How we use Resource Capacity & Demand at Montefiore IT

September 22, 2017

Agenda

- **Introductions**
- **Need for Resource Capacity vs. Demand**
- **Basic Montefiore IT PMO Concepts**
- **Resource and Project Manager Dashboards**
- **Impact of Improvements**
- **Next Steps**
- **Questions**

Introductions

- **David Eng**
  - **Assistant Director at Montefiore IT overseeing the Project Management Office, Service Management Tool and Apple Teams**
  - **Over 10 years experience in Project Portfolio Management as a Project Manager and manager of the PMO**
  - **Responsible for providing the processes, tools and data to guide Montefiore IT in choosing what to work and ensuring we have the resource and methodology to successful complete the work.**
- **Montefiore IT PMO**
  - **Defines and maintains the portfolio and project management standards used by Montefiore IT for all projects across all customers**
  - **Established in early 2000's**
  - **Moved to On Demand in 2009**
  - **Staff of 5 (not including project managers who do not currently report into the PMO)**
  - **~900 Clarity users and ~300 investment files**

Introductions

- **Montefiore Health System (MHS)**
  - Premier academic medical center made up of
    - 11 hospitals
    - a primary and specialty care network of 200+ locations across the Bronx, Westchester County and lower Hudson Valley
    - an extended care facility
    - the Montefiore School of Nursing
    - Albert Einstein College of Medicine
  - Partnered with various other medical centers in the NYC area
- **Montefiore Information Technology (IT)**
  - Wholly owned subsidiary of Montefiore Health System responsible for IT related efforts of the Health System such as support of current IT system and implementation of enhancements and new IT systems
  - Provides data center functionality for multiple medical centers in the NYC area

> *To heal, teach, discover, and advance the health of the communities we serve*

Need for Resource Capacity vs. Demand

- **No quantifiable data to show Capacity vs Demand**
  - **Limited visibility into department's availability**
  - **Limited visibility into the impact of new work on departments**
  - **Inaccurate data on estimates to complete requests**
  - **Departments found it hard to justify saying "No" to a work being requested**
  - **Projects delayed due to a department taking on too much**
  - **Very little trust that capacity vs. demand reports were accurate**
  - **Monthly portfolio meetings were ineffective. Meetings talked more about what estimates needed to be updated vs. making decisions based on the data**
- **Montefiore continues to grow at a fast pace. To support this growth we need to be able to effectively and efficiently manage current and future work**

Resource Capacity vs. Demand Basics

- **Estimates (ETC) are the key piece of data we use. We don't use allocation**
- **Resource capacity and demand is viewed by organization structure (i.e., department and teams). Not role based.**
- **Resource hours are separated into 4 types of work**
  - *Administrative:* **Task to run the business (i.e., Performance Reviews, Training)**
  - *Core:* **Maintain existing functionality…"keeping the lights on"**
  - *Enhancement:* **New/Improved functionality that does not require significant effort**
  - *Project:* **New implementations that require significant effort and requiring multiple domain areas**
- **Administrative estimates are managed by PMO**
- **Core and Enhancement estimates are managed by resource managers**
- **Project estimates are manages by project managers**

Clarity Improvements: Role Based Dashboards

- **Groups functionality by role and easily accessible from main menu**
- *Team Member*
  - **View where and how much time was tracked across timesheets**
  - **Shows current estimates across investments**
- *Resource Manager*
  - **Real time view to resource utilization/availability**
  - **Real time estimate data**
  - **Single screen to view previous actuals and future estimates**
- *Project Manager*
  - **Identify potential project issues using Key Performance Indicators**
  - **Single screen to update attributes across projects (i.e. status comments)**
  - **Real time estimates and make simple updates without Open Workbench.**
- *Executive*
  - **Reports/Portlets showing key project data**

RM Dashboard: Resource Demand

- **Real time view of resource utilization/availability**
  - **Do resources have too much work or can take on more work**
  - **What investments resources are working and make sure estimates are correct**
  - **Compare actuals from previous months to estimates from future months**
  - **Update estimates directly from Clarity without using Open Workbench**

Resource Demand Summary

Resource/Role	Resource Manager	2015-04-01 Estimate	2015-05-01 Estimate
Banks, Alister	Grayson, Marc	🟢 27.63	🟢 123.14
Becker, Jason	Grayson, Marc	🟢 32.33	🟡 161.63
Costa, Joy	Springer, Roger	🟢 28.11	🟢 142.13
Ebighatian, Norayr	Stabile, Joseph	🟢 30.82	🟢 136.93
Eng, David	Hoch, Brian	🟢 76.03	❌ 194.97
Evans, Daphne	Springer, Roger	🟢 30.07	🟢 126.49
Grayson, Marc	Eng, David	🟢 55.32	🟢 148.60
Niyazov, Aleksandr	Grayson, Marc	🟢 27.77	🟢 138.83
Petrilli, Jeanne	Stabile, Joseph		
Reel, Tammi	Stabile, Joseph		
Reiner, Lisa	Stabile, Joseph		
Smith, Jared	Grayson, Marc		
Springer, Roger	Eng, David		
Stabile, Joseph	Eng, David		
Total ETC			

Summary view of resource estimates
- 🟢 **: < 180 hrs/month**
- 🟡 **: Between 180 and 220 hrs/month**
- ❌ **: > 220 hrs/month**

Breakdown of resource estimates by investment

Resource Demand by Project

Resource/Role	Resource Manager	Project Name	Project Manager	Project Phase	Priority	2015-04-01 Estimate	2015-05-01 Estimate	2015-06-01 Estimate
Banks, Alister	Grayson, Marc	Infrastructure for Apple Workstation Management	Grayson, Marc	Approved	7	3.00		
Banks, Alister	Grayson, Marc	WACOM(V3.6PS.ETP	Eng, David	Approved	10	7.89	39.43	43.37
Banks, Alister	Grayson, Marc	WBENNV3.6PS.ETP	Eng, David	Approved	10	15.36	76.78	84.46
Banks, Alister	Grayson, Marc	CVHD13	Stabile, Joseph	Approved	10	1.39	6.94	7.63
Becker, Jason	Grayson, Marc	WACOM(V3.6PS.ETP	Eng, David	Approved	10	18.36	91.78	100.96
Becker, Jason	Grayson, Marc	WBENNV3.6PS.ETP	Eng, David	Approved	10	12.32	61.61	67.77
Becker, Jason	Grayson, Marc	CVHD13	Stabile, Joseph	Approved	10	1.65	8.24	9.06
Costa, Joy	Springer, Roger	EpicWF Activation and Cutover	Harmon, Ruth	Approved	10	2.57	14.43	
Costa, Joy	Springer, Roger	WACOM(V3.6PS.ETP	Eng, David	Approved	10	17.83	89.14	98.05
Costa, Joy	Springer, Roger	WACOM(V3.PS6.BOARD.WEBSERV(DsaRe)	Costa, Richard	Approved	10	1.38	6.90	7.59
Costa, Joy	Springer, Roger	WBENNV3.6PS.ETP	Eng, David	Approved	10	4.60	22.99	25.29
Costa, Joy	Springer, Roger	CVHD13	Stabile, Joseph	Approved	10	1.73	8.67	9.54

RM Dashboard: Portfolio Demand

- **Real time investment estimates by department and team**
  - **Make sure your resource's work is estimated correctly**

View resources by Department

View resources by Team

PM Dashboard: Portfolio Demand

- **Real time estimates by project**
  - **Make sure your resource's work is estimated correctly**
  - **Update estimates directly from Clarity without using Open Workbench**

Estimates by Department

Update estimates from Clarity by clicking on task name

Non-Clarity Improvements

- **More visible Executive sponsorship**
- **Introduced Portfolio Manager aligned to departments**
  - **Assist Departments in understanding capacity vs demand concepts**
  - **Train resource managers on how to view and update estimates**
  - **Meet with resource managers once a month to review dashboards and highlight potential issues**
- **Increased visibility of reports**
  - **Reports used by executives made available to everyone**
  - **Reports sent to key individuals in addition to Department directors**

Build vs. Out of the Box

- **Ease of use to view/update real time role and resource estimates in one screen**
- **No out of the box functionality to view/update assignments by department and team**
- **Needed way to view resource capacity by type of work (i.e., Admin, Core, Enhancement, Project)**
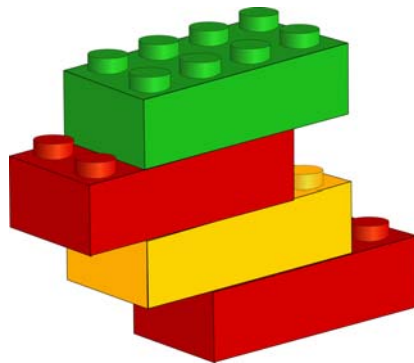
Impact of what was implemented

- **Resource and Project managers find it much easier to keep their estimates accurate**
- **Executives trusted the reports**
- **Portfolio meetings focused on making decisions instead of questing report accuracy**
- **Provided quantifiable data to Montefiore leadership to prioritize IT work and justify funding for resources and consulting**
- **General feeling from employees that leadership was trying to control their workload that boosted morale**

First report (1/2014): Overcommitted by ~65% in the next 3 months
Latest report (7/2017): Overcommitted by ~12% in the next 3 months

Next Steps

- **Enhance Clarity to be able to break down capacity by types of work (i.e., Admin, Core, Enhancement, Project) instead of 1 overall number**
  - Rego assisted in development to view and manage "sub-capacities"
  - Provides ability to assign a resource's capacity per work type that can then be rolled up to a team/department
  - Capacities used to set team budgets
- **Determine best approach to save snapshots of data (i.e., investment ETCs at the beginning of each month).**
  - Needed to create trending and audit reports
- **Automate creation of portfolio reports**

Questions/Contact Info

David Eng
Assistant Director - PMO
deng@Montefiore.org
914-457-6010

Joseph Stabile
Senior Product Manager - PMO
jstabile@montefiore.org
914-457-6386

Tammi Reel-Davis
Technical Lead - PMO
treel@montefiore.org
914-457-6353