2023 Q1 Performance Evaluation

Employee Name Ammar Husain
Job Title X Product Manager II
Manager Name Abhinav Gupta
Level 5

Self Assessment

All linked documents/resources must be shared with edr-perf-help@google.com.

Please list your three main achievements, using the PARIS format below.

Emphasize text using **bold format** only when you are referring to Eng-Leveling Guidelines (tech) or GBO Attributes (non-tech). Do not use bold text for any other purpose. This allows Calibration reviewers to visually identify key points. Only reference Guidelines and Attributes that compliment your main achievements - do not feel obligated to cover all of them.

ACHIEVEMENT #1 : Interventions Tracking
Problem: Several shadowing experiences highlighted constant RO assistance onsite. Reporting interventions involved filling out lengthy forms (~3-4 mins) per incident thereby infeasible and mostly unreported.
Action:

- Initiated an efficient reporting mechanism that automatically captures operational context (timestamp, robot_id, service_type, map_id) & enables in-situ reporting.
  - Previously reported post-op & manually.
  - Proposed simple Viz-mkii add-on & partnered with Tools in feature scoping.
- Defined unambiguous taxonomy for interventions (with paulae@) & clear guidance on reporting instructions.
- Detailed requirements for corresponding dashboard analytics & visualizations.
- Led cross-functional collaboration, from conception to launch.
- Led RO training sessions, collected hands-on user feedback & prioritized mitigations for ongoing reporting issues.

Result:

- Interventions reporting button in Viz-mkii.
- Interventions from all sources available within one dashboard, trends over time visualizable & filterable by different service types, buildings, robots etc.
- Presented launch at townhall.

Impact:

- Reporting time: ~10 secs (95% improvement).
- Precipitously increased accuracy of reported interventions with ~300 reported in just the second half of December totaling ~1500 interventions over ~875 robot hours.
  - Compared to ~16 interventions reported for the entire November.
- Accurate intervention data is critical for:
  - investments towards capabilities development.
  - gradually reducing human interventions -> EDR's strategic staircase ("value & autonomy" step).
  - increased robot-to-human ratio -> EDR's strategic milestones
  - system-wide list of capability limitations for data driven prioritization
  - streamlining service design & system autonomy
- Compatible & integrated with triaging to ease workflows:
  - Timestamps of incidents closer to occurrences.
  - Viz-mkii links accessible per intervention.

Support:

- go/EDR-interventions-reporting
- go/interventions-tracking-wg
- go/edr-interventions-dash

ACHIEVEMENT #2 : DRI for humans-in-the-loop
Problem: HitL is crucial to unlock the "human brain" in EDRs Three-Brains development model & provide delightful performant robot services. Beyond high level LT-guidance product vision & execution strategy for HitL lacked definition.
Action:

- Aligned all levels of the org with goal of unpacking ambiguity and reducing problem complexity (with yunfeibai@). Engaged:
  - LT to understand business objectives, EDR service vision and strategic milestones for N:1 robot-to-human ratio.
  - engineering teams on where human help is used and where it would be maximally beneficial.
- Led cross-functional brainstorming sessions for translating observed interventions into remotely resolved assistance requests.
- Leveraged robotics domain expertise & EDRs tech stack knowledge to identify missing pieces in HitL.
- Championed HitL API SW OKR for enabling individual modules to seek help.
- Handled fallout of EDRs business decision to disallow remote teleoperations.
- Contributed to org-wide roadmap development as Product POC for the Autonomy & Reasoning roadmap.

Result:

- Clearly defined product strategy with HitL paradigm decomposed into "awareness, assistance & learning".
  - Each paradigm component further decomposed into operational modes with product vision "north stars".

Impact:

- Transitioned HitL from product to feature strategy -> emphasis on building robot awareness (see achievement#1).
- Measurable, ambitious & attainable milestones established within roadmaps and currently under development.

Support: (inline)

ACHIEVEMENT #3 : Transition from Perception SWE
Problem: Product team had emerging need for defining and enabling robot capabilities.
Action:

- Identified product opportunity for robotics expertise & jumped to contribute.
- Continued supporting efforts in navigation perception and its migration over to HiFi maps (with klose@).
- Implemented python bindings for message_sync.

Result:

- Obtained Product Management Certificate - Stanford.
- Presented navigation-perception developments at TOCC (1, 2 etc) & contributions highlighted in townhall.
- Standardized synchronization logic library available for C++ & Python.
- Filed 2 patents: X-52505, X-52506

Impact:

- Minimized transition setback.
- Successfully transitioned from Perception SWE to leading 1 of 4 Product verticals.

Support: (inline)

Citizenship (optional): Please share any citizenship contributions you'd like to highlight that are aligned with the Everyday Robots Mindset (go/EDR-mindset). Citizenship includes anything that helped EDR, Everydaysies, or EDR's culture that aren't part of your job description or team duties.

- Established the importance of robot shadowing (along with mquinlan@) for EDR product & engineering teams. Our journal log of onsite experience with MetAs at PR55 was shared EDR wide and impacted Q2'22 planning in highlighting various areas for robot improvement. Furthermore it kickstarted EDR-org wide OKRs that required 100% participation from the software team and 60% of all EDR to shadow robot services in customer sites, thereby influencing it as a crucial job function for Everydaisies.
- Collaborations with Robotics@Google:
  - Led a cross functional team to prototype several Language x Actions interactions for EDR skills at the R@G Language Hackday.
  - Pursued 20% project to incorporate SayCan within EDRs tech stack.
  - Engaged with Chainmaker team to build support for executing chain-of-thought prompts on EDR robots (currently only supported in a browser). This enables seamless prompt tuning and prototyping for complex language interactions

Peer Feedback

How well does Ammar foster an environment of respect? 3 **At EDR's expectations**

Why did you answer that way (respect)?

Mithun Jacob / X ENG SOFT

Ammar does an excellent job of respectfully handling multiple points of view from collaborators across EDR. His work on interventions is an example of this since it required fielding honest feedback from frustrated RO and QA and convincing multiple groups across EDR to implement the interventions reporting button.

Paula Echeverri / X HW ENG

It is a pleasure to collaborate with Ammar.

- In documents and email, Ammar responds promptly, factually, and kindly to questions and concerns from cross-functional engineering teams, TPMs, triagers and operators.
- In brainstorming and working meetings, Ammar is attentive and curious, and an active listener. For example, Ammar gathered technical leads with strong points of view from across EDR to develop a paradigm for HITL. Discussions including Benjie (Services), Mohi (Skills), Jon W (Behaviors), Michael Q (Perception), and Yunfei (Sim) led to useful frameworks for the Autonomy and Reasoning roadmap.

Yunfei Bai / X ENG SOFT

Ammar is always very respectful, and is a good listener. He did a great job in understanding different perspectives for HitL directions, and brought people together in brainstorming ideas across functional teams.

How well does Ammar demonstrate teamwork? 3 **Extremely well**

Why did you answer that way (teamwork)?

Mithun Jacob / X ENG SOFT

Ammar's work on interventions tracking and getting "the button" implemented is an excellent example of teamwork. He managed to corral different groups across EDR to achieve "the button"; an essential step towards understanding robot interventions. Additionally, he managed to highlight the importance of robot shadowing to EDR resulting in several actionable items by working with several disparate groups across EDR.

Paula Echeverri / X HW ENG

Ammar demonstrated his ability to lead a cross-functional team with the complex deliverable to track interventions. He had a well articulated goal, offered repeated and consistent clarifications, and he was an active team player — autoring reporting instructions, shadowing operators, ensuring clarity in definitions, etc.

Yunfei Bai / X ENG SOFT

Ammar worked highly effectively across teams. Getting alignment across teams on HitL is challenging, as the problem space is ambiguous and requires cross functional effort. He brought people across functional teams together in brainstorming technical ideas and directions for HitL, which was really successful in terms of getting alignment and buy-in from team for this new initiative. He led people across EDR in collaborating with R@G in SayCan 20% project and Hackday to create momentum in technical exploration. I also truly enjoyed working with Ammar and bouncing ideas off him for HitL directions!

What's one thing that Ammar can do to improve impact in their role?

Mithun Jacob / X ENG SOFT

Ammar's role is unique within EDR. He is a seasoned roboticist, software engineer and PM. His work on robot shadowing, and tracking interventions have been hugely influential. I am certain that his current work on HitL will improve his impact across EDR.

Paula Echeverri / X HW ENG

Ammar has seen great traction in a brief period as Product Manager because he is trusted by the technical team and he understands the EDR system and its limitations well. Continue to nurture and leverage this familiarity with the stack to identify areas that need development, and scope work with high likelihood of success. Keeping an eye on focus will also be very impactful — sitting between the product team with a purview of EDR's strategy, and the eng teams with understanding of resources, Ammar can help prioritize fewer projects for faster future progress on a more solid foundation.

Yunfei Bai / X ENG SOFT

Ammar seems to be very passionate about product management, and I encourage him to keep learning the PM skills from Abhinav and from books/courses. Ammar has demonstrated strong leadership in autonomy and HitL, and given his robotics technical expertise and experiences, he can grow into a really strong PM in EDR and influence the strategic direction of autonomy and HitL.

Manager Assessment

Assign a rating for your direct report based on the past 15 months.

Manager Calibration Rating

- ○ **1** - You did not consistently perform what is required of you in your job level and/or required significant oversight to fulfill job responsibilities. Performance needs to enhance as you work with your manager on a plan to improve.
- ○ **2** - You're performing well in most areas but occasionally miss what is required for your role. Work with your manager to understand any gaps, development areas, or ramp-up time and strive to leverage your strengths to fulfill them.
- ○ **3** - You're performing strongly across all the dimensions of your role at Everyday Robots, and sometimes beyond what is required in your role.
- ◉ **4** - You are consistently and regularly performing well beyond the expectations in your role and level with some impact beyond the typical scope of your role.
- ○ **5** - You've demonstrated exemplary performance and delivered significantly beyond what is required in your role with exceptional impact.
- ○ **Not Applicable [N/A]** - The Everydaysie did not work enough of the performance period, therefore the manager had insufficient information to rate them. The minimum threshold to receive a rating is to have a start date before October 1, 2022. Please work with your People Partner on any exceptions.

Complete this form at least 72 hours prior to your calibration session so that other managers can review your notes ahead of time. After your calibration session, it is your responsibility as a manager to update this assessment based on feedback from the calibration session. The final result will be released to your direct report at the end of the cycle.
Note: word count includes template.

Calibration Notes

Why this rating and why not higher and why not lower? Focus on how this Everydaysie has demonstrated performance at the proposed rating.

- Why not higher: Ammar transitioned to the PM ladder last year and has hit the ground running — he has leveraged his unique EDR SWE foundation to become a very trusted resource across eng on defining product direction. He led the interventions tracking work from concept to functional requirements gathering to execution to operations — this is the first phase of the autonomy work at EDR in a multi-phase project so landing the next phases will unlock a higher rating for Ammar.
- Why not lower: Ammar led the interventions tracking work and launched an incredible set of features towards autonomy (a first tangible feature that has become foundational for EDR to track and determine a feature roadmap towards increasing both stability of the platform AND a path to unsupervised robot operations). He engaged across stakeholders (eng, product, design) to take this effort from concept to functional requirements gathering to execution to operations (the RO team is now actively using this feature). Ammar also spearheaded a robot shadow effort (without any direction / mandate from the leadership team) — this formed the basis of an org-wide OKR to shadow our robot operations

Areas of Growth & Development: Ammar has shown signs of very positive product sense and he's able to work cross-functionally with buy-in from multiple stakeholders / functions. As Ammar further transitions into the PM ladder, I'd like to see him drive further influence & land impact to our upcoming autonomy milestone.