

Resource Management




regoconsulting

Topics

- ❑ Resource Management 101
 - ❑ Overview and Benefits
 - ❑ Concepts - Terms, Analysis, Horizons
- ❑ Process and Decisions
 - ❑ CA Resource Management Process
 - ❑ Clarity Data Decisions
 - ❑ Clarity Process Decisions
- ❑ Keys to Success
- ❑ JD Irving – A Use Case

- ❑ APPENDIX
 - ❑ Clarity - Views



Resource Management 101

Overview

- Definition: Resource Management is the process of managing the work your resources perform. From time tracking you can understand what a resource is working on, but resource management takes that a step further to provide the information needed to control and predict resource usage.
- Caution: Resource management is one of the most difficult processes to implement successfully within an organization. There are three main reasons for this:
 1. It requires a sizable amount of information to be input and kept current each week, while not providing the individual project and resource managers significant value in the short term – the real value is in looking at data across an organization.
 2. It requires a highly cooperative environment. Resource and project managers have different objectives, and that misalignment results in natural tension when these two people must keep data current in the same location.
 3. It requires complete organization adoption. Resource management must be implemented within an organization completely - it cannot be implemented only for some resources or some projects.

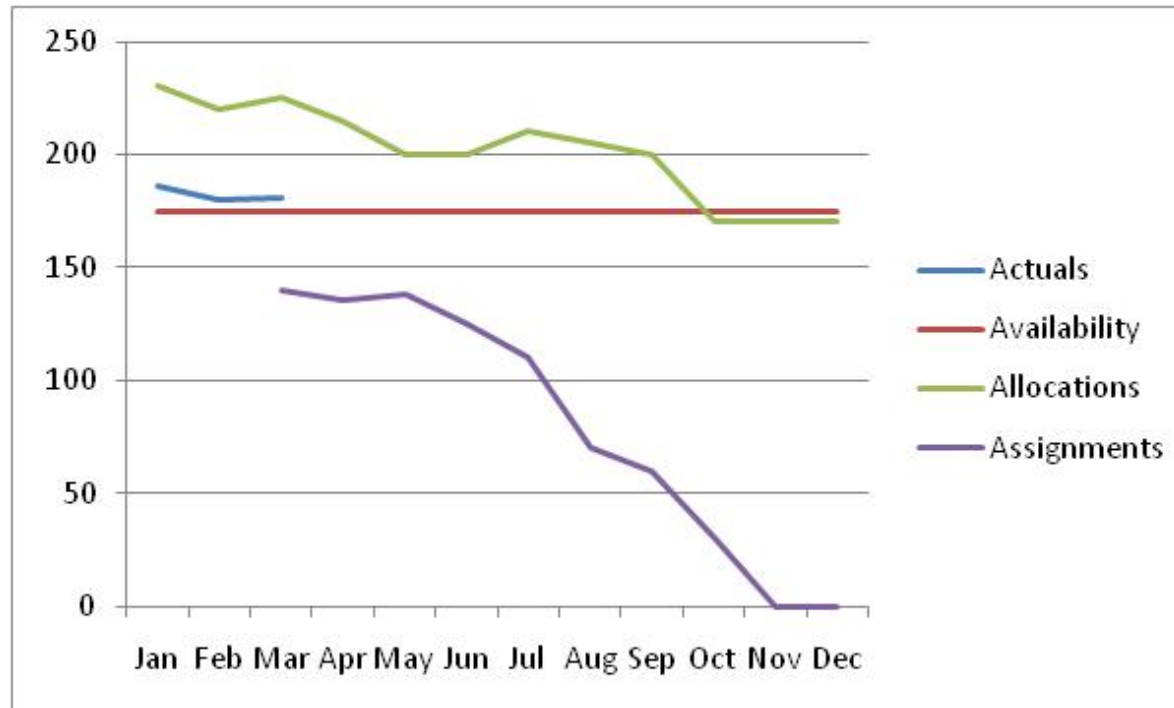
Key Benefits

- Resource Management will lower external consulting costs
 - WHY: Understanding future resource needs will allow an organization to better plan its internal/external resource mix. This reduces the situation where an organization is forced to go find external resources at the last minute to complete work
- Resource Management will move labor costs from lower value add activities to high value add activities
 - WHY: The natural tendency of a project manager is to overestimate the resources needed to perform work. This often leads to resources who have extra time outside of their project placement, and that time is filled with non-strategic work. Resource management monitors this to allow an organization to plan more accurately the correct amount of strategic work and significantly reduce “filler” work by resources
- Resource Management will increase the ROI of projects by reducing the total project delivery timeline
 - WHY: Proper resource planning will allow resources and resource managers to plan future weeks with more confidence - reducing the number of resource conflicts and constraints between projects or activities
- Resource Management will improve customer satisfaction by providing more accurate project dates
 - WHY: Through the use of effort based scheduling and accurate estimation of hours needed, project managers can more accurately predict the finish dates of tasks, milestones, and projects. Dates will be based on real resource assignments, while looking at their personal calendars and availability.

Concepts - Foundation

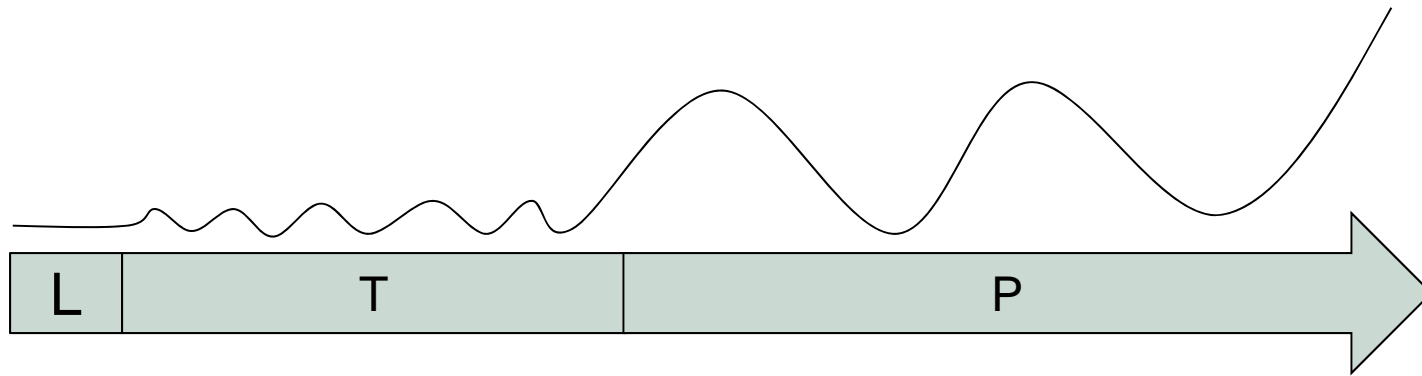
- **Availability:** The number of hours a resource is available to work on any given day. A resource's calendar defines their availability – resource sin the US may have an 8 hour workday and resources in Asia may have an 8.4 hour workday
- **Allocation:** The high level percent of a resource that is designated to perform work on an investment. A resource is allocated to a project for XX% of that resource's total available time.
- **Assignments:** The specific amount of hours within a time period that a resource is given a specific task to perform. Within an assignment, a resource will have actual time tracked plus the estimate to complete (ETC). These two figures together indicate the estimate at completion (EAC).
- **Actuals:** The time tracked by a resource against an assignment within a given time period.

Analysis of Data




- Allocation Compliance is a measure of whether a resource's availability has been filled with allocations. (RM)
- Actual utilization is a measure of how accurate the allocations were in the past. (PM)
- Forecasted utilization is a measure of how well the project manager is planning to use a resource within the allocation given. (PM)

Planning Time Zones



	Locked	Trading	Planning
Time Zone	Next 2 weeks	2 - 8 weeks	8 weeks +
State	Level loaded	Level loaded	Not Level Loaded
Allocated Resource	Individual	Individual	Role
Allocation Time bucket	Weeks	Weeks	Month
Assignment to tasks	Full	Partial	None
Authorization to Change	VP	Directors	Manager/Master Planner



Process and Decisions

CA Resource Management Process

- Projects created and staffed with roles
- Project plan tasks updated to include dependencies and role assignments with ETCs
- Allocate roles from estimates to identify accurate percentage of time needed for that role to the project; auto-schedule the project
- Identify named resources to replace the roles
 - Use the Resource Finder feature to match on primary role, skill and availability
- Add the resource to the project
 - PM adds the resource as “soft” booked
 - RM changes the booking status to “hard” to confirm the resource is “committed”
 - Modify assignments as needed (replaced resource will inherit role assignments)
- Track time
 - Resources log time to assignments each week and modify ETC on timesheet if necessary
- Project schedule maintained
 - Project managers review resource proposed ETC and accept or reject to create new ETC on tasks
 - Project managers review impacts to the plan (time, task completion) and ensure the plan is kept up to date each week
 - PMs, RMs and management monitor appropriate views to identify issues

Core Data Decisions

▪ Roles

- Decision: A standard set of roles for the organization must be defined. Roles will be used as the first filter when finding resources and these roles will be used to do capacity reporting
- Considerations: Roles are not job titles. Try to keep the number of roles under 100 for performance reasons on Clarity portlets. Once roles are created, they cannot be removed, but you can always add more roles. Before you have named resources, roles are the only thing that can be used to create a project estimate, so you may end up having some roles to represent different resource cost types – like offshore, etc.

▪ Skills

- Decision: A standard set of skills for the organization must be defined. Skills will be used as the secondary filter when finding resources
- Considerations: Because a resource can have multiple skills, skills cannot be used in capacity planning. Keep skills only for “hard” skills – not skills like “communication”. Only track skills used in finding resources – not a full skill management. Use a skill hierarchy to allow searching for parent skills.

▪ Other Work

- Decision: A standard set of “buckets” used to track time not related to projects. These other work buckets will be used to constrain resources for admin type of time – PTO, holidays, meetings, etc.
- Considerations: Pick only 1 or 2 other work items to use in constraining resources – do not allocate/constrain resources to every type of other work.

NOTE: Clarity data decisions must be universal within the organization

Core Process Decisions

- **Roles/Skills**

- Absolute: Resources must have a primary role
- Decision: Will the organization leverage skills in addition to role, or just do resource searching at a role level. Skills are only used when doing resource searching. Even if skills are updated, they cannot be used for capacity planning. If this is needed, consider having a “primary skill” like primary role which can be leveraged to do capacity planning by skill.

- **Allocation vs. Assignment or Both**

- Decision: Will the organization require allocations and/or assignments to be kept current? IF you have separate RMs from PMs – then you may want to consider using both. IF your RMs are your PMs – it may not make sense to keep both in sync. As you mature over time, you may move from allocation long-range planning to assignment short-range planning.

- **Hard/Soft Booking**

- Decision: Three processes can be used in booking or allocating resources to investments:
 1. Project manager does a “soft” book, followed by a resource manager confirming this and making the booking “hard”
 2. Project manager creates a formal requisition for resource or booking managers. Resource managers propose potential resources which are then “hard” booked as the project manager approves the req.
 3. Project manager makes a request via email or verbally (or not at all), and the resource managers go into the project and “hard” book the resource selected for the project

- **Role/Direct Booking**

- Decision: Will the organization have project managers prepare their schedules and estimates using standard roles first, and then replace those roles with named resources; or will the organization have project managers add specific named resources and then build the plan using the availability and talent of those named resources

NOTE: Clarity process decisions can vary by group within an organization



Keys to Success

Keys to Success: Pre-Deployment

■ Buy In & Decisions

- Visible upper level management buy-in
- Make core data decisions: Roles, Skills, Other Work
- Define organization resource management process, making key process decisions: Role/Skill, Allocation/Assignment, Hard/Soft booking, and Role/Direct booking
- Educate management on resource management - key terms, analysis to perform, benefits received, and labor needed to maintain/deploy

■ Determine Governance of Resource Management

- Ensure you have the FTEs to be successful: Dedicated SMEs to support initial deployment long-term on-going support, as well as funds to handle initial mentoring/training from internal/external experts
- Determine how you will monitor compliance, who will do the reporting, and who will view/take action on the results
- Determine how you will handle conflicts or new demand - essential
 - Weekly meeting? Operations Review?
 - Central planning team? Master Planner?

■ Data Preparation

- Update Resources with roles, calendars, and skills
- Update resource allocations on investments

Keys to Success: Deployment and Post-Deployment

■ **Training/Mentoring**

- Written materials are not as helpful as hands-on mentoring – their resources, their allocations, their projects.
- Deployment training needs to be more workshop and less lecture – smaller groups with lots of hands-on.
- Dedicate SMEs within the organization to support initial deployment long-term on-going support

■ **Philosophy**

- Perfection is the enemy of good: Resource management is all about “close” – horseshoes and HG. If you are OCD, RM will be difficult. You will NEVER be 100% accurate – you will live in shades of “close”
- Keep reminding people of the overall reasons and benefits of resource management – it is for the bigger picture. You will need on-going commitment from resources is required to maintain data

■ **Monitor Adoption and Compliance**

- Use the governance process you established - weekly meeting, central planning, etc
- Use allocation compliance metrics to take action and establish compliance as the new “norm”
- Do not run faster than you are able. It will take months before allocation compliance is part of the company culture – do not try and deploy too much new functionality in that time – wait for RM to take hold.
- Success will be when you have “appropriate” allocations across the organization for 3 months in a row. (Appropriate = 80-120% allocated for the next 3-6 months)



JD Irving – A Use Case

- **Process**
 - Environment
 - Approach
 - Steps
 - Metrics
- **People**
 - Organizational Change
 - Training
- **Technology**

- Centralized IT division supporting 50 operating companies on a “Fee for Service” model.
- Decentralized Resource Management
- Many to Many Negotiations
- Inconsistent approach
- No common view of demand or capacity
- Recognition given to firefighters not planners

- One single source of the truth.
- Only Project Managers can enter/change demand.
- Only Resource Managers can enter/change commitment.
- Everyone is 100% Allocated to something.
 - Administration, Projects, SR/Incident work, etc
- All demand should be hard allocated in the next 4 weeks.
- Work is to be assigned for Project work for the next 4 weeks.
- Project schedules are kept realistic.
- Time is entered weekly to the task level.

Project Manager

Creates demand by adding roles to projects. (Soft Allocations)



Project & Resource Managers

Negotiate Best fit of resource to project.



Resource Manager

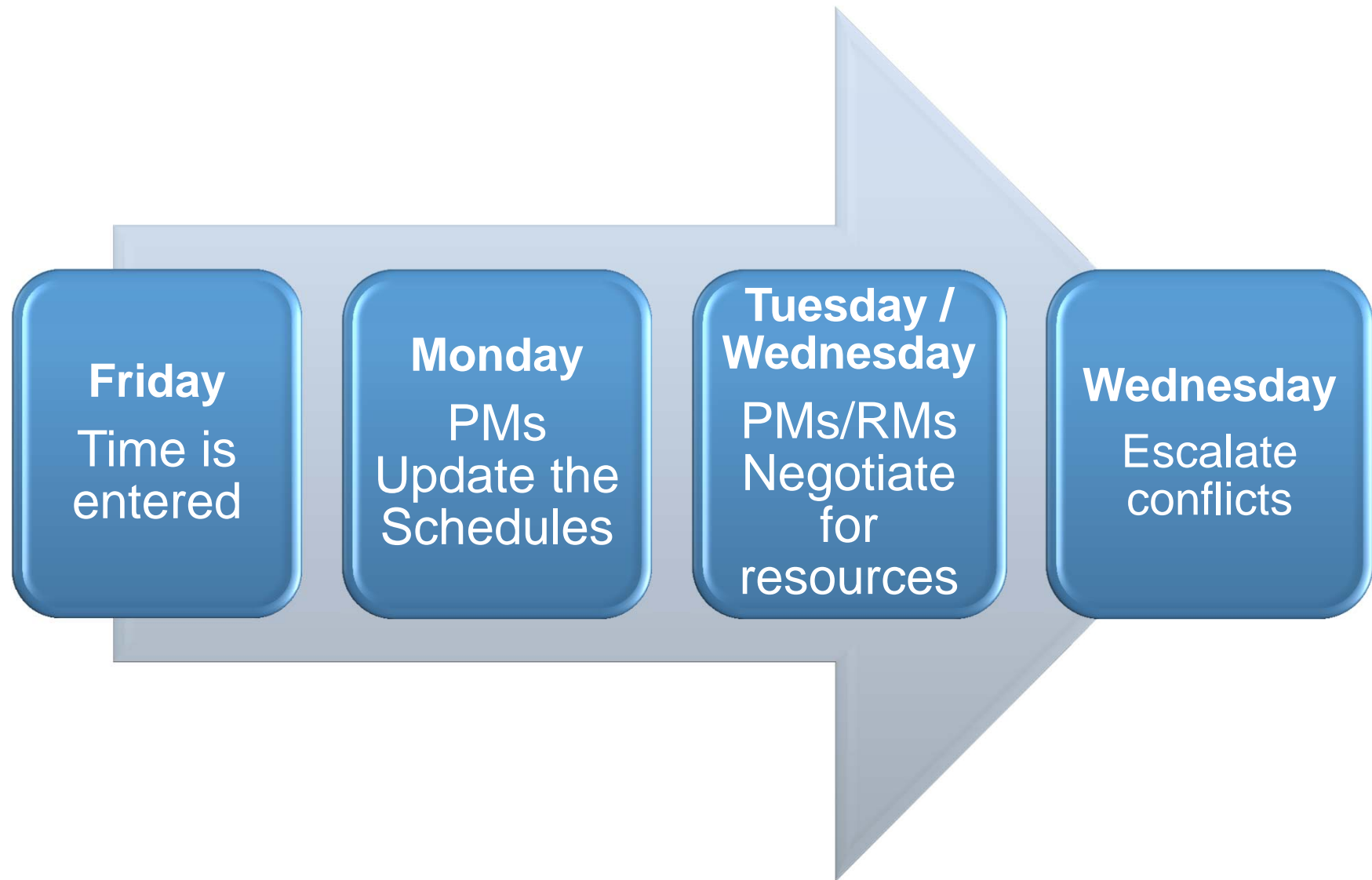
Commits the resource to the project.
(Hard Allocations)



Project Manager

Maintains the Schedule and adjusts demand





Realistic Resource Plan

Resource Allocation
Compliance

Working to
Allocation

Monetary
Incentive

Demand
committed to
Projects

Assignments
Past Due

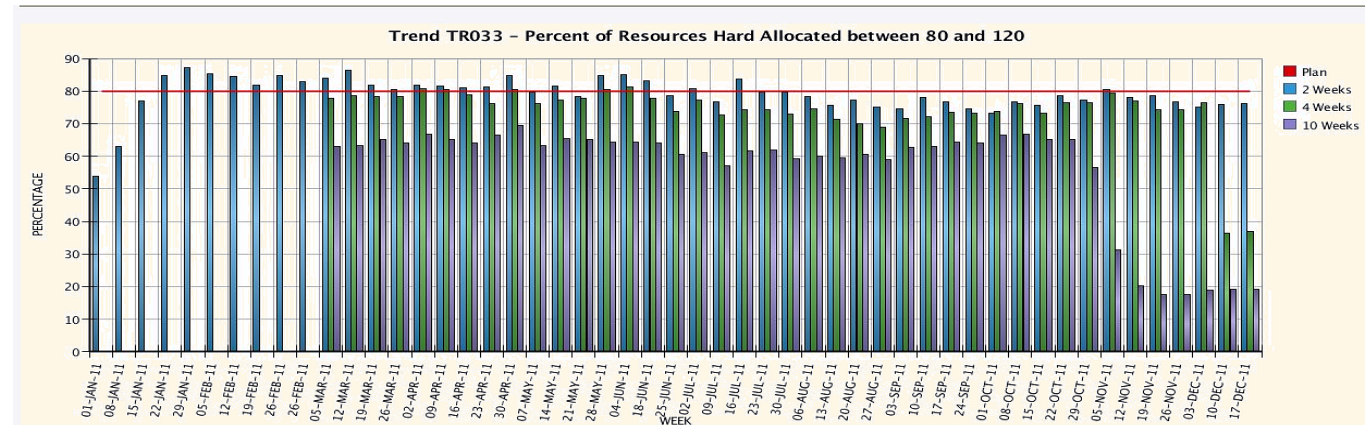
Assignments
to Allocations

Time
Entered

Vacations /
Training
Entered

Monetary
Incentive

- Trends



- Dashboards

<input type="checkbox"/>	Resource Manager	Total Employees	Total Contractors	Total Resources	RM Non-Compliance (a+b+c+d+e+f+g+h)	Time not Entered? (a)	Availability not Allocated (Next 4 Weeks) (b)	Allocations vs Actual not in Compliance (e)	Calendar Updated? (Last 2 Weeks) (d)	Allocations or Assignments Past Termination Date	Active Resources Past Termination Date (g)	Contractor with No Termination Date (h)
<input type="checkbox"/>		231	61	292	254	✗ 23	✗ 76	✗ 115	✗ 32		✗ 7	✗ 1
<input type="checkbox"/>		21	0	21	24	✗ 1	✗ 10	✗ 10	✗ 3		✓ 0	✓ 0
<input type="checkbox"/>		1	0	1	2	✓ 0	✗ 1	✗ 1	✓ 0		✓ 0	✓ 0
<input type="checkbox"/>		19	1	20	27	✓ 0	✗ 16	✗ 4	✗ 7		✓ 0	✓ 0
<input type="checkbox"/>		5	0	5	3	✗ 1	✓ 0	✗ 2	✓ 0		✓ 0	✓ 0
<input type="checkbox"/>		6	0	6	8	✗ 2	✗ 4	✗ 1	✗ 1		✓ 0	✓ 0
<input type="checkbox"/>		0	2	2	4	✓ 0	✗ 2	✗ 2	✓ 0	✗ 1	✓ 0	✓ 0
<input type="checkbox"/>		4	0	4	6	✗ 1	✗ 2	✗ 2	✓ 0		✗ 1	✓ 0
<input type="checkbox"/>		3	2	5	2	✗ 1	✓ 0	✗ 1	✓ 0		✓ 0	✓ 0
<input type="checkbox"/>		5	0	5	6	✗ 2	✗ 3	✓ 0	✗ 1		✓ 0	✓ 0

- emails

- People
 - 250 Staff
 - 30+ Resource Managers
 - 50+ Project Managers
- Training
 - CAPA
 - Process Diagrams and Work Instructions
 - Online Wiki
 - Lunch and Learns
 - Coaching sessions Group and One on One

- Use
 - Soft and Hard Allocations
 - Other work for Vacations, sick, training, etc
 - A project for Administrative allocation and time
 - Some “Self Managing Resources”
- Not using
 - Resource Requisitions

JDI Resource Management – Weekly Detail

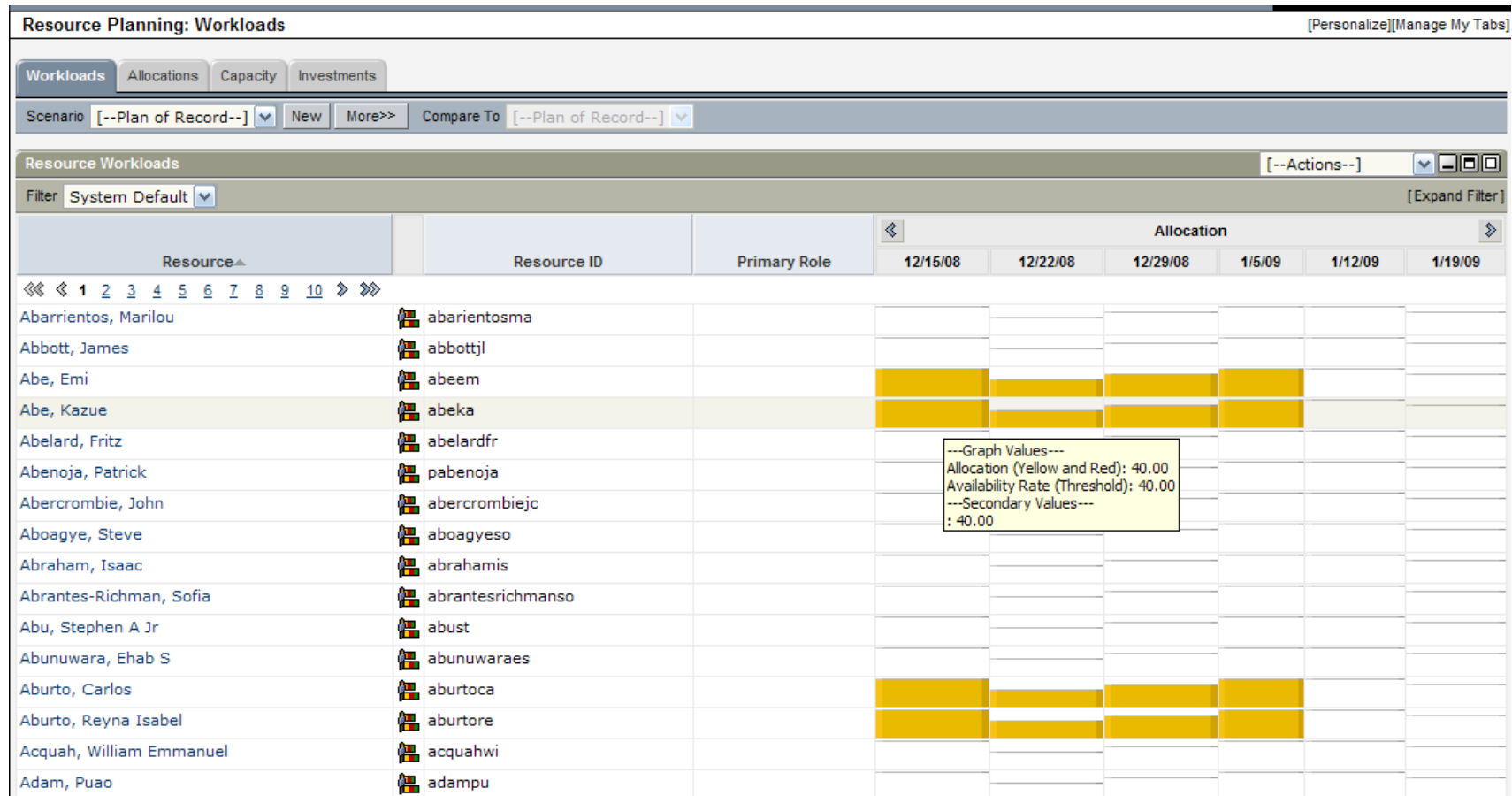
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		Resource	Project Role			Project	JDI Business	Division	Avail Finish	Avail Start	Project Manager		Allocation/Assignment/Actual								
													November 2011		December 2011			January 2012			
													11/28/11	12/5/11	12/12/11	12/19/11	12/26/11	1/2/12	1/9/12	1/16/12	1/23/12
		Dickson, Don (ITD)	Role - Other			ITD			12/31/10	5/29/08		Soft Allocation Hard Allocation Assignment Actuals									
		Dickson, Don (ITD)	Role - Other						12/27/13	6/1/09		Soft Allocation Hard Allocation Assignment Actuals									
		Dickson, Don (ITD)	Role - Other						12/31/13	5/28/09		Soft Allocation Hard Allocation Assignment Actuals	1.9 1.9 2.0	1.9 1.9 12.8	1.9 1.9 12.8	1.9 1.9 12.8	1.1 1.1 7.7	35.6 35.6 28.0	35.6 35.6 28.0	35.6 35.6 28.0	
		Dickson, Don (ITD)	Role - Other						12/31/13	6/1/09		Soft Allocation Hard Allocation Assignment Actuals			1.9 1.9	1.9 1.9	1.2 1.2				
		Dickson, Don (ITD)	Role - Other						8/27/10	6/14/10		Soft Allocation Hard Allocation Assignment Actuals									
		Dickson, Don (ITD)	Role - Other						12/12/11	1/24/11		Soft Allocation Hard Allocation Assignment Actuals	10.9 11.2	15.6 4.5 245.0	3.8						
		Dickson, Don (ITD)	Role - Other						12/30/11	2/2/11		Soft Allocation Hard Allocation Assignment Actuals	3.8 3.8 29.5	3.8 3.8 3.1	10.0 10.0 3.1	10.0 10.0 3.1	10.0 10.0 0.6				
		Dickson, Don (ITD)	Role - Other						12/31/11	1/4/11		Soft Allocation Hard Allocation Assignment Actuals	20.6 20.6 6.0	29.6 23.6 3.4	31.9 24.4 24.4	31.9 24.4 24.4	19.1 14.6				
		Dickson, Don (ITD)	Role - Other						10/28/12	9/13/11		Soft Allocation Hard Allocation Assignment Actuals		7.5 7.5 2.4	2.0 1.9 2.4	7.5 7.5 2.4	2.0 1.1 1.4	2.0 1.9 2.4	2.0 1.9 2.4	7.5 7.5 2.4	2.0 1.9 2.4
Total Soft Allocation													37.1	58.4	49.5	51.3	32.2	37.6	37.6	35.5	37.6
Total Hard Allocation													37.5	41.2	38.1	43.8	26.9	37.5	37.5	35.5	37.6
Total Assignment														266.7	20.2	20.2	10.9	2.4	2.4	2.4	2.4
Total Actual													37.5								

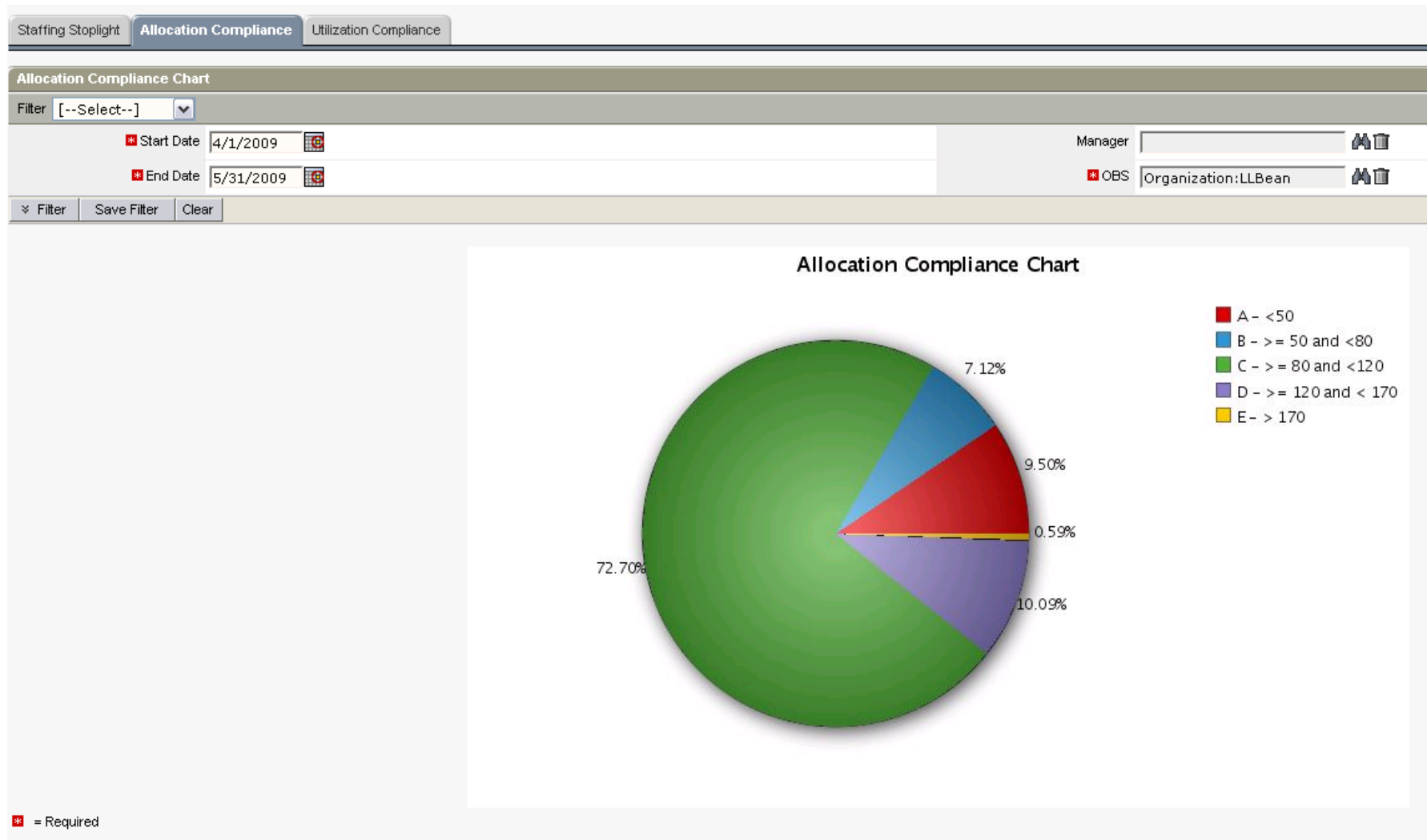
- Senior Management Support
- Leading Change is key to success
 - Communicate the need
 - Communicate the concepts
- Simplify as much as possible
- Support process with metrics
- Phased approach
 - Resource Planning
 - Resource Scheduling
- Not an incremental rollout



APPENDIX

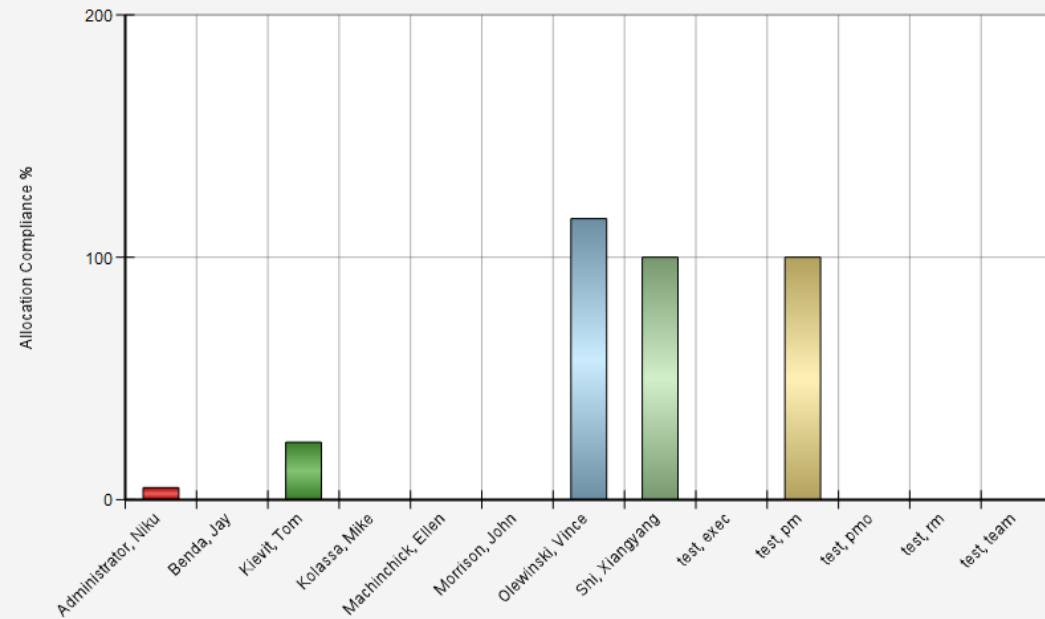


- Resource Workloads – One line per resource (RM) – Config: time scale, act/alloc/assign/net, hr/FTE/bar
- Weekly Detail – One line per allocation (RM & PM) – Config: time scale, act/alloc/assign/net, hr/FTE/bar
- Booking Status – Team records soft or mixed (RM)
- Unfilled Requisitions – Role team records not replaced (RM & PM)
- Role Capacity – View of future capacity summarized by role (Mgmt) - Config: time scale, hr/FTE/bar

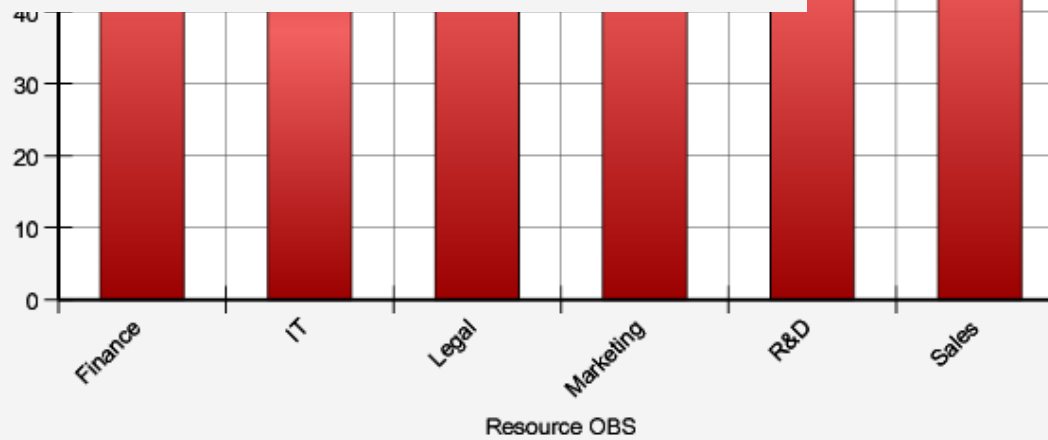


PM Dashboard Missing Time Late Issues/Risks/Action Items Late Tasks & Milestones Variances **Resources Over Allocated** Res Capacity

Allocation Compliance for PM [Actions] Filter System Default [Expand Filter]

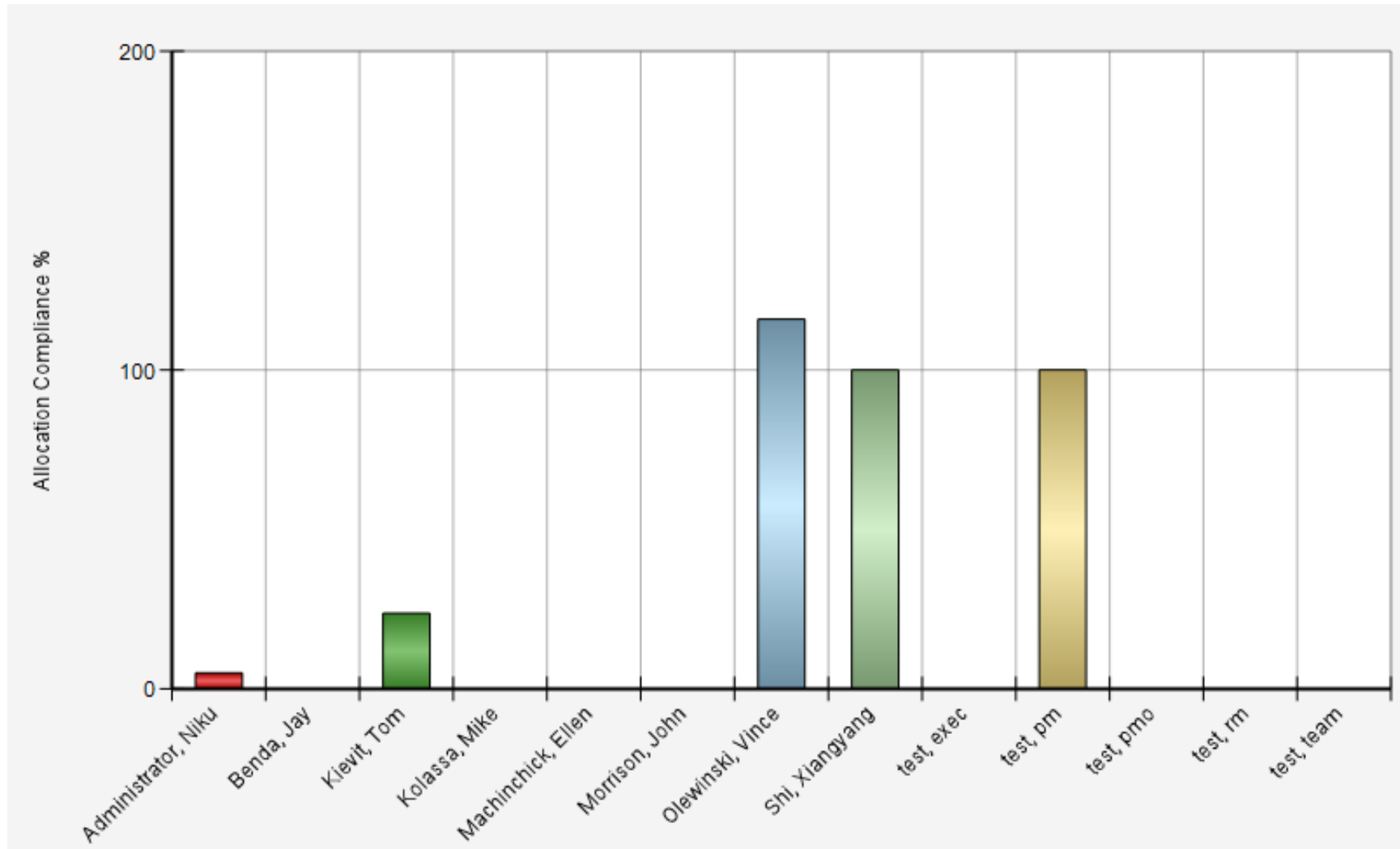


Required

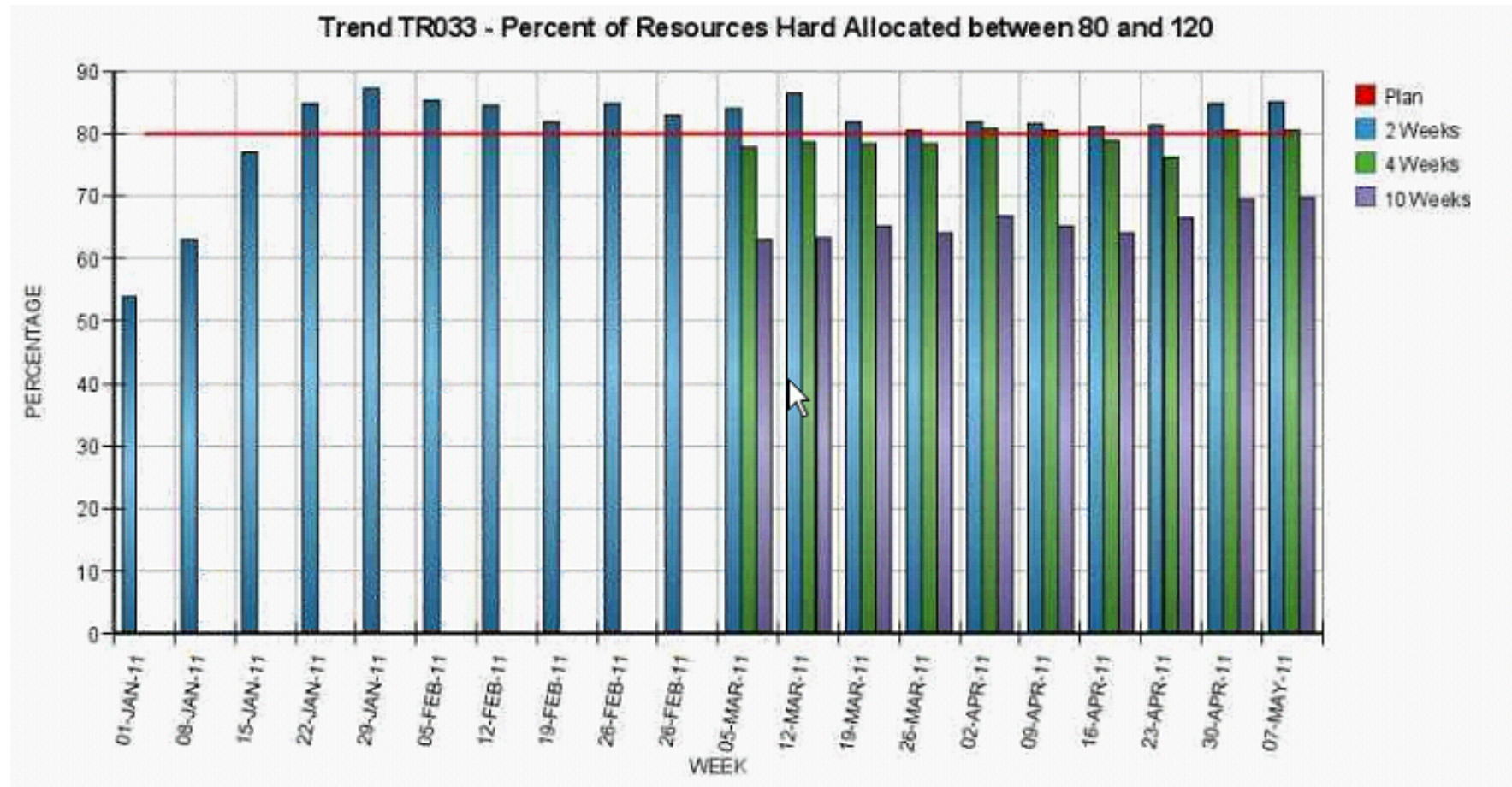


- A: Under Allocated (Less Than 80%)
- B: Appropriately Allocated (Between 80-120%)
- C: Over Allocated (Over 120%)

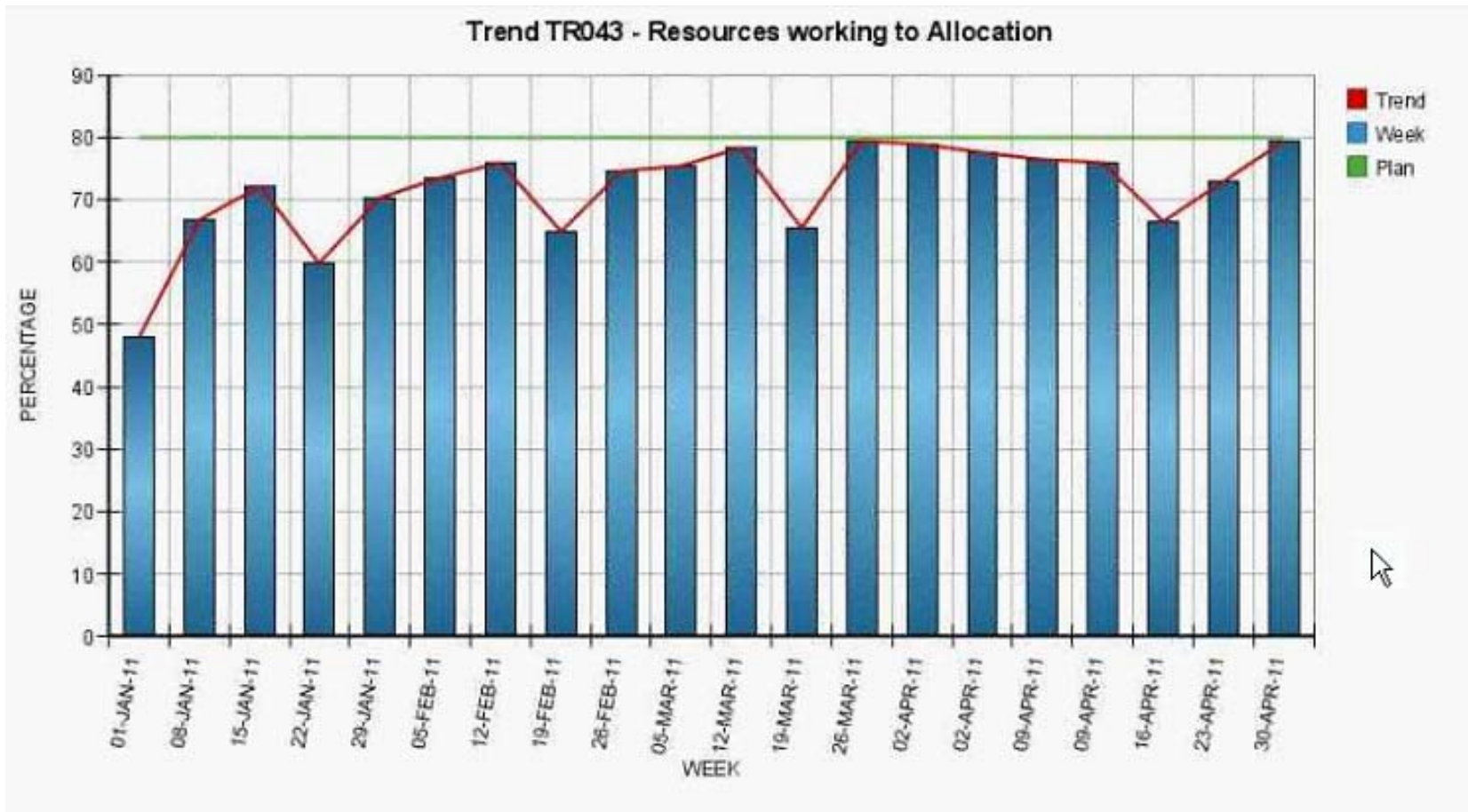
View 1



View 2

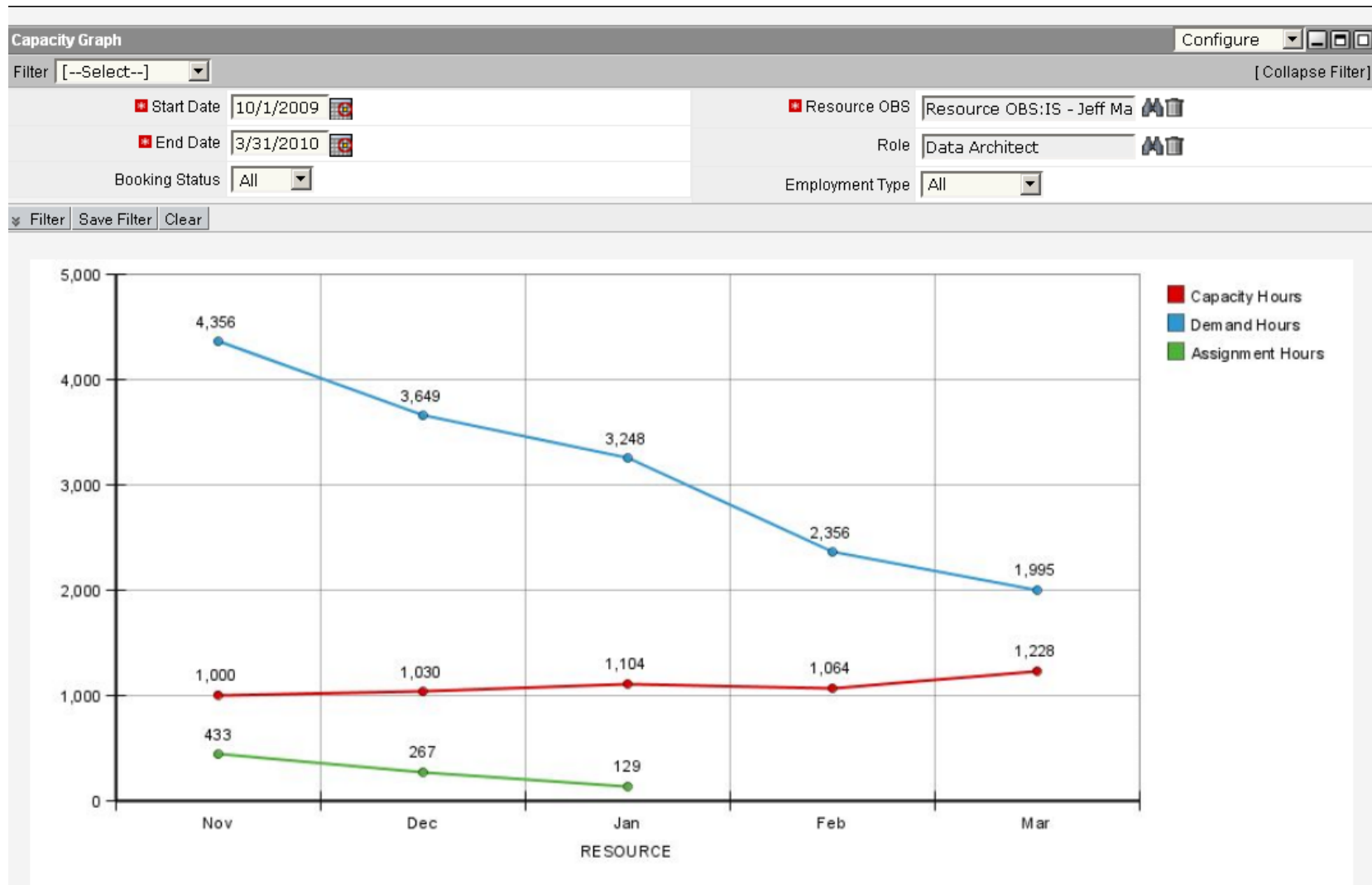


View 3



Capacity Graph

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Maturity Criteria: Resource Allocations

Purpose: Is the RM keeping their staff's allocations current?

Compliance: $\text{Allocation \%} = \text{Total Allocations} / \text{Total Availability}$

Level 0: The resource does not have an allocation % between 70-130% for the next 1 month.

Level 1: The resource has an allocation % between 70-130% for the next 1 month.

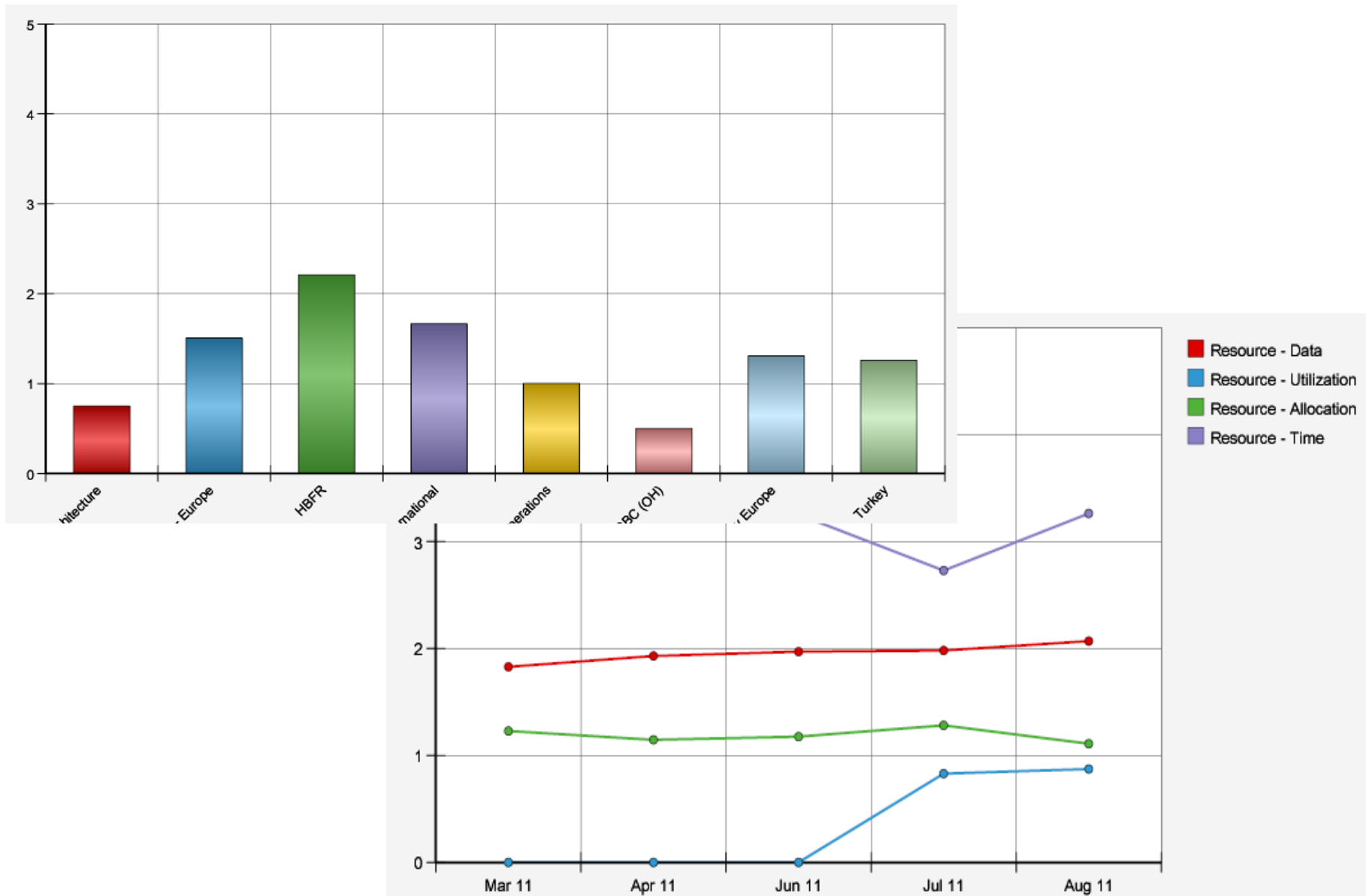
Level 2: The resource has an allocation % between 70-130% for the next 3 months.

Level 3: The resource has an allocation % between 80 -120% for the next 3 months.

Level 4: The resource has an allocation % between 70-130% for the next 6 months.

Level 5: The resource has an allocation % between 70-130% for the next 9 months.

View by Metric Within an Organization



Contact Us

☐ Rego Consulting

☐ Daniel Greer

☐ daniel.greer@regoconsulting.com

☐ 414-248-2829

☐ JD Irving

☐ Don Dickson

☐ Dickson.Don@jdirving.com

☐ 506-648-3614