

Risk Management

Taking the Mystery out of
Risk Management Planning



Why is Risk Mgmt Important?

Let's start here....

What percentage of projects would you estimate have or could have risks?

Answer:

?



Why is Risk Mgmt Important?

Let's start here....

What percentage of projects would you estimate have or could have risks?

Answer:

At least 101% of all projects have potential and/or confirmed risks.





Let's have fun!

Why is Risk Management Planning Important?

The purpose is to establish an agreed-upon basis for evaluating risks and to ensure that sufficient resources and time are allocated for risk management activities.



Risk Management / Goals for this Session

- What is a risk?
- What is Risk Management?
- Why should we care?
- When is the appropriate time to conduct Risk Management?
- People aspects
- Process aspects
- Technology aspects
- Best Practices
- What about the Unknown Unknowns?
- Fun Role Play Session!



What is a Risk?

“**Risk**” – an *uncertain* event or condition that, if it occurs, has a *positive* or *negative* impact on at least one project objective such as time, cost, scope, quality, etc.

BTW....

“**Issue**” – a point or matter in question or in dispute, or a point or matter that is not settled and is under discussion or over which there are opposing views or disagreements. Often project issues are first identified as a risk and through the risk management planning process may already have a planned approach to managing the issue.



What is Risk Management Planning?



- In short: Risk Management Planning is the process of “deciding how to approach, plan, and execute risk management activities for a project” (PMBOK®).
- In detail: The identification, assessment, and prioritization of risks, whether positive or negative....

...followed by coordinated and economical application of resources...

...to minimize, monitor, and control the probability and/or impact of unfortunate events...

...or to maximize the realization of opportunities.

CA-PMM Toolkit has the Answer!

Overall link to the **State Information Management Manual (SIMM 17)** – a manual of State of California’s IT policies and procedures.

http://www.cio.ca.gov/Government/IT_Policy/SIMM_17/index.html

Specific link within SIMM 17 to the **CA-PMM Reference Manual**

http://www.cio.ca.gov/Government/IT_Policy/pdf/SIMM_17A_CA-PMM_Reference_Manual_Final_07182011.pdf

Specific **link to the CA-PMM Toolkit which contains the Risk Management/Log tools** – once opened click on the Template Inventory tab – then select Risk Management Plan:

http://www.cio.ca.gov/Government/IT_Policy/msdoc/SIMM_17C_CA-PMM_Toolkit_03072011.xls

People Aspects

- Possible obstacles to an effective risk management environment
 - Cultural
 - Management may not want to hear about the risks...“Just get it done on-time, under-budget, and on-scope!”
 - TIPS : Frame the risk(s) in the context of their potential impact on the organization’s goals for that time period.
 - Time constraints
 - “We don’t have time to complete a Risk Mgmt plan.”
 - TIP: Possible compromise – spend enough time to identify and work through a plan for the high probability/high impact positive and negative risks.
 - Stakeholders risk tolerance
 - An important component in effectively managing a stakeholder is to understand their tolerance for risk.
 - TIP: Interview; summarize; sign-off
- ...and many more...



People Aspects/ Who Contributes?

- Who contributes throughout the Risk Management Lifecycle?
 - Everyone contributes!
 - Here is one example matrix:

Activity	Role
Risk Identification	All project stakeholders
Risk Registry	Project Manager
Risk Assessment	All project stakeholders
Risk Response Options Identification	All project stakeholders
Risk Response Approval	PM with concurrence from Stakeholders
Risk Contingency Planning	Project Manager(s)
Risk Response Management	Project Manager(s)
Risk Reporting	Project Manager(s)



Process Aspects

- “Plan the work, then work the plan!”
 - Draft a **Risk Management Plan (RMP)**
 - PMI PMBOK defines a RMP as a document that describes how project risk management will be structured and performed on the project. It is contained in or is a subsidiary plan of the Project Management Plan (PMP). During the creation of the RMP a prioritization process follows the identifications of risk whereby the risks with the greatest potential impact are prioritized first.
- Early warning signals –how many of these get ignored?!
 - **Financial** risk such as investments, funding, capital expenditure, etc
 - **Legal** risk such as lawsuits, changes in law, etc.
 - **Physical** risk such as natural disasters, fire, accidents, death, etc.
 - **Intangible risk** such as human resources, knowledge, skill sets, relationships, etc.
 - **Technical** risk such as IT security, infrastructure, software, etc.
 - **Security** risk such as facility, information, documentation, etc.



CA-PMM Approach covers the PMI's PMBOK 6 Processes:



PMBOK prescribes six main processes for Risk Management:

1. Risk management planning

1. The process of “deciding how to approach, plan, and execute risk management activities for a project”(PMBOK®).

2. Risk identification

1. Iterative process throughout the project.

3. Qualitative risk analysis

1. The process of “prioritizing risks for subsequent further analysis or action by assessing and combining their probability of occurrence and impact” (PMBOK®).

4. Quantitative risk analysis

1. The process of “numerically analyzing the effect on overall project objectives of identified risks” (PMBOK®).

5. Risk response planning

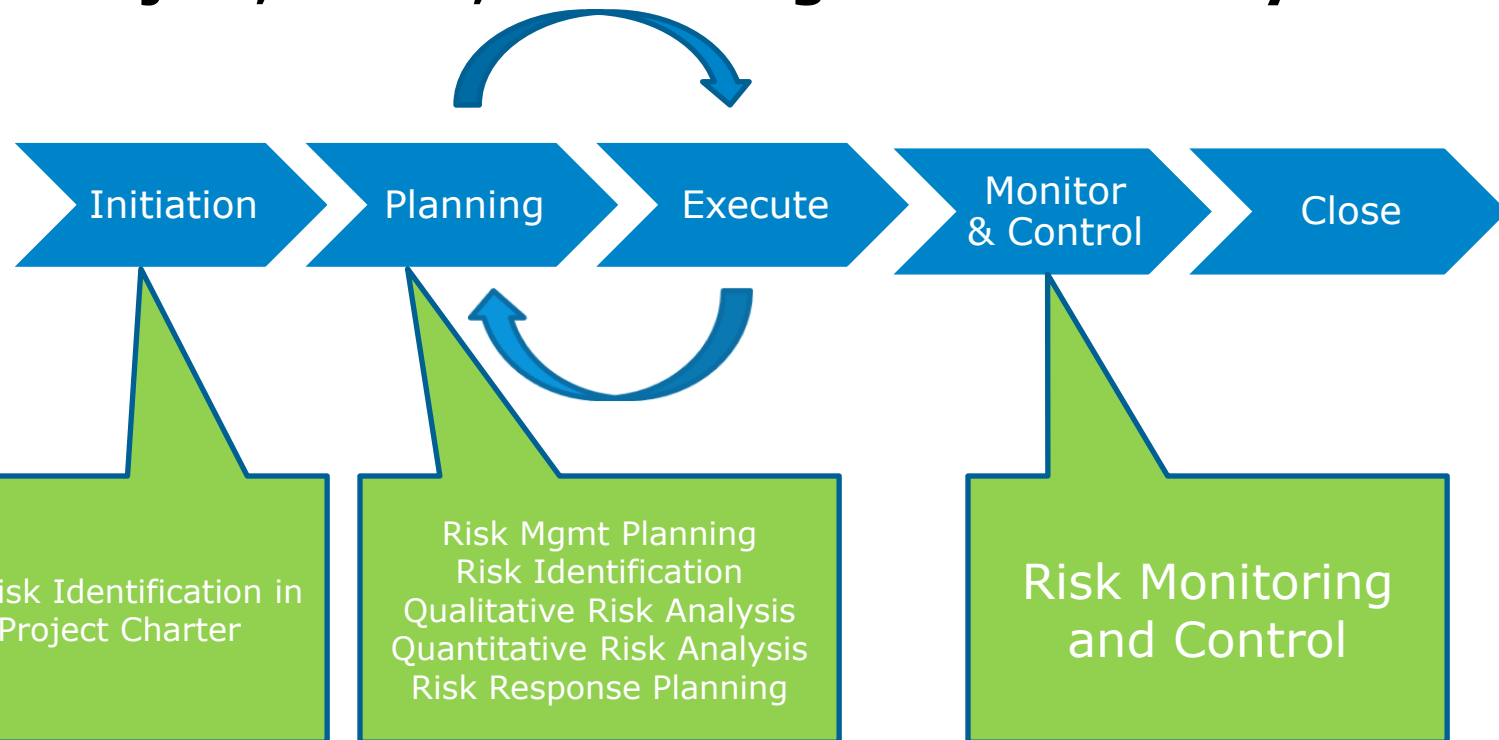
1. The process of “developing options and determining actions to enhance opportunities and reduce threats to the project’s objectives” (PMBOK®).

6. Risk monitoring and control.

When is the right time for Risk Management Planning?

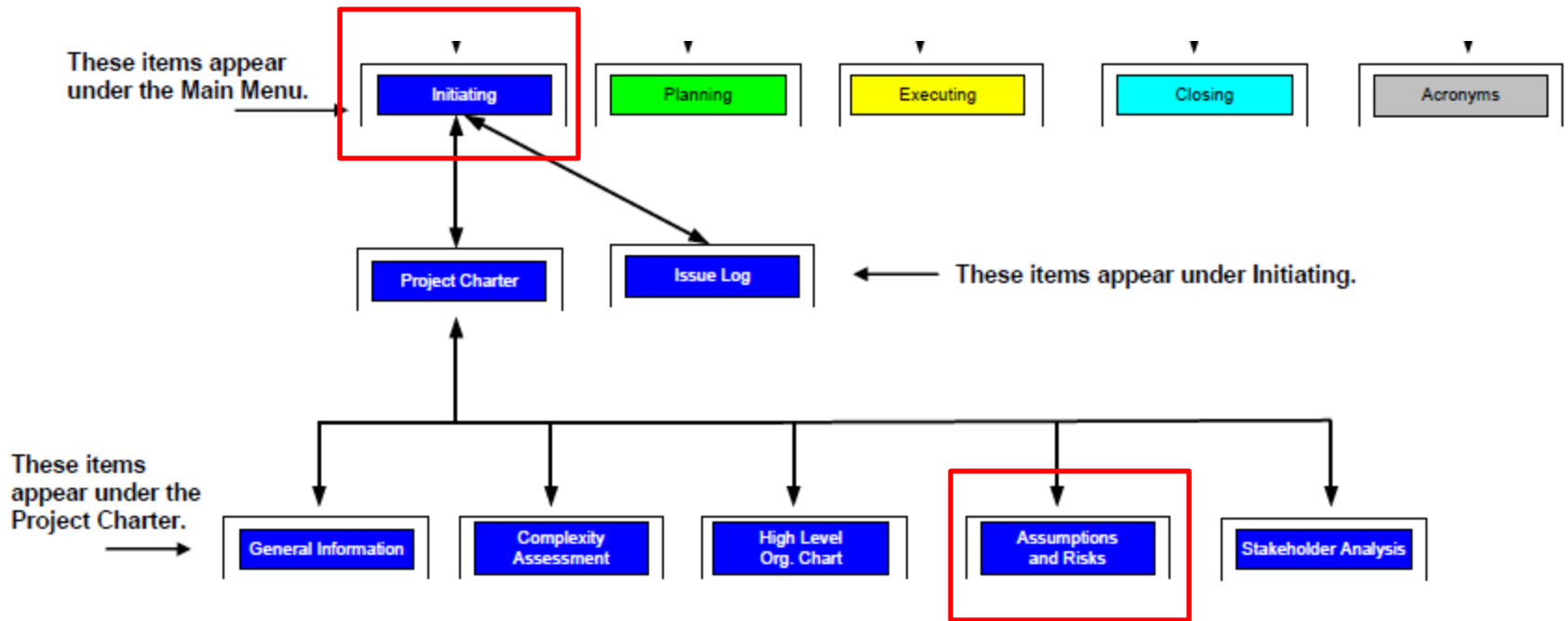
Early and often!

Project, Phase, and Change Control Lifecycle



CA – PMM Toolkit says...Initiation > Project Charter

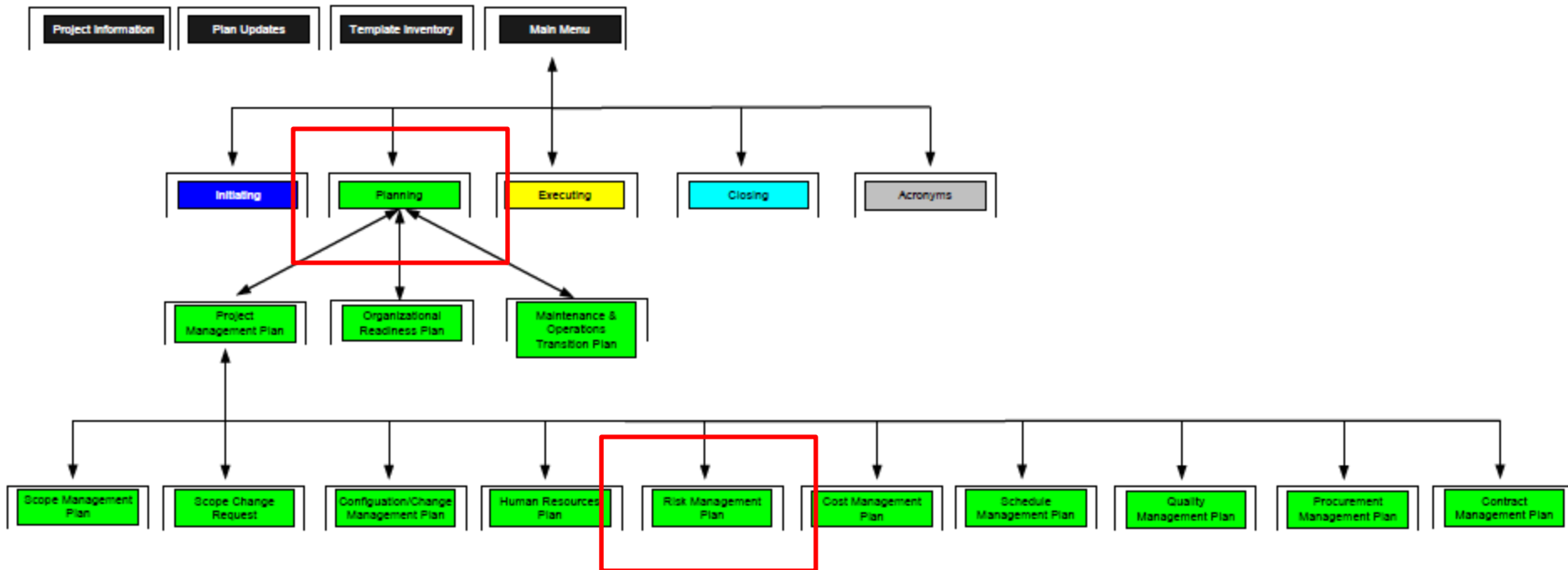
Begin to identify “high probability risks (>80%) & significant impact” in your Project Charter during Project Initiation.



CA – PMM Toolkit says...Planning > Risk Mgmt Plan

...then dive into the details in your Risk Management Plan in the Planning phase.

CA – PMM Toolkit Map – Planning Templates



CA – PMM Toolkit says...

Probability x Impact x Time Scale = Risk Level

When analyzing a risk, you will use the following metrics to calculate the Risk Level by which all risks will be measured and compared.

Probability Scale (likelihood)

1	<20%
2	21 - 40%
3	41 - 60%
4	61 - 80%
5	>80%



Impact Scale

- 1 Less than a 5% change to schedule, scope, budget, or quality
- 2 5 - 10% change to schedule, scope, budget, or quality
- 3 11 - 15% change to schedule, scope, budget, or quality
- 4 16 - 24% change to schedule, scope, budget, or quality
- 5 25% or greater change to schedule, scope, budget, or quality



Risk Level

- 1 - 9 = Low Risk Level
- 10 - 15 = Medium Risk Level
- 16 - 25 = High Risk Level

Timing

Risk could happen within the next 6 months = 1.0
Risk could happen between 6 months to a year from now = 0.66
Risk could happen over one year from now = 0.33

Technology Aspects

- We want to automate:
 - A centralized repository of information and documentation,
 - Consistency with analysis metrics for a meaningful prioritization exercise.
 - Visibility
 - Communication
- A best practices tool set would include:
 - Risk Management Plan template
 - Risk Register template
 - Risk Management Checklist
- We can find the automation in many formats:
 - Excel
 - Access Database
 - SharePoint format
 - Component of a full-blown Project and Portfolio Management application
 - Risk Management point solution
- ***State of California "PM Toolbox" has all of this and more!***

Example Excel Spreadsheet / CA-PPM Risk Register

State of California's Risk Register Excel Spreadsheet

* 1-9 = Low Risk Level, 10-15 = Medium Risk Level, 16-25 = High Risk Level

Lock Headings Unlock

#	Risks	Probability (1 - 5)	Potential Impact (1 - 5)	Risk Management Timing	Risk Level* (1 - 25)
					0
					0
					0

Transference	Acceptance	Contingency Plan	Trigger Event	Owner
Audit				
E				

Response Plan Effectiveness	Residual Risks	Secondary Risks	Risk Status	Closure Date

Example PPM Application / Risk Register

Clarity PPM Paul Martin Logout | Learn | Help | About

Home Favorites

General PM Alerts Project Dashboard **Issues and Risks**

Overview: Issues and Risks

Business Technologies OBS Project Manager Martin, Paul Filter More

Risk Management

Project	Risk	Description	Priority	Probability	Impact	Above Threshold	Target Resolution Date	Category	Owner
Financial Process Audit	New External Auditors	The new external auditors have different views on their role and what constitutes required financial process changes.	⚠	⚠	❌	✓	6/14/13	Flexibility	Morris, Tom
Financial Process Audit	Updates to SOX regulations	Because of updates to the Sarbanes Oxley (SOX) regulations we may be required to re-engineer some of our processes	⚠	⚠	⚠	✓	6/28/13	Objectives	Morris, Tom
Data Warehouse Performance Tuning	Base Architecture	The base architecture of the data warehouse must be thought out carefully. We don't want to have to go through this exercise again because we didn't plan for the future growth.	⚠	⚠	⚠	✓	7/4/13	Implementation	Thompson, Peter
eCommerce Portal	Sponsorship Risk	Sponsors are difficult to engage for design and approval issues.	⚠	⚠	⚠	✓	7/8/13	Sponsorship	Granger, Paula
Online Order Performance Improvements	Java vs .NET performance	If the purpose to switching technologies is to increase speed have we done, or are there benchmarks we can read?	✅	✅	✅	✓	7/12/13	Technical	Morris, Tom
Online Order Performance Improvements	Can switching technology increase performance?	We are not 100% sure that switching the underlying technology CAN fix the performance problem.	✅	✅	✅	✓	7/22/13	Technical	Morris, Tom
Client Services Datamart	Sponsorship risk	Sponsorship needs to be well defined in order to get quick approval on all purchases and decisions. Time lines are very short.	❌	⚠	❌	✓	7/26/13	Sponsorship	Martin, Paul

Best Practices – General Activities

- **Identify Early** – Identify potential project risks as early in the project life cycle as possible. Document these initially identified risks in the project charter and clearly communicate their potential consequences the project sponsors and stakeholders.
- **Identified Continuously** – Continually identify and reevaluate project risk. When a new risk is identified, communicate updates as needed.
- **Analyze** – Analyze the potential impact of the risks. Repeat this analysis process throughout the project lifecycle; make updates; and communicate changes as needed.
- **Reprioritize** – As risks are continually analyzed throughout the lifecycle, reprioritize risks as potential project impact adjusts to changing project events.
- **Define and Plan** – Define risk thresholds and triggers, mitigation strategies, and contingency plans. The greater probability of the impact(s) on the project goals, the more detailed this information should be.
- **Communicate** – Communicate regularly regarding risk status and changes in the level of overall project risk. Solicit feedback from project team members and stakeholders regarding known risks and prospects of unknown risk. Store the risk register in a location accessible to the project team for fast retrieval and reference.
- **Update** – Update the risk register on a regular basis, both informally and formally.
- **Educate** – Educate the entire project team and stakeholders on risk management and encourage them to actively identify, communicate, and mitigate risk.

Common Software Development Risk Management Practice Activities

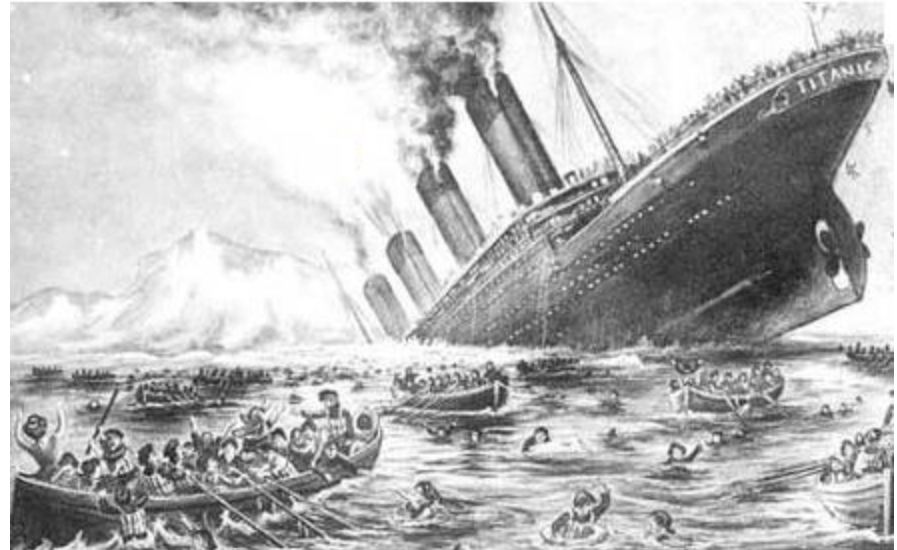
For software development projects the following practice activities are commonly used:

- **Identify** – Identify project risks.
- **Evaluate & Analyze** – Analyze identified risks and evaluate potential impact on project goals.
- **Categorize & Prioritize** – Categorize the risks / Prioritize risks based on probability of currents and potential impact on project goals.
- **Mitigation & Contingency Plan** – Develop risk mitigation strategies and contingency plans. Document systems and triggers use to identify when implementation plan risk action should be executed.
- **Track & Monitor** – Track risk some form of risk management log. Continuously monitor risk status as the project progresses and reports status of change.
- **React** –When appropriate react to escalating risk by executing mitigation strategies are executing agency plans.
- **Close** – When risk is no longer reasonable threat, or the risk has a curve and is now issue, that particular risk may be closed in the risk management log.

What about the Unknown Unknowns?!!

Of course, there will always be **Murphy's Law**: *If something can go wrong, it will.*

- Stay calm.
- Be flexible.
- Apply what we are learning today.



QUIZ!!!

Did we just learn anything?



Role Playing Time!

- 10 min instructions
- 75 min role playing
- 5 min recap at the end
- Guidelines
 - We will stop the recording at this time.
 - Spread out the tables to help reduce the noise.
 - Have fun!!! Act it up!
 - Help out your team members if they get stuck.
 - Mike/Michelle will facilitate questions from the teams.
 - Stop at the half-way mark; we will re-group.
 - We have check-point about 1/2 through; write-down your questions and we could begin to address them.
 - No need to rush...if you finish early, you and your table will be asked to sing karaoke. (just kidding)

