Project Management at Toyota Motors North America
Karen Nocket
Vice President - Enterprise Services

Getting to know you…

Karen J. Nocket
• Trainee
• Programmer
• Project Manager
• Program Manager
• Chief Architect
• Divisional CIO
• Vice President, Enterprise Systems
A few of my favorite things…

<table>
<thead>
<tr>
<th>Mentoring</th>
<th>Encouraging people to stretch past their limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT and business strategies</td>
<td>Answering business needs with IT delivery</td>
</tr>
<tr>
<td>Running large programs</td>
<td>Setting up successful large programs &amp; Turning around struggling programs</td>
</tr>
<tr>
<td>Building high-performing teams</td>
<td>Optimizing the power of “Team” and “Fun”</td>
</tr>
</tbody>
</table>

PM Case Study 1: Workplace of the Future

WOF
We needed to modernize the end user technologies to enhance the experience, changing the way we work and collaborate

Aging infrastructure
Aging email system
Aging desktops
Limited mobile access

Cost
- Operational costs for old email system growing, too costly to go to next version
- Aging infrastructure getting more expensive to maintain

Risk
- Increased infrastructure failures
- Software was past support time
- Limited ability to easily communicate with business partners and customers
- Real time document sharing was a requested new feature with no solution
- Needing mobile access to email, people, and documents

The advanced technologies that people had at home showed us that there was a willingness to adopt new tools

There was a **HUGE GAP** between the technology we have in our **homes** and the technology we use in our **workplace**.
The WOF program took on these challenges and drove the transformation of business collaboration capabilities:

- Aging infrastructure
- Aging email system
- Aging desktops
- Limited mobile access

- 45,000 Mailboxes migrated to the Microsoft cloud
- 25,000 PC’s upgraded
- 17,000 New mobile devices issued
- 150+ Servers retired

To be successful, the team had to manage a complex, large scale project whose scope was North America and Europe.

Why?
- People don’t like change
- People wanted cool stuff
- Distrust of large projects
- Disruption to work environment

Stakeholder Engagement
- Heavy dependency on the vendor
- Cloud, what is a cloud?
- Many unknowns and questions
- Cycle of repeated issues

Risk Management
- Competing with multiple projects
- North America wide roll-out
- Many different groups needed to be communicated, organized and involved

Timeline
Changing the way people worked and collaborated required a well orchestrated stakeholder engagement and marketing plan

- Branded the program with a mascot
- Aggressive marketing campaign
- Consistent, continuous communication
- Special attention to key users
- Identified and collaborated with over 40 “Champions” from the business

Aggressive attention to risk management was done on a daily and weekly basis to remove blockers

- PM’s managed the risk log daily – thank team members for communicating risks
- Maintained a vendor Q&A log
- Published a weekly program status
- Held weekly PMO meetings
- Decision large risks in a monthly Executive Steering Committee meeting
- Attention to removing barriers constantly
Preparing and publishing an actionable plan ensured all the right activities and people were lined up to deliver as promised.

- Built roll-out schedule around “Champion” feedback on business priorities
- Dedicated a client release manager and migration analyst
- Used a Microsoft Project master schedule for workstream visibility
- Use of a consolidated, easy to read Dashboard to keep everyone on track

Enlisted early adopters to build excitement and to help manage deployment risk

Ensured the process was transparent and communicated

Organized complex activities into manageable workstreams

Communicated, communicated, communicated

Dedication of a client release manager and migration analyst was essential

Built a comprehensive plan and made it visible, on the wall

Invested in “champions” and high-impact stakeholder relationships

Marketing the project with a mascot helped awareness and added a little fun

WOF program key Lessons Learned
PM Case Study 2: Toyota Enterprise Security System TESS

The infrastructure to support secured access to applications and data is very complex and was critical to be working all the time.

- Very complicated and hard to support
- Infrastructure ages quickly
- Security services can be outdated quickly
- Highly technical people required
With the introduction of cloud and mobile, needed to be prepared for the modernization of these security services quickly

- Many, many clouds to understand
- Additional complexity added to existing infrastructure
- Must be up 100% of the time
- The bad guys are very smart

The TESS program led the enterprise to prepare and move all the remaining applications to the new security platform

- 58 Applications migrated
- 33 Workstreams
- Single sign-on capability
- Compressed timeline – 1 year reduction
To deliver with quality and speed, the team had to prepare itself for a very visible leadership role and drive to meet the date.

**Stakeholder Engagement**
- Task looks impossible
- Stakeholders "burned out"
- Distrust of large projects
- Fear of disruption to workflow

**Risk Management**
- Understaffed & over worked
- Processes not in place
- Can't make a mistake with security projects

**Timeline**
- Timeline reduced by one year
- Introduction of Agile and Scrum
- Pressure to implement single sign on

There was great preparation to engage and hold the stakeholders accountable to the mission yet keep it fun and interesting.

- Highly engaged and involved leadership approach
- Clear accountability and roles / responsibilities
- Excel at communication and collaboration across organization
- Weekly dashboards and status
- Celebrations when milestones achieved
Since the risks were great and important to solve, a process for escalation was put in place to better decision and manage

- Risk management process communicated
- Weekly review and documentation of risks and decisions
- Weekly escalation meeting so risks did not linger—and—no one person could hold the project hostage
- Very visible Executive Support

The stretch goal was given to the team to reduce the project timeline (2 years to 1 year) gave urgency and a common goal

- Pre-Planning workshops established a sense of urgency
- Streamlined decision making process
- Fast-tracked timeline – moved from Waterfall to Agile
- Weekly meeting cadence
### TESS program key *Lessons Learned*

<table>
<thead>
<tr>
<th>Set aggressive timelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build in recovery periods for the staff and keep them motivated / excited</td>
</tr>
<tr>
<td>Identify critical resources earlier, Plan for extra capacity well in advance</td>
</tr>
<tr>
<td>Validate environment builds quickly and complete quality checks at every stage</td>
</tr>
<tr>
<td>Watch for ‘re-decisions’ with people stopping the progress because they don’t like a decision</td>
</tr>
<tr>
<td>Be aware of impact on external stakeholders and create check points</td>
</tr>
<tr>
<td>Rehearse the migration work – moving forward and backward</td>
</tr>
</tbody>
</table>

> “It was the hardest project I have ever done, yet it was the most fun I ever had!”

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### Project Management

**The Secrets to our Success**
Successful projects start with staffing critical leadership roles and supporting talent, and providing a structure for work to get done.

- **PMO Manager**
  - Accountable for success; Assists with major issues, problems, and policy conflicts; removes obstacles; Ensures teamwork
  - Active in planning the scope; approves changes; signs off on major deliverables; Approvals to move to the next phase

- **Product Manager**
  - Acts as the stakeholder advocate
  - Drives shared program vision
  - Manages customer expectations
  - Drives the business case
  - Manages the steering committees
  - Drives features vs. schedule vs. resources tradeoff decisions
  - Manages marketing, evangelizing and public relations
  - Delivers the communication plan and change management efforts

- **Customer & Executive Sponsor**
  - Vocal and visible champion of the project; Secures funding; Makes decisions
  - Responsible for the outcome of the project; Keeps abreast of major project activities

- **Program Manager**
  - Drives the delivery process
  - Manages risk and countermeasures
  - Manages the overall program schedule, budget, resources and reports project status
  - Vets and contributes to all sub-project plans for consistency and quality
  - Facilitates good teaming across all supporting delivery areas
  - Manages product specifications
  - Drives implementation of critical trade-off decisions

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The business case and charter give clarity to the project’s purpose, benefits and ensures sponsorship alignment to support.

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**Business Case**

**Charter**

1. Project Description
2. Project Purpose
3. Business Case
4. Business Requirements
5. Assumption
6. Constraints
7. Risks
8. Project Deliverables
9. Project Milestones
10. Project Manager
11. Project Roles and Responsibilities
12. Project Life Cycle Methodology and Tools
13. Authorization

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  8.1 Financial Considerations
  8.2 Preliminary Acquisition Strategy Plan
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10. Appendix C: References
11. Appendix D: Key Terms
Completing a stakeholder analysis early in the standup of a project ensures good steering and governance to share the risk.

<table>
<thead>
<tr>
<th>Group</th>
<th>Membership</th>
<th>Objective</th>
<th>Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Management Office</td>
<td>3 key IT Executives</td>
<td>Operational program management and decisions, sponsors teamwork and fun</td>
<td>Weekly meeting Status report and Dashboard</td>
</tr>
<tr>
<td>North American IT Leadership</td>
<td>3 CIOs</td>
<td>Overall program oversight and decisions, remove blocking risks</td>
<td>Monthly meeting Dashboard &amp; prepared presentation General communication campaign</td>
</tr>
<tr>
<td>Executive Leadership Steering Committee</td>
<td>Business and IT Executives</td>
<td>Program guidance, information sharing, advocacy</td>
<td>Monthly meeting Prepared presentation General communication campaign</td>
</tr>
<tr>
<td>Business Champions Steering Committee</td>
<td>Business and IT Champions (at least one per department)</td>
<td>Department-level communications, upgrade and migration scheduling, general facilitation and feedback; Strong voice back to the business</td>
<td>Monthly meeting / bi-weekly during migrations Dashboard and Knowledge documents General communication campaign</td>
</tr>
<tr>
<td>Early Adopters</td>
<td>Business and IT Champions</td>
<td>Process development and improvement, software testing and validation</td>
<td>Weekly meeting with some breaks Dashboard and Knowledge documents General communication campaign</td>
</tr>
</tbody>
</table>

Assigning risk and impact to the stakeholder list allows direct and purposeful communication and increases support and buy in.

<table>
<thead>
<tr>
<th>Key Stakeholder Groups</th>
<th>Sub Teams or Individuals</th>
<th>Overall Risk</th>
<th>Impact</th>
<th>Current Adoption Level</th>
<th>Future Adoption Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Adopters</td>
<td>Business Partnering Groups</td>
<td>Low</td>
<td>Medium</td>
<td>Unaware</td>
<td>Adoption</td>
</tr>
<tr>
<td></td>
<td>Diversity &amp; Inclusion</td>
<td>Low</td>
<td>Medium</td>
<td>Unaware</td>
<td>Adoption</td>
</tr>
<tr>
<td></td>
<td>Vertical SMEs</td>
<td>Low</td>
<td>Medium</td>
<td>Awareness</td>
<td>Adoption</td>
</tr>
<tr>
<td></td>
<td>Power Users</td>
<td>High</td>
<td>Medium</td>
<td>Unaware</td>
<td>Adoption</td>
</tr>
<tr>
<td></td>
<td>IT Management</td>
<td>High</td>
<td>Medium</td>
<td>Buy-in</td>
<td>Ownership</td>
</tr>
<tr>
<td></td>
<td>IT Lab Tutors / Trainers</td>
<td>High</td>
<td>High</td>
<td>Buy-in</td>
<td>Ownership</td>
</tr>
<tr>
<td>Business Champions</td>
<td>Executives</td>
<td>High</td>
<td>Medium</td>
<td>Awareness</td>
<td>Ownership</td>
</tr>
<tr>
<td>Exception Groups</td>
<td></td>
<td>Low</td>
<td>Medium</td>
<td>Unaware</td>
<td>Adoption</td>
</tr>
<tr>
<td>Legal</td>
<td></td>
<td>Medium</td>
<td>Medium</td>
<td>Unaware</td>
<td>Adoption</td>
</tr>
<tr>
<td>Field Users</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>Buy-in</td>
<td>Ownership</td>
</tr>
<tr>
<td>Business Sales and Manufacturing</td>
<td>Executives</td>
<td>High</td>
<td>Medium</td>
<td>Awareness</td>
<td>Ownership</td>
</tr>
<tr>
<td>Business Finance</td>
<td>Executives</td>
<td>Low</td>
<td>Medium</td>
<td>Moderate</td>
<td>Project success depends on stakeholder reaching future adoption level.</td>
</tr>
<tr>
<td></td>
<td>Business Champions</td>
<td>Medium</td>
<td>High</td>
<td>There will be minimal impact to people and/or business operations.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exception Groups</td>
<td>High</td>
<td></td>
<td>There will be moderate impact to people and/or business operations.</td>
<td></td>
</tr>
<tr>
<td>Information Technology</td>
<td>Leadership</td>
<td>Unaware</td>
<td></td>
<td>There will be significant impact to people and/or business operations.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CIOs</td>
<td>Awareness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employees</td>
<td>Understanding</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contracted Workers</td>
<td>Buy-in</td>
<td></td>
<td>Stakeholder group decides to accept the change.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Application Owners</td>
<td>Adoption</td>
<td></td>
<td>Stakeholder group changes their behavior to meet project goals.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Service Desk</td>
<td>Ownership</td>
<td></td>
<td>Stakeholder is critical to the success of one or more areas of the project and will serve as a source of leadership, direction, decision-making, and/or deliverable review/approval.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WOF Project Team</td>
<td>Ownership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Microsoft Account Team</td>
<td>High</td>
<td>Medium</td>
<td>Ownership</td>
<td>Ownership</td>
</tr>
<tr>
<td></td>
<td>Communications</td>
<td>High</td>
<td>High</td>
<td>Awareness</td>
<td>Ownership</td>
</tr>
</tbody>
</table>

Rating Legend:
- Overall Risk: Low = Project success is at minimal risk if stakeholder does not reach future adoption level; Medium = Project success is at some risk if stakeholder does not reach future adoption level; High = Project success depends on stakeholder reaching future adoption level.
- Impact Levels: Low = There will be minimal impact to people and/or business operations; Medium = There will be moderate impact to people and/or business operations; High = There will be significant impact to people and/or business operations.
- Adoption Levels: Unaware, Awareness, Understanding, Buy-in, Ownership.
Defining the change management activities ensures great attention is paid to helping everyone adopt change at their pace.

Proper meeting cadence and attendees helps give structure to building a working team, sharing status and making decisions.
The daily standup meeting keeps the team up to date, ensures the right things are being worked, and addresses risks / issues.
The most important area to address in the PMO meeting are the risk and issues – actively remove the blockers for success

<table>
<thead>
<tr>
<th>LID</th>
<th>Title</th>
<th>Impact</th>
<th>Action Plan for Issue Resolution</th>
<th>Due Date</th>
<th>Vertical</th>
<th>Escalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>71</td>
<td>Dongguan integration with T3: not confirmed</td>
<td>Impacted the T3 MDC and G&amp;I relationships, cost: T3 retirement may be delayed if not resolved.</td>
<td>TESS Product Management to finalize the recommended options with EA, EBP, T3, and TESS. CTD to escalate to Karen and Phil if needed. Denial to recommend by CTD. A date for a decision is recommended by CTD.</td>
<td>4/2</td>
<td>CAPS</td>
<td>Level 3</td>
</tr>
<tr>
<td>104</td>
<td>Customer Connection integration delayed due to individual integration issues with local and MDC. AO: 2.5.6.4 G: 3.6.7.7.8</td>
<td>Customer Connection is prevented from moving forward with testing. Product point is to T3 data integration bug. Must be addressed. A solution is recommended by TESS. A date for a decision is recommended by CTD.</td>
<td>TESS Product Management to finalize the recommended options with EA, EBP, T3, and TESS. CTD to escalate to Karen and Phil if needed.</td>
<td>3/31</td>
<td>CAPS</td>
<td>Level 1</td>
</tr>
<tr>
<td>145</td>
<td>PCIe, TCC, TFM, password management continued to be poor UX irrespective of mobile applications</td>
<td>XDA may not be able to access CPS mobile and CRM mobile application. Additionally, affinities and XDA may not be able to obtain sensitive information from T3. TESS Product Management to finalize the recommended options with EA, EBP, T3, and TESS. CTD to escalate to Karen and Phil if needed.</td>
<td>TESS Product Management to finalize the recommended options with EA, EBP, T3, and TESS. CTD to escalate to Karen and Phil if needed.</td>
<td>4/16</td>
<td>CAPS</td>
<td>Level 1</td>
</tr>
</tbody>
</table>

### Highlighted Risks

<table>
<thead>
<tr>
<th>LID</th>
<th>Title</th>
<th>Impact</th>
<th>Next Steps for Risk Mitigation</th>
<th>Date</th>
<th>Vertical</th>
<th>Escalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>127</td>
<td>ABC 2.0: Target version may not meet ISU phase requirements</td>
<td>KRC version replacement patch deployment may impact the timeline and custom TESS collaboration application</td>
<td>TESS to prioritize the risk through an assessment by CTD.</td>
<td>4/13</td>
<td>All</td>
<td>None</td>
</tr>
<tr>
<td>178</td>
<td>Federation Enterprise for VMs not implemented</td>
<td>Toyota Leasing Enterprise (WCW) on-Campus data may be impacted. Toyota Leasing Enterprise (WCW) on-Campus data may be impaired.</td>
<td>TESS to prioritize the risk through an assessment by CTD.</td>
<td>4/17</td>
<td>CAPS</td>
<td>None</td>
</tr>
<tr>
<td>183</td>
<td>TESS Production performance still validated against TESS metrics</td>
<td>TESS production performance still validated against TESS metrics. TESS production performance still validated against TESS metrics.</td>
<td>TESS Product Management to finalize the recommended options with EA, EBP, T3, and TESS. CTD to escalate to Karen and Phil if needed.</td>
<td>4/30</td>
<td>All</td>
<td>Level 1</td>
</tr>
</tbody>
</table>

### Key Decisions

<table>
<thead>
<tr>
<th>D.ID</th>
<th>Title</th>
<th>Impact</th>
<th>Approved by</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>82</td>
<td>TESS will be responsible for site transitions with migration approach</td>
<td>Application timeline risk mitigated as the requirement supported by TESS</td>
<td>TESS</td>
<td>3/20</td>
</tr>
</tbody>
</table>

A common framework that visually shows status of deliverables and activities helps keep the consistency high and team focused.
A prepared agenda, presentation on status and for discussion, facilitation, note taking and tasks improves the PMO meeting

<table>
<thead>
<tr>
<th>Item</th>
<th>Agenda Item</th>
<th>Discussion Leader</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TESS Environmental Road Map</td>
<td>Kavita/COE RMUs</td>
<td>15 min</td>
</tr>
<tr>
<td>2</td>
<td>• Review upcoming milestones</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Environmental Road Map</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>TESS COE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• New integrations</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Go live path for in flight apps (TESS 1.0 or TESS 2.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Issues/Risks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>TESS AMS</td>
<td>Greg L/Kiran</td>
<td>15 min</td>
</tr>
<tr>
<td></td>
<td>• Operational issues and Risks</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• AMS activity status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>TESS 2.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Project timeline overview</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Update on pilot apps, OEM, and key technical decisions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Issues/Risks</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Using a very visual Dashboard (1 page, A3) helps communicate the status of all the workstreams, dependencies and risks
Celebrating teamwork and accomplishments goes a long way to keeping it fun – weekly recognitions help reward the hard work.

You, TEENA & BRUCE, are the WOWSOMEST of us all this July.

Thank you for going above & beyond, & making a difference!

Project Management key *Lessons Learned*

- Properly staff the project, key players are the Product and Program manager
- Spend the time to identify all the Stakeholders, proactively manage those relationships
- Establish the proper (clear purpose) meetings, the weekly PMO and monthly Steering are important
- Manage the project plans, risks and budget very professionally
- Pay attention to Change Management to ensure support and readiness
- Communicate, Communicate, Communicate and then Communicate some more
- Develop and care for the Team, spend the time to build a high performing Team
- Celebrate often, inspire fun and be a Cheerleader
Thank You