flexible processes</b></p>	<p><b>Depth of understanding of business goals</b></p>
<p><b>Staff involvement and receptiveness to new ideas</b></p>	<p><b>Awareness of existing processes</b></p>
<p><b>Process variance simpler to control</b></p>	<p><b>Less diversity in products &amp; services</b></p>



Small to medium businesses often function in focused markets as:

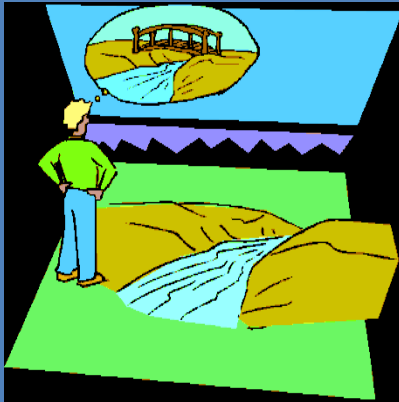
- suppliers of specialized on-site technical services or products
- domain specialists
- staff augmentation



Costs of implementing process improvement models are considered key investments in these vulnerable cash flow environments.

Both near and long term cash flow analysis typically includes factors such as:

1. customer base stability
2. revenue cycles
3. costs of acquiring appropriate resources and skills in the process improvement models



Understanding and taking advantage of commonality and overlap in model functions and architectures is a key factor in planning implementation of different models.

Planning implementation activities typically includes assessment of critical factors such as:

1. required resources
2. training
3. non-intrusive scheduling and
4. risk management.



The resources and skills required for depth of understanding the functions and architectures of multi-models is acquired from a range of possibilities such as outsourcing, hiring expertise, training current staff or combinations.

Selection of any of these possibilities is both costly and risky as there are no guarantees of success in process improvement.





Planning a risk management strategy typically includes identifying sources such as:

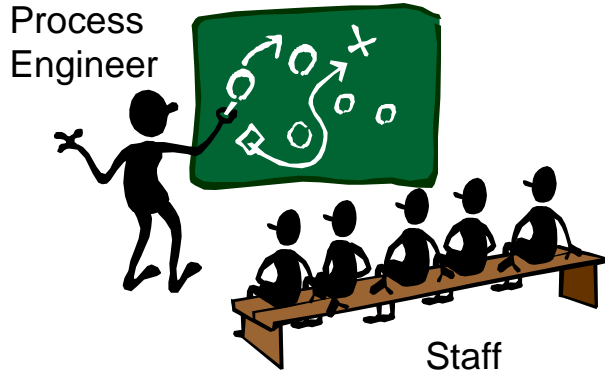
1. Limited resources
2. Potential disruptions in cash flow
3. Staff turnover rate
4. Stability of current customer base
5. Projection of market growth
6. Required schedules for certifications or appraisals



Improving processes when implementing any model requires some changing of current staff functions. As a risk mitigation technique, small – medium businesses often customize a path of small, adjustable steps to improve functions. A path of small steps is typically effective in minimizing the initial staff disruption and controlling the spending rate.

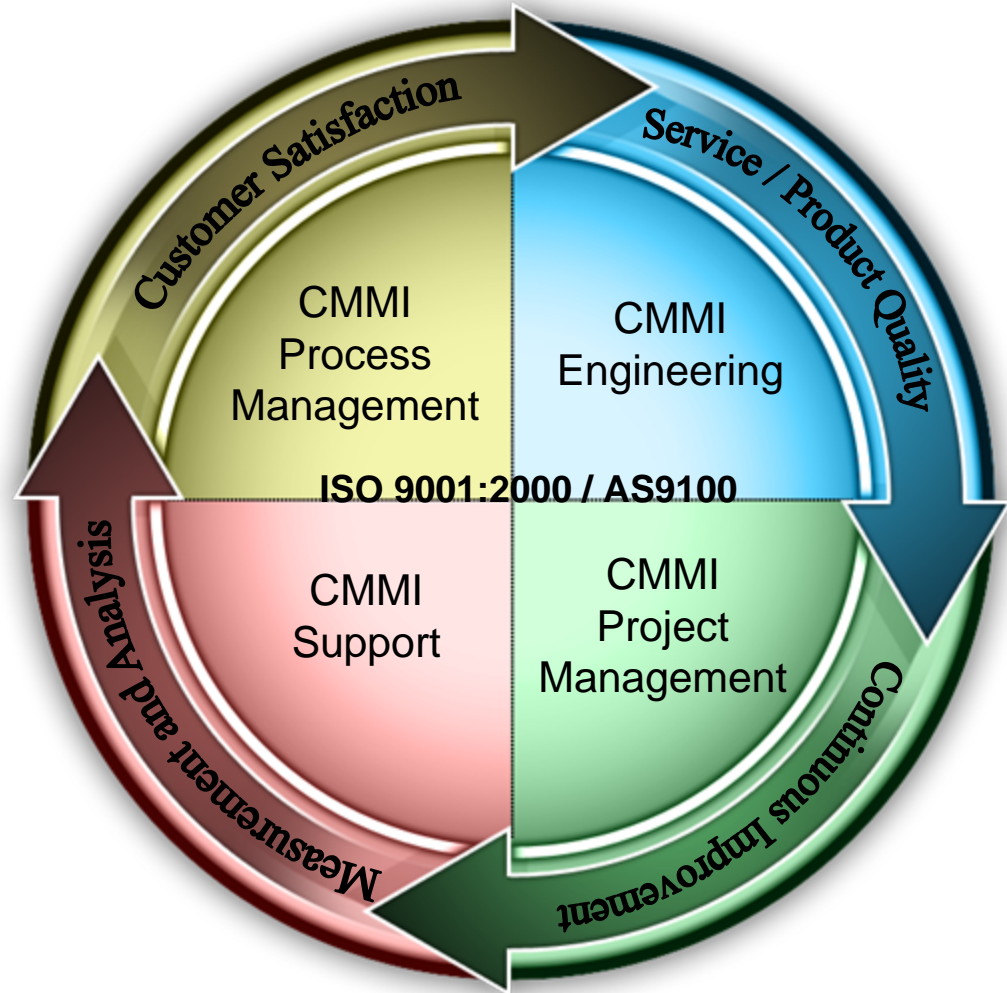
An example of a path of small steps is a hybrid approach of acquiring expertise in ISO 9000 first, then leveraging on the implemented quality system to implement other models, such as AS9100 and CMMI constellations.





Frameworks of the ISO/CMMI models provides:

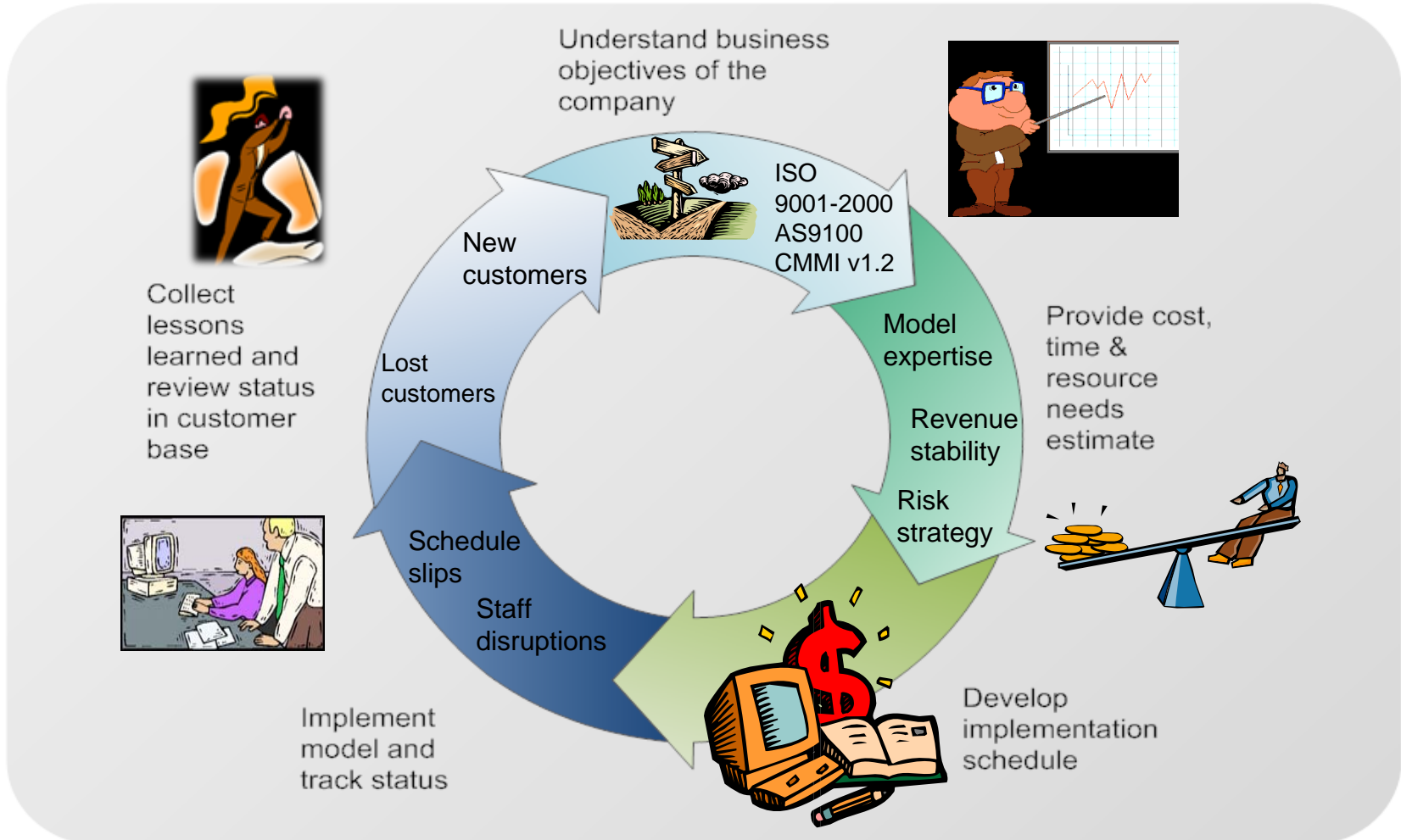
1. Increases in implementation efficiency due to redundancy in model functions
2. Minimal opportunities for conflicts with staff and resources with adequate model understanding







## Steps in Implementing Multi-Process Improvement Models





# Strategy Map for Using Audits and Appraisals

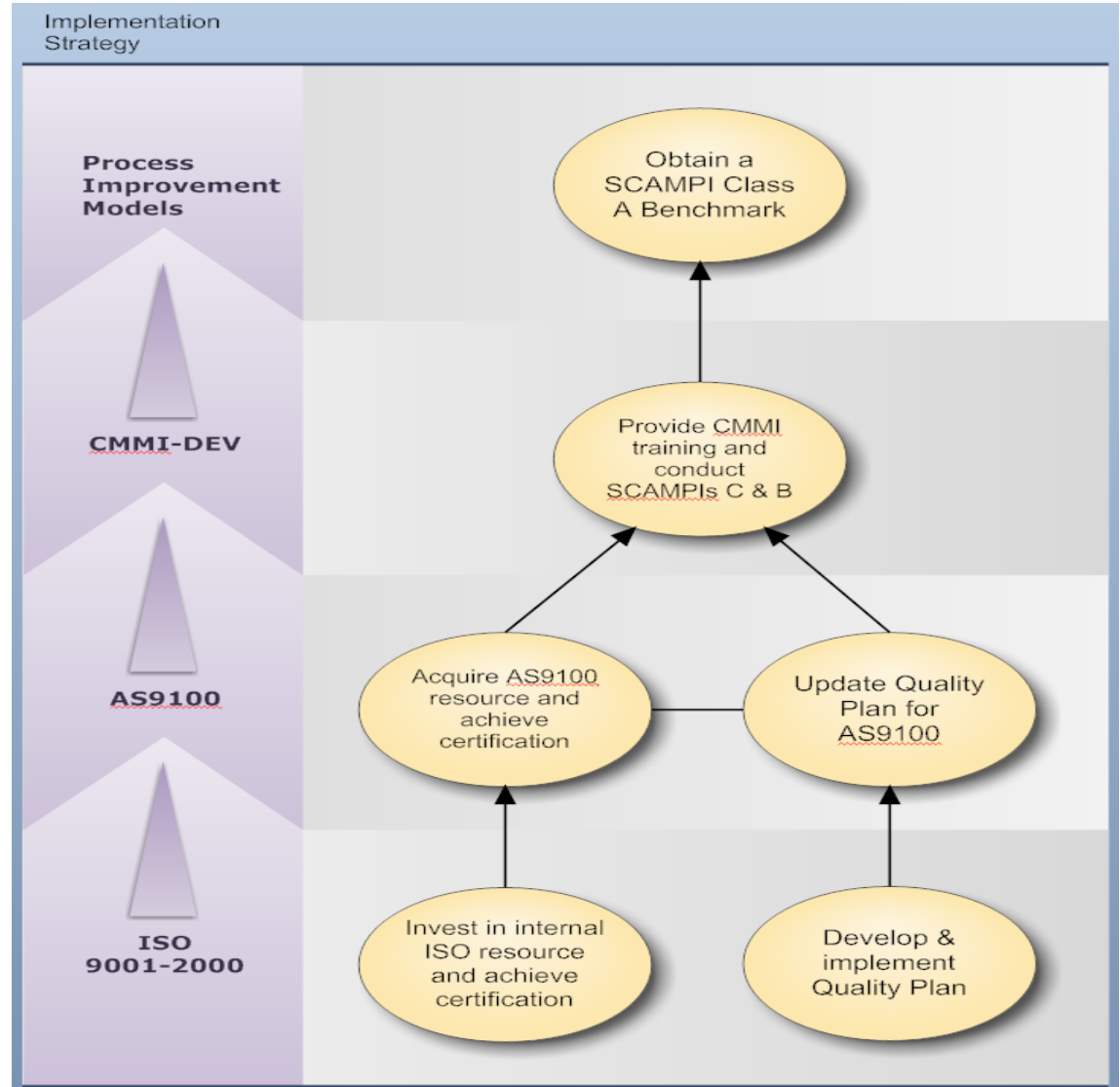
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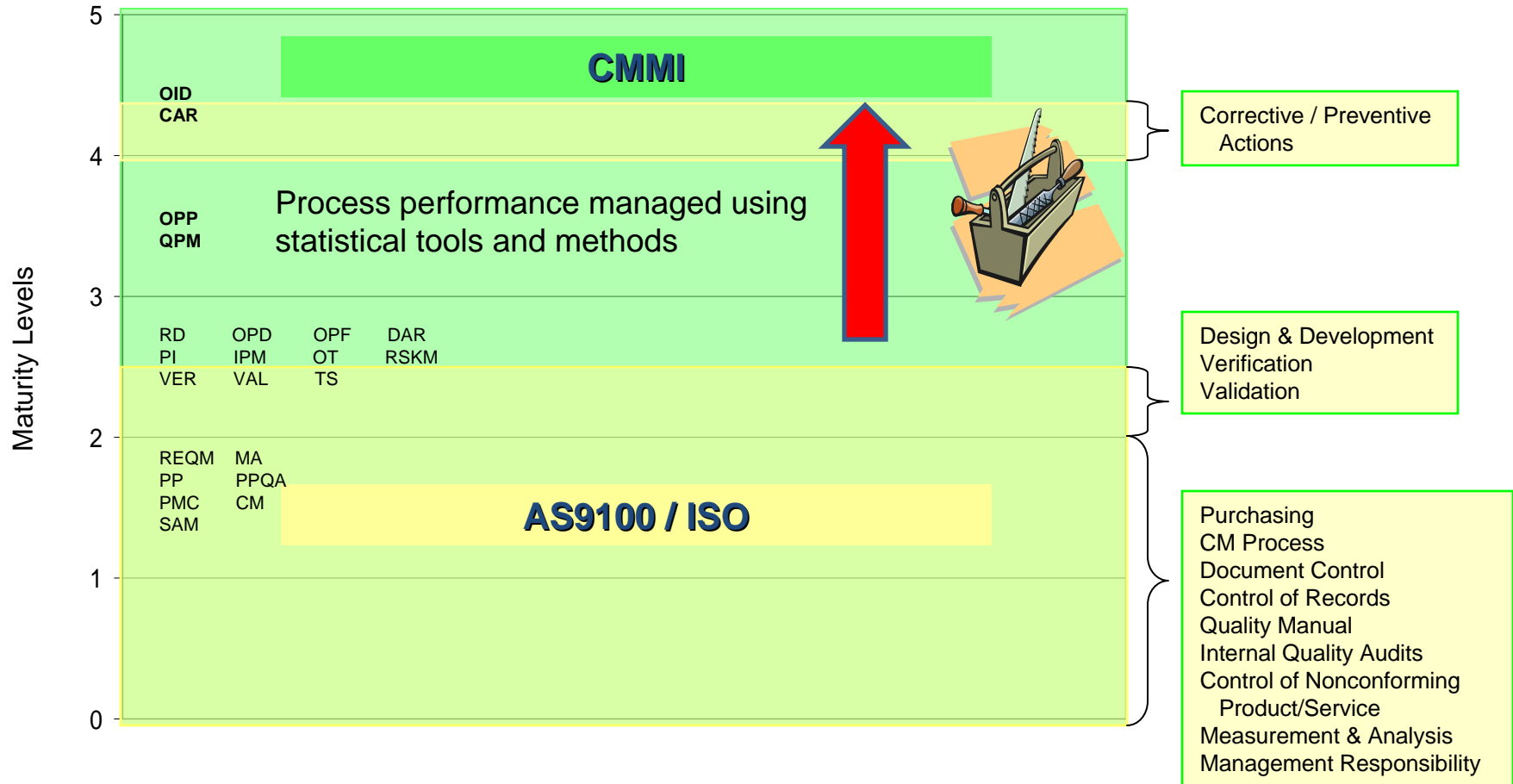
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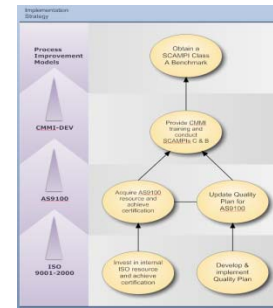


A key activity in planning implementation of multi-process models is using the risk management functions of models, such as:

- ISO 9001– 2000 internal audits
- CMMI SCAMPI Class C and B appraisals.







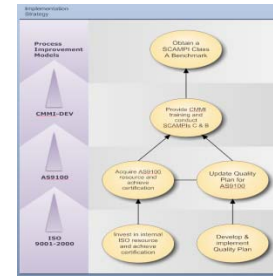
Process Improvement Implementation Success Factors	small settings		large organizations
flatter organization	✓		
efficient communication skills	✓		
flexible processes	✓		
depth of understanding of the business goals	✓		
staff involvement	✓		
staff receptiveness to new ideas	✓		
awareness of existing processes	✓		
simpler process performance models	✓		
process variance simpler to control	✓		
less diversity in products and services	✓		



Success Factor	Multi-Model Benefits
<b>Flatter organization</b>	Less management levels in planning Increased visibility Increased staff interactions More efficient buy-in Increased sponsor commitment
<b>Efficient communication skills</b>	More efficient cross training



# Multi-Model Process Improvement Benefits and Success Factor for Small – Medium Businesses (continued)



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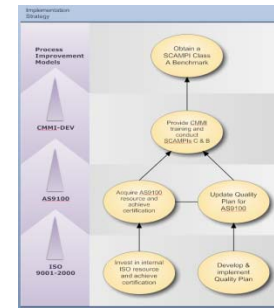


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Success Factor	Multi-Model Benefits
<b>Flexible processes</b>	<p>Early identification of improvements are less challenging to implement in existing processes.</p> <p>Institutionalization cycles are usually shortened.</p>
<b>Depth of understanding of business goals and costs</b>	<p>Documentation of process improvement goals increases staff awareness of business goals and impact on profitability</p>
<b>Staff involvement</b>	<p>Few staff members are often “owners” of key processes.</p> <p>Staff members may wear “many different hats” and become cross-trained.</p>

# Multi-Model Process Improvement Benefits for Small – Medium Businesses and Success Factors (continued)



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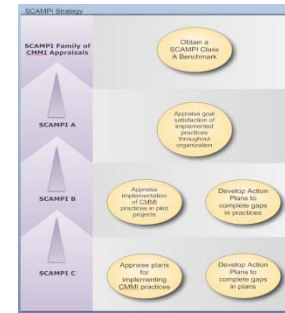


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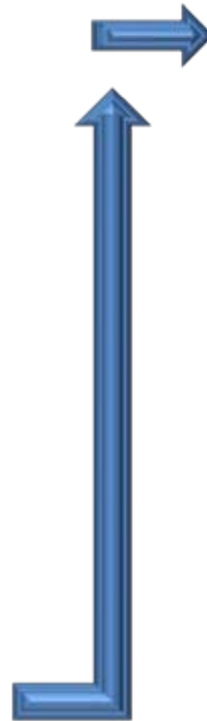


Success Factor	Multi-Model Benefits
Staff receptiveness to new ideas	Early identification of improvements are easily identified and more efficient to implement.
Awareness of existing processes	Single staff members are the process “owners” and understand the process.
Simpler process performance models	Existing processes usually have a simple measurement baseline established and rely on some type of forecasting to improve business health.

# Multi-Model Process Improvement Benefits and Success Factors for Small – Medium Businesses (continued)



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Factor	Multi-Model Benefits
Process variance simpler to control	Quality manuals and User templates are less complex to develop and implement.
Less diversity in products and services	Simpler to focus improvements on smaller set of services and products.



Avoid costly problems by understanding and taking advantage of commonality and overlap in the architectures of different process models.

Adequate model understanding is a prerequisite to plan implementation activities, required resources and manage risks.

Acquire resources and skills required for adequate understanding of multi-models from a combination of outsourcing, hiring or training existing staff.



The selection of the alternatives to gain expertise in the target process models is highly influenced by current revenue stream stability, staff turnover, required schedules and projected growth in the customer base.



Develop an affordable “small steps” process improvement path by hiring expertise in ISO 9001 - 2000, providing required staff training, and then leveraging on the implemented quality system to implement other models, such as AS9100 and CMMI constellations.



# The End



You have just seen  
benefits of multi-model process  
improvements in a small - medium  
business from the "30,000 feet" level.



Questions or Comments ?