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Session No. 101E

Risk Management 101:
A Practical Approach
For Safety Professionals

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Objectives



- Define risk and risk management
- Identify types of risk and exposures
- Look at a risk management model
- Discuss the risk assessment process
- Discuss risk management strategies
- Answer questions

What is Risk?

Risk is the *possibility* of an event with consequences.

Risk is not the event itself or the cost, it is just the *possibility*.

Business Risk



- **Employees**
- **Fleet**
- **Vendors**
- **Buildings & Equipment**
- **Cyberspace**
- **Reputation**
- **Raw Materials & Suppliers**

Risk Types

- Damages to Others
- Employee Injuries
- Fire, Wind, Flood
- ‘Closed for Rebuilding’
- ‘60 Minutes’
- Contractors
- Crashes

Risk Types



- Damages to Others - General Liability
- Employee Injuries - Workers' Compensation
- Fire, Wind, Flood - Property Loss
- 'Closed for Rebuilding' - Business Interruption
- '60 Minutes' - Reputation and Image Loss
- Contractors - Contractual Activities
- Crashes - Vehicle (including Employee-owned)

More Business Risks



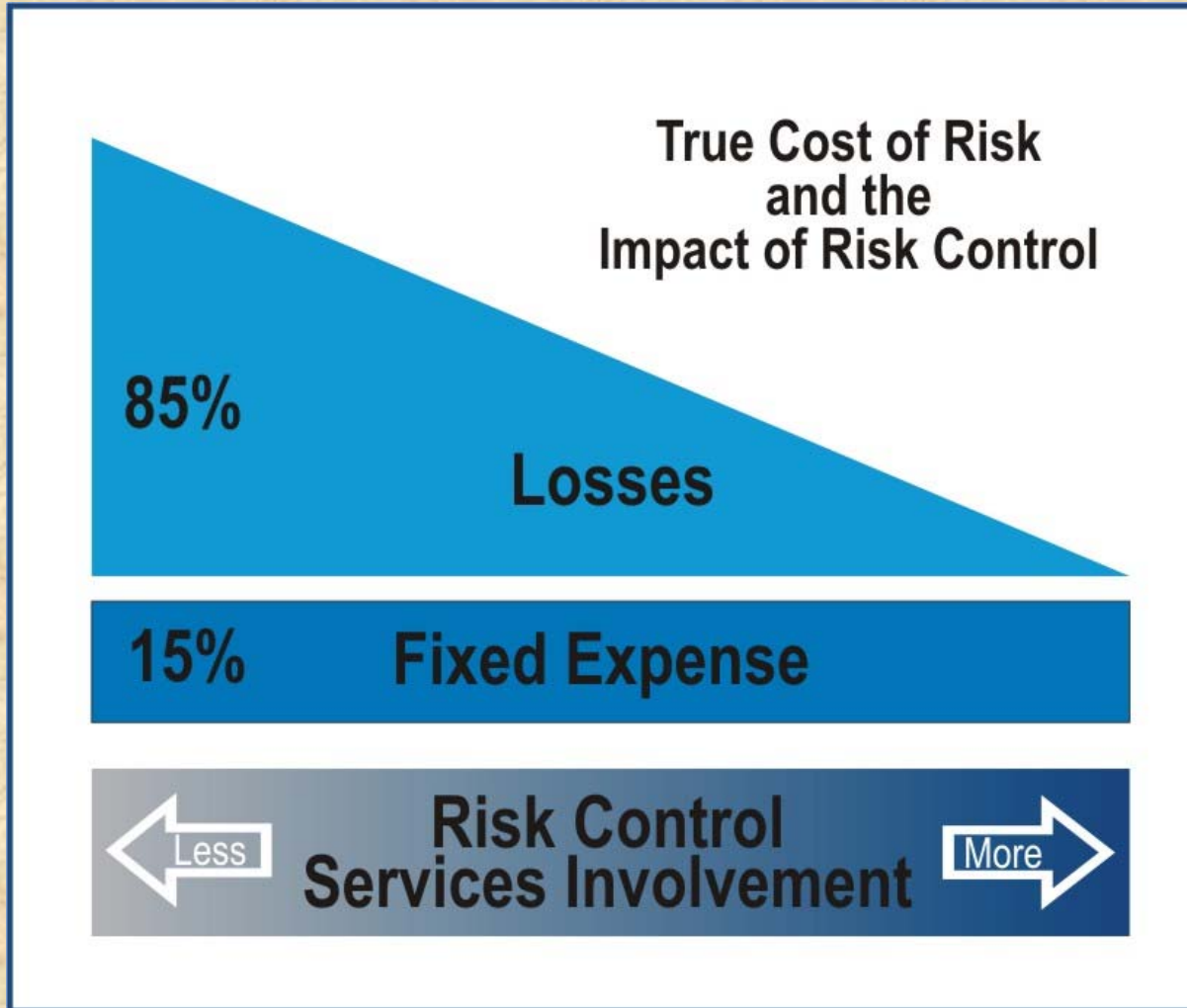
- Officer & Director
- Products
- Legal Conflict
- Food & Beverage
- Environmental Impact
- Information on Others
- Intellectual Property
- Insert Your Risk Here...

Risk Type Examples



- **General Liability**
- **Workers' Compensation**
- **Property Loss**
- **Business Interruption**
- **Reputation and Image Loss**
- **Contractual Activities**
- **Vehicle (including Employee-owned)**

The Real Value Of Risk Management



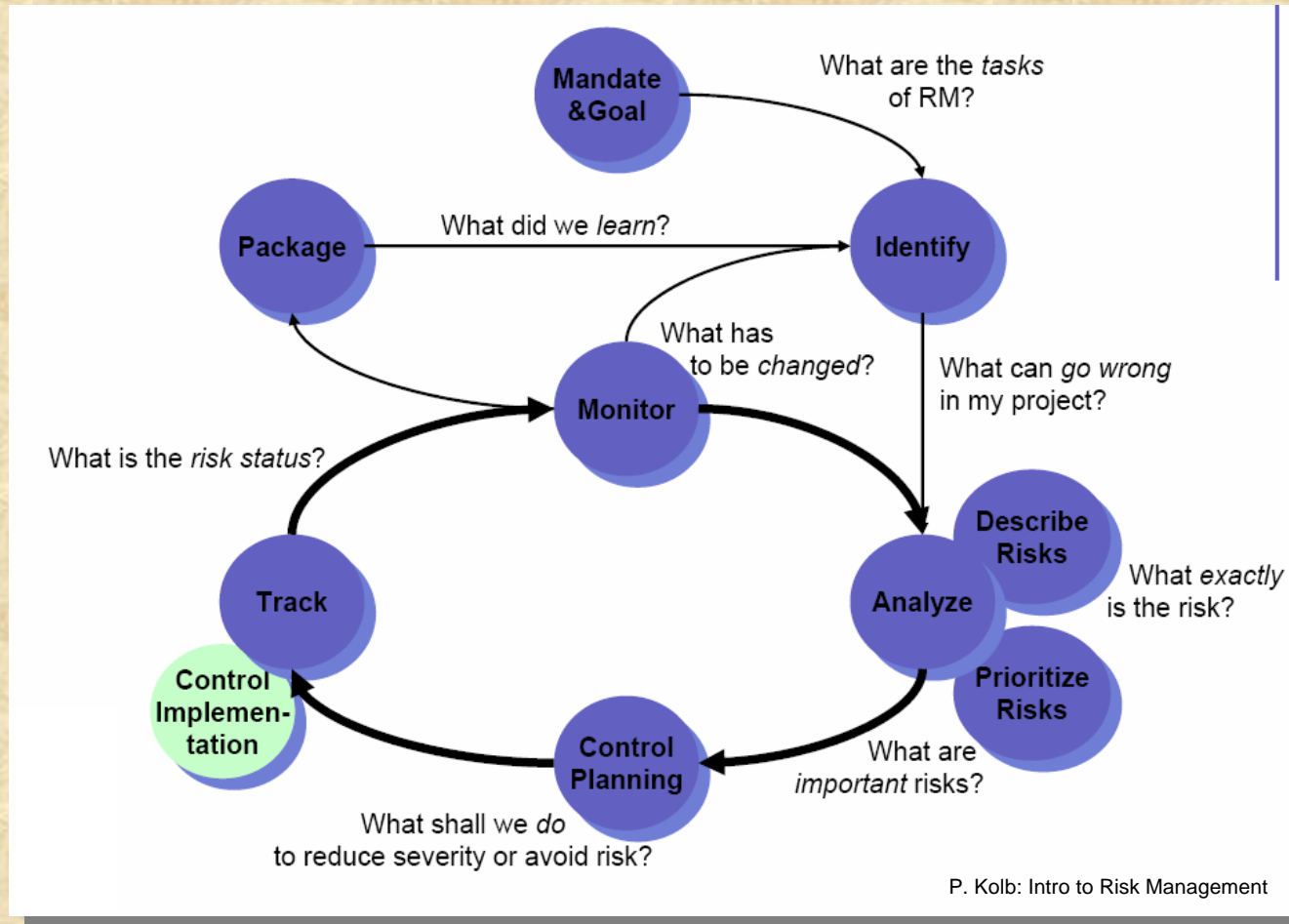
What Is Risk Management?



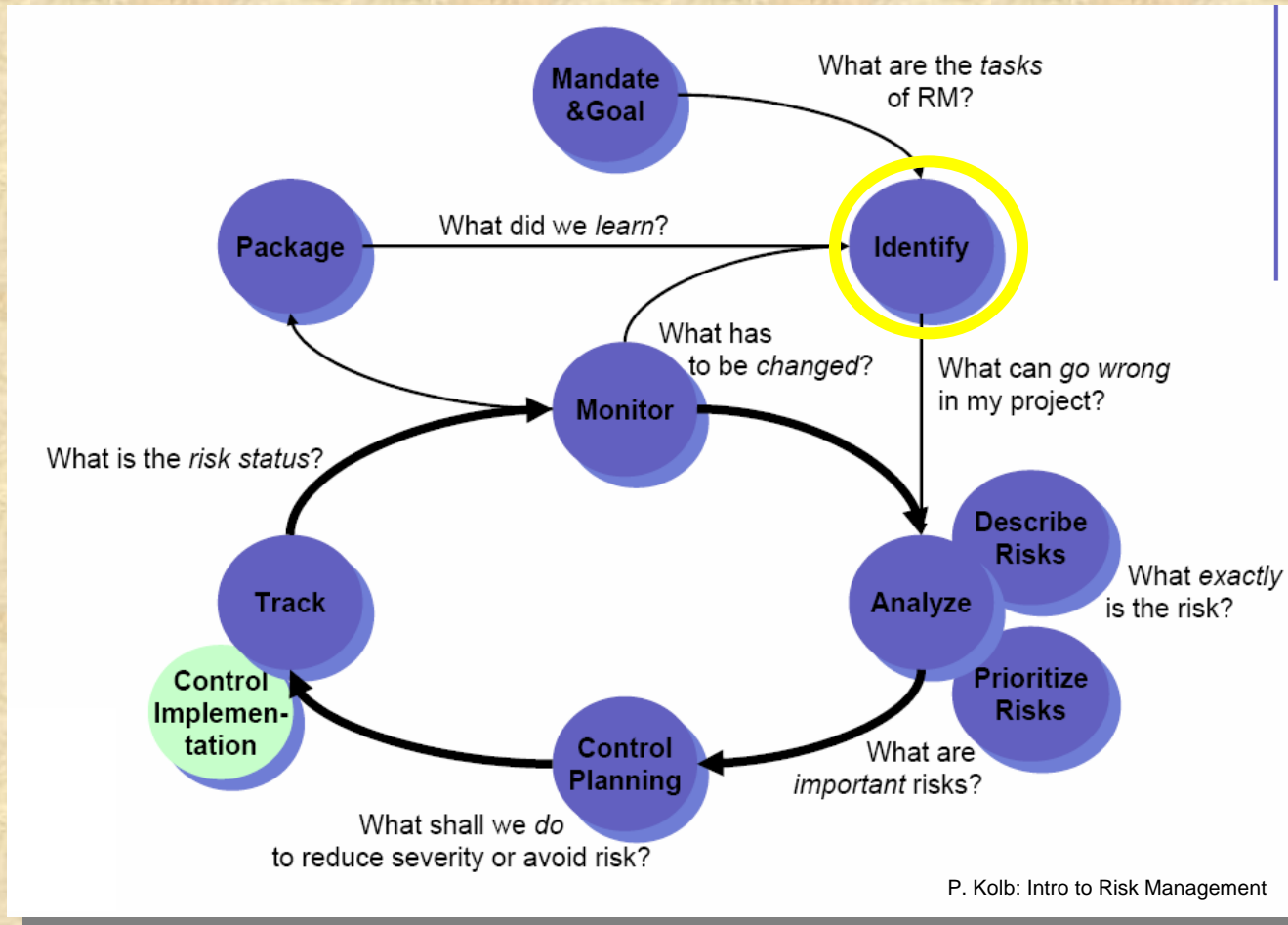
Identify
Assess
Manage

Risk Management is the process of assessing a risk, understanding the parameters of the risk, and managing the risk by making appropriate decisions based upon the available information.

Visualizing The Risk Management Process



Risk Identification



Risk Identification



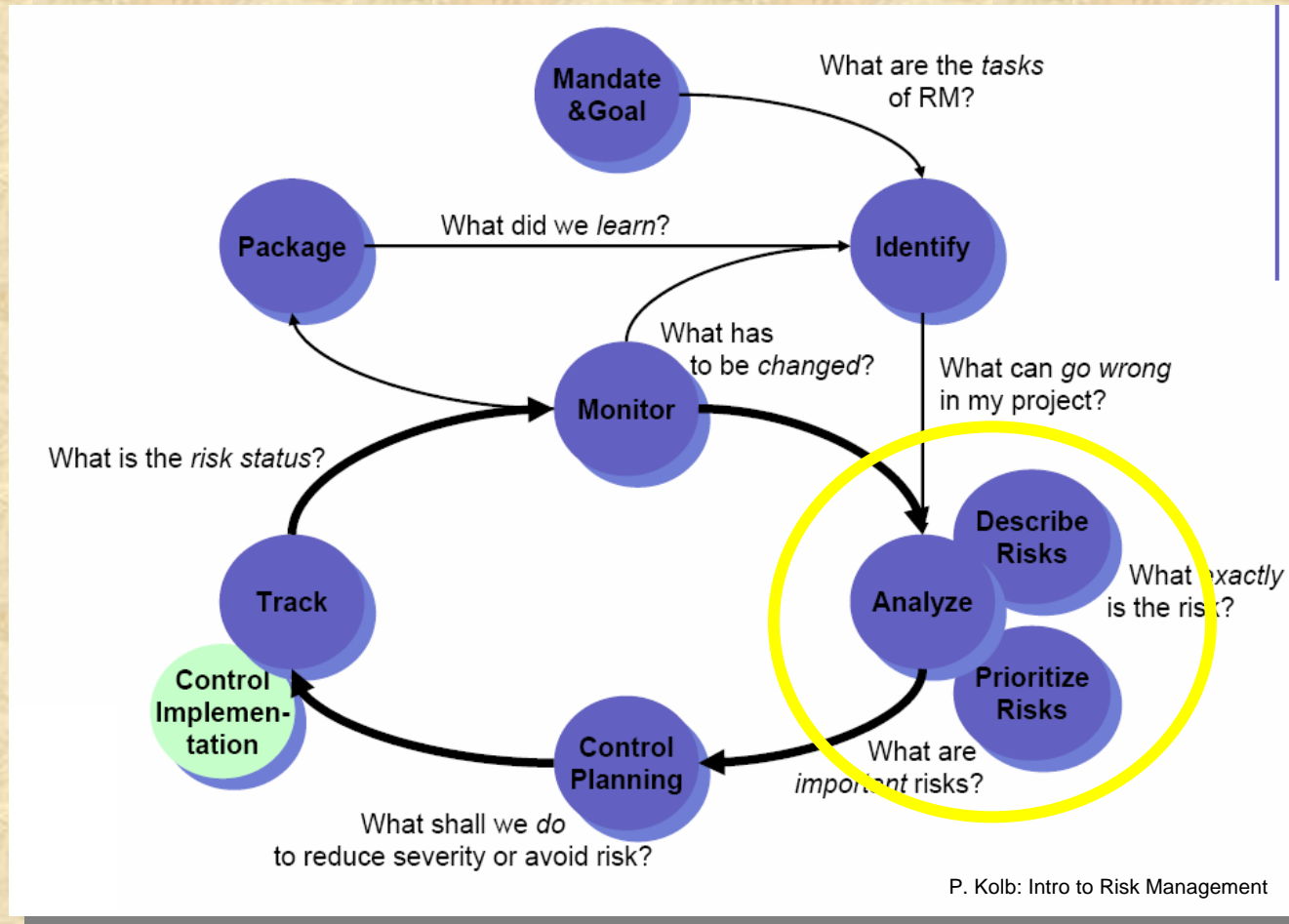
Identify all possible risks – no regard for probability

Use Trailing and Leading Indicators

Involve as many people as possible. One person can't fully understand every aspect of the project well enough to identify all the risks alone.

Never considered complete. Risks will become apparent later in the process and during operations and should be included!

Risk Assessment

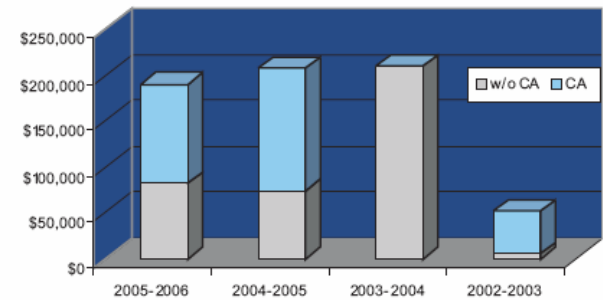


Risk Assessment Process

Quantify the Risk

$$\text{Risk} = \text{Probability} \times \text{Impact}$$

Slip/Trip/Fall Injury Severity



2005-2006

Acc Type	Tot Freq	% of Tot Freq	CA Freq	CA % Freq	Tot Sev	% of Tot Sev	CA Sev	CA % Sev
Burn								
Caught	4	10.00%	2	50.00%	\$21,751	4.05%	\$102	0.47%
Rep Motion	9	22.50%	3	33.33%	\$188,000	35.04%	\$130,569	69.45%
Cut								
Eye								
Fall/Elevation	4	10.00%	2	50.00%	\$37,403	6.97%	\$3,318	8.87%
Slip/Trip/Fall	10	25.00%	2	20.00%	\$189,938	35.40%	\$108,137	56.93%
Stress	2	5.00%	2	100.00%	\$19,000	3.54%	\$19,000	100.00%
Struck	3	7.50%	1	33.33%	\$15,402	2.87%	\$14,648	95.10%
Strain	3	7.50%			\$34,593	6.45%		
Unknown	5	12.50%	2	40.00%	\$30,461	5.68%	\$27,197	89.28%
Vehicle								
Totals	40	100.00%	14	35.00%	\$536,548	100.00%	\$302,971	56.47%

Risk Probability

Probability

Descriptor	Scenario	Probability	Score
Very Low	Not Expected to Occur	<1%	1
Low	Small Likelihood	1-20%	2
Medium	Occurs quite often	21-49%	3
High	Common Occurrence	50-85%	4
Very High	Very Frequent	>85%	5

Risk Impact

IMPACT

Descriptor	Financial	Regulatory	Injury	Environmental	Reputational	Operational	Score
Negligible	0-\$49,999	Not regulated	no injury or illness possible	No Impact, internal or external	negative internal impact, short term	Disrupts single lab operation, but normal functions able to resume quickly	5
Marginal	\$50,000-\$249,999	non-compliance with Standard/Guidelines	first aid	Minor or localized internal impact and internal clean up crew	negative internal impact, long term	Disrupts operation of a floor, but normal functions able to resume quickly; or disrupts operations of a single lab for longer periods	10
Substantial	\$250,000-\$999,999	non-compliance with Internal Policy	minor injury possible	Minor or localized external impact and internal clean up crew	negative external impact, short term	Disrupts operation of a bldg but normal operations resume quickly; disrupts operations of a floor; extensive renovations to a lab	15
Severe	\$1,000,000-\$3,000,000	potential violation of Act / Regulation	critical injury possible	Serious external impact and external cleanup crew, required notification to authorities	negative external impact, long term	Disrupts more than one bldg, not resume quickly; disrupts one bldg for longer period	20
Disastrous	<\$3,000,000	potential violation of external Permits / Certificates / Licences	fatal injury possible	Significant external impact requires external crew & has long lasting impact requiring authority and community notification	significant negative external impact, long term	wide scale disruption of more than one bldg for longer periods, major disruption to a bldg requiring major renovations	25

Risk Prioritization

		Probability				
		VLO	LO	MED	HI	VHI
Impact	Disastrous	5	4	3	2	1
	Severe	5	4	3	2	1
	Substantial	5	4	3	3	1
	Marginal	5	5	4	3	1
	Negligible	5	5	4	3	1

Risk Categories

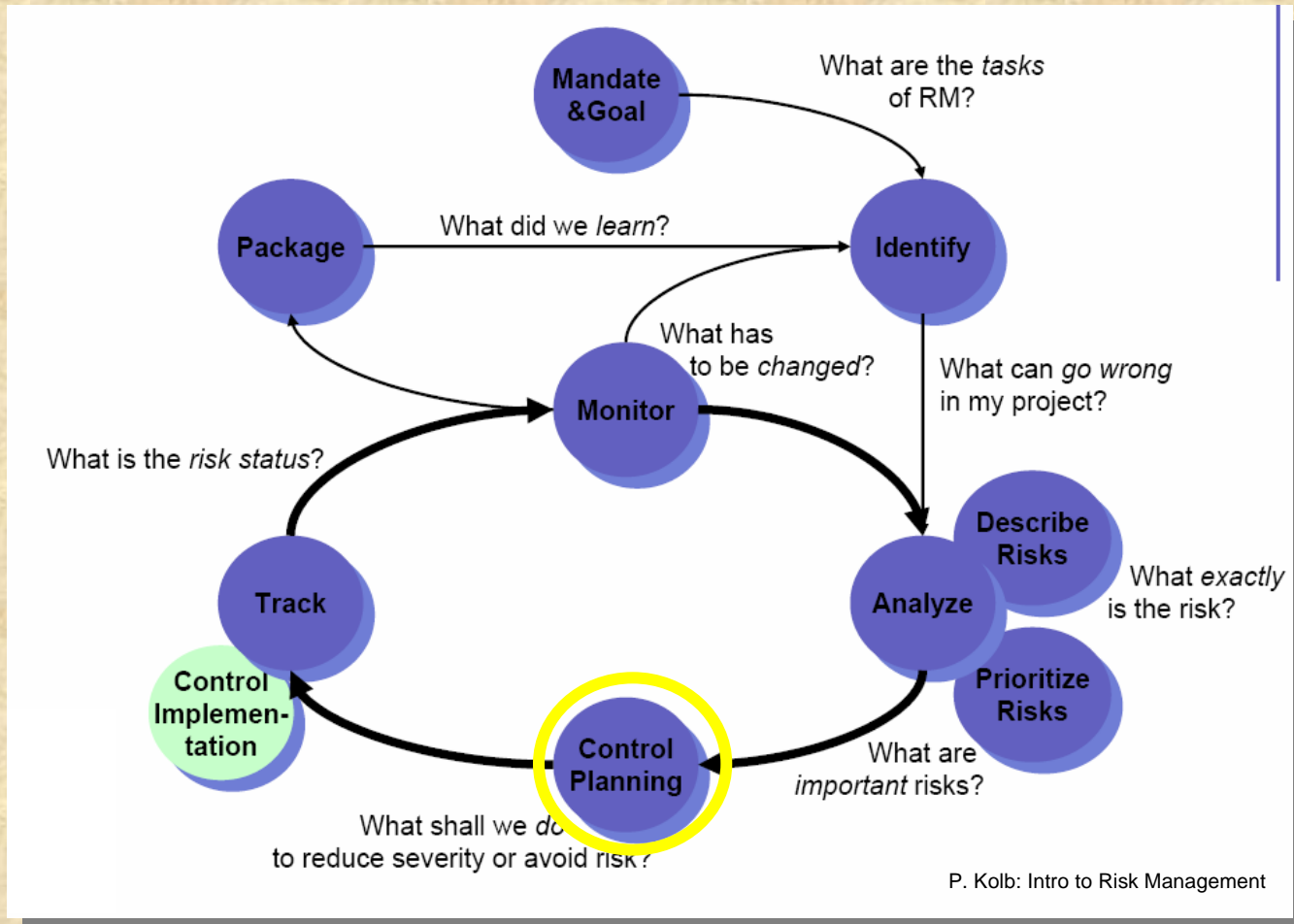
- 1 Critical
- 2 Severe
- 3 Significant
- 4 Minor
- 5 Possible Concern

Risk Prioritizations



1. Risk A - High Probability, High Impact
2. Risk B - High Probability, High Impact
3. Risk C - High Probability, Moderate Impact
4. Risk D – Moderate Probability, Moderate Impact
5. Risk E – Low Probability, High Impact

Risk Control-Planning



Techniques For Controlling Risk



Avoid

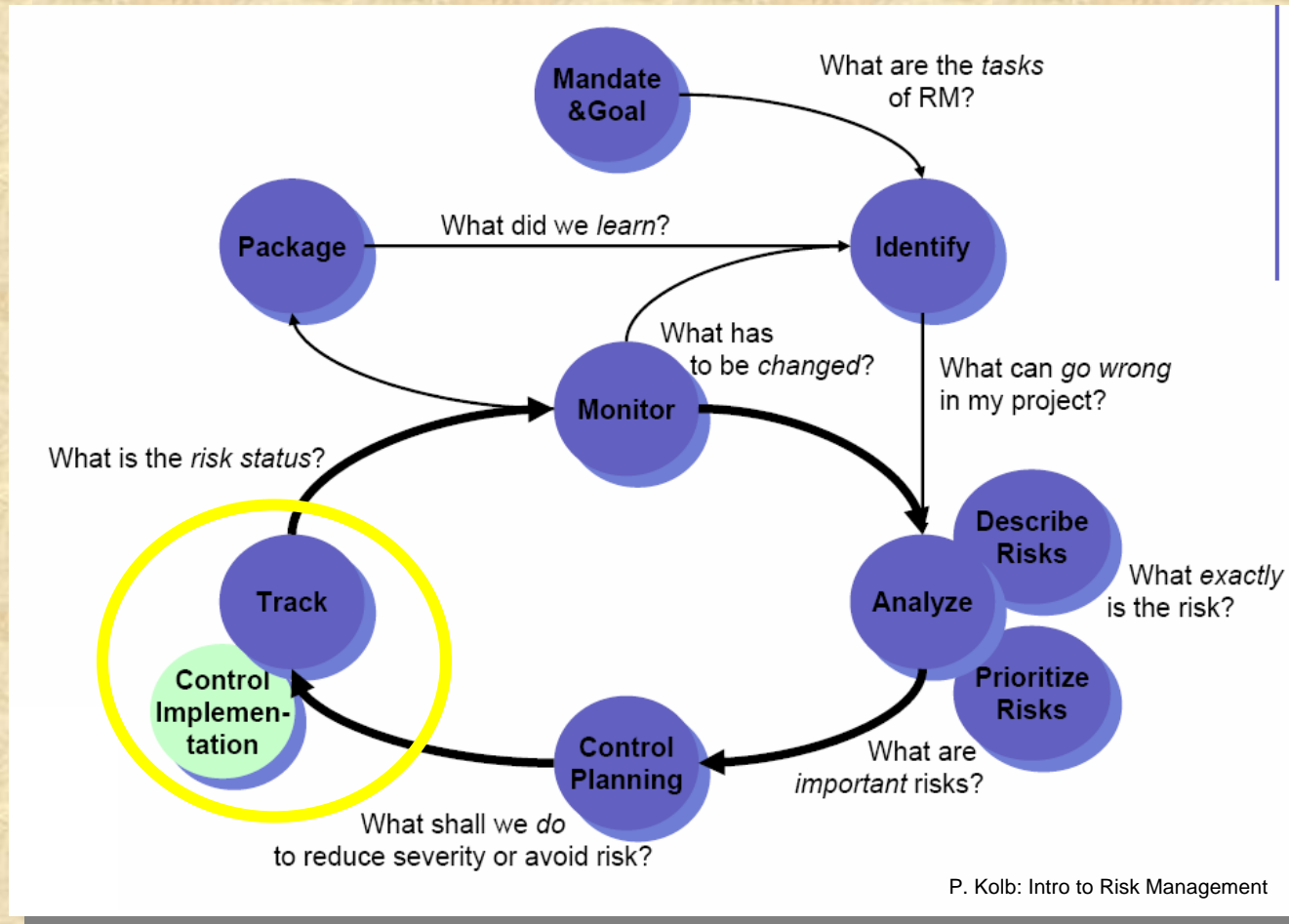
Reduce

Retain

Transfer

Risk Tolerance – The organization’s attitude towards risk.

Risk Control & Tracking



Implement the Selected Technique

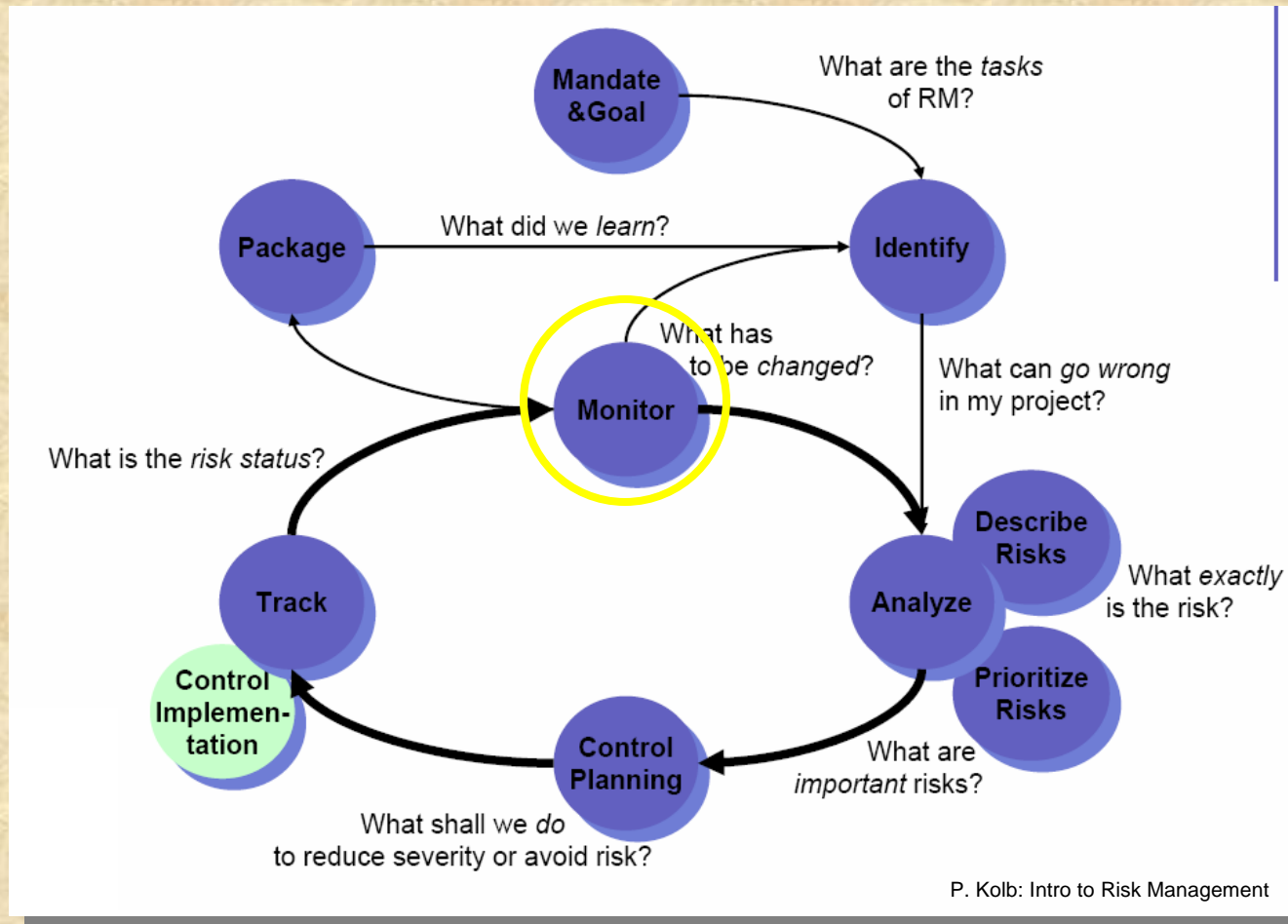


Measures & Benchmarks developed early

Whichever method you select, have an implementation strategy that informs the stakeholders and affected parties, anticipates roadblocks and is able to be analyzed and modified.

Continuous Improvement

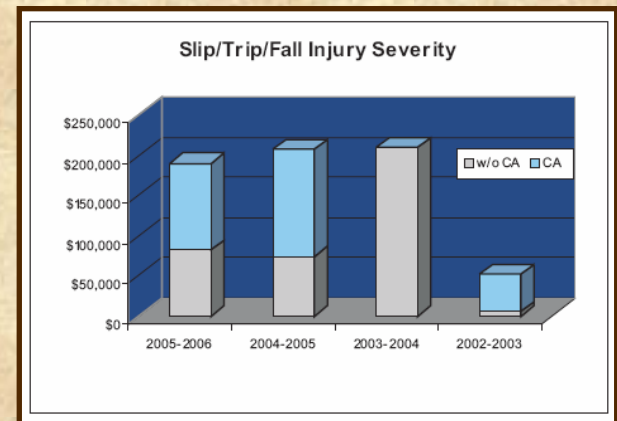
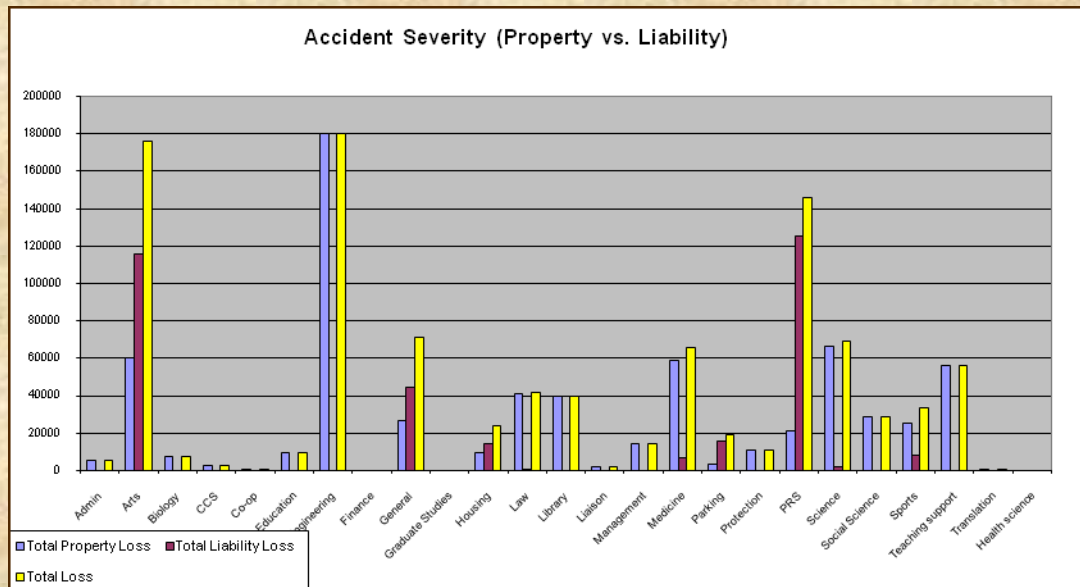
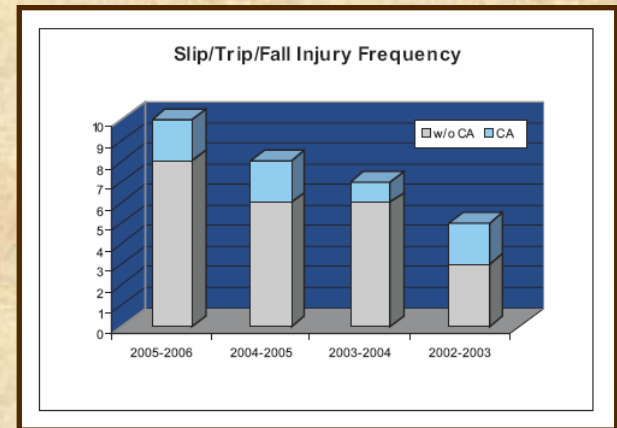
Risk Monitoring



Risk Monitoring

Data analysis

Discussions



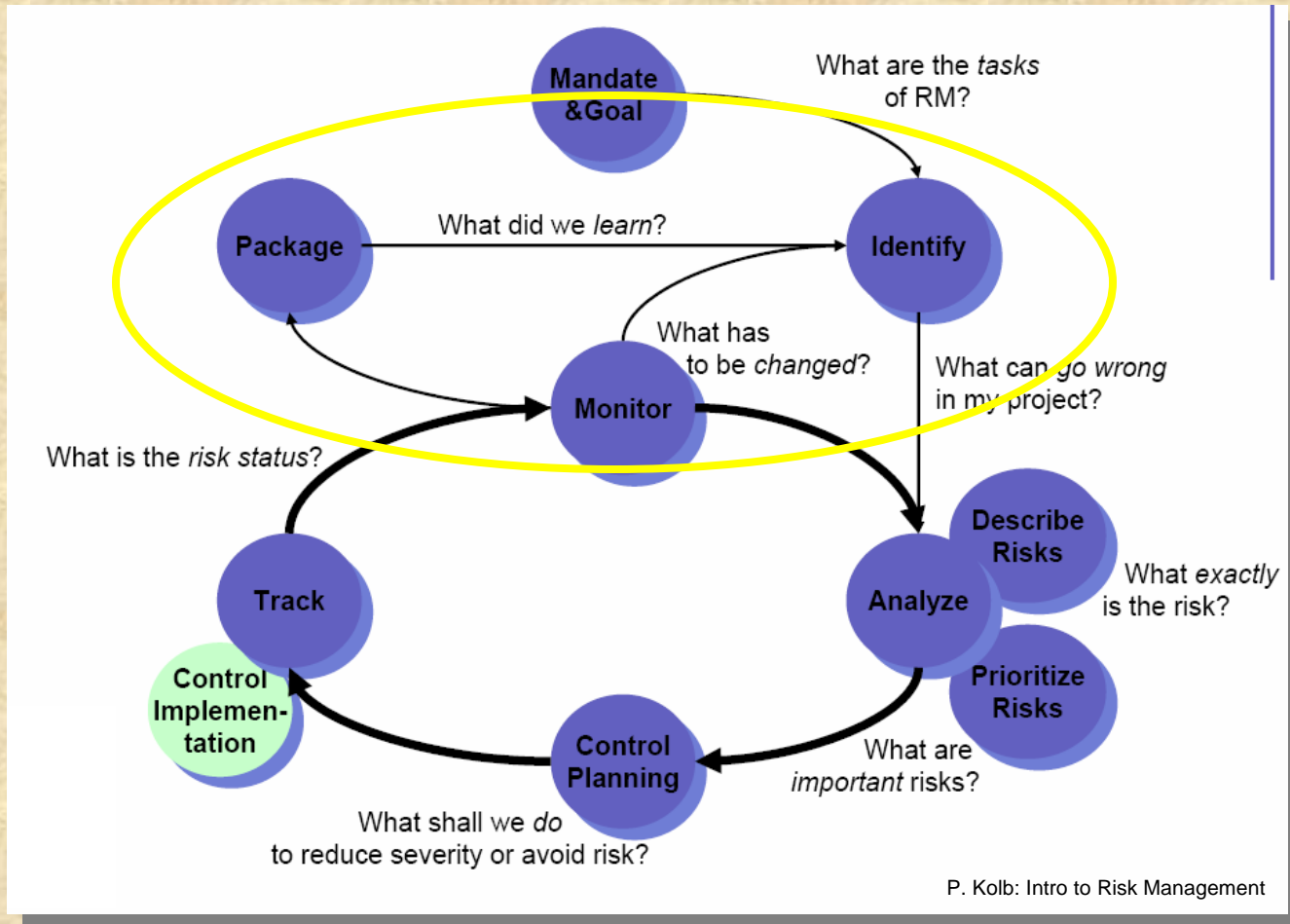
Modify – Change as Required



Recommendations:

1. In order to better understand the causes leading to the high frequency and severity in the California locations, a detailed review of the claim management practices, including the use of the medical provider network, early return to work and communications with the injured workers should be conducted.
2. Creation of a standardized formal approach to accident reporting, investigations, claim management and return to work programs should be drafted for use throughout the entire Alta system.
3. An analysis of the root causes of the ergonomic injuries, including a review of the adjustability of equipment and types of instruction given to users.
4. Creation and implementation of a simple new employee orientation to ergonomics in the workplace, which includes instruction for adjusting the workstation to achieve comfort. The program should outline who at each location will be responsible for the orientation, guidelines for periodic review of the program's effectiveness, and a checklist for completion of the orientation and initial adjustment.
5. An analysis of the slip/trip/fall injuries to determine common circumstances and a development of policies and procedures to ensure that hazards leading to these injuries are detected and eliminated in an organized efficient manner.

Feedback Looping



Feedback Looping



Continuous Improvement

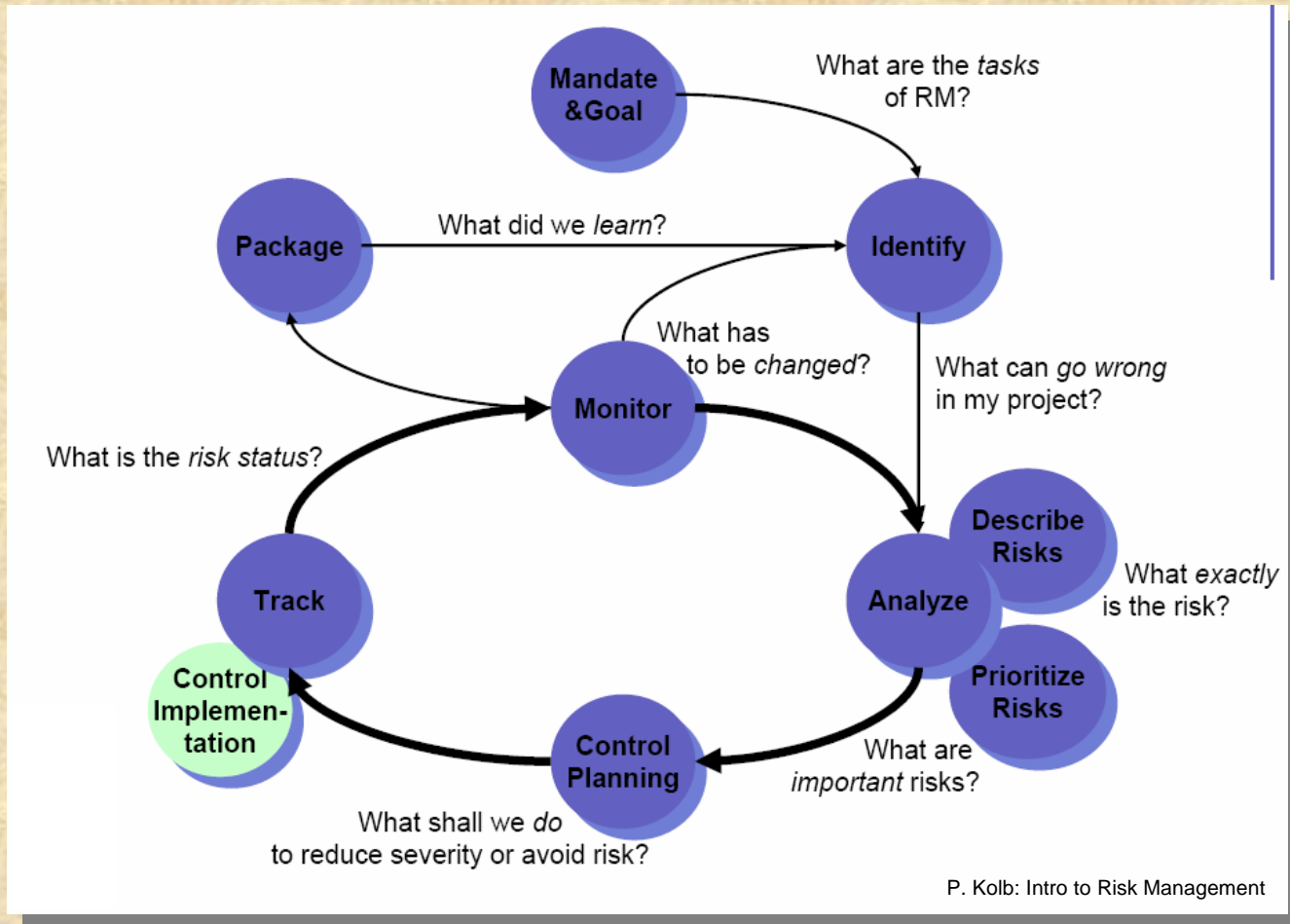
Overall package and individual items

“As a Result....” Statements

Organizational Impacts

Symptomatic Impacts

Visualize the Risk Management Process



Questions



- What are some risks you face and can impact?
- Do you have the time and resources to be proactive?
- How much will your value increase if you apply risk management techniques to your areas?
- Where can you get help after today?
 - Your insurance broker's risk control folks
 - Your insurance carrier's loss control staff
 - Regulatory agency web sites
 - Professional Associations

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