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| **Table Number: PRR Facilitator Name: Major King** | |
| **Session 1 Part 1: Implementing Digital SETRs** | |
| For SETR processes in general, please use the space below to answer the following questions. If continuing your answers on a different page, please use the question number, e.g. 1.c, to indicate what you are responding to. | |
| **Overall SETR Process**   1. What are the current overall challenges to preparing, documenting, executing, and reviewing SETRs? 2. What approaches (digital or otherwise) have you found successful in accelerating the SETR process while increasing (or maintaining) the efficacy of the review? 3. What digital tools, platforms, or methods have you used in your SETR processes? Have these been sufficient? Expand on successes, failures or gaps. 4. What are the lessons learned from the approaches you've tried or participated in? 5. (optional) What specific cultural attributes need to change to successfully implement the approaches identified above? Are their risks or impediments, and how would you mitigate or overcome them?   a)   * Time delay and negative cultural effect by having to prep prior to SETR, dress rehearsal, presentation, & review in a segregated event executed by contractor * ﻿﻿Lack of collaborative space to house digital environments and ability to use tools → Infrastructure, → classification levels * ﻿﻿Lack of clear understanding & expectations for the SETR → along w/ how data to be shared * ﻿﻿Lack of Access to data, looking to 2nd /3rd Tier suppliers, is everyone on the same page?   b)   * Intervly developing interface architecture * ﻿﻿Digital twin of production facility itself w/ processes * ﻿﻿Tailoring production readiness to the techincal risk * ﻿﻿Collaborative Assessment matrix that compares supply chain w/ the manufacturing readiness level   + design to quality to work force to etc * Continuous Decision Traceability * Proper risk acceptance to meet urgency of need   c).  JIRA Board (8/10) / PLM Tool →  → avoid slides → process simulation  → production  d)-Say what you want to do with the data, vs loading up the contractor w/ DIDS.  Be intentional w/ use case on what you want to do with the info | |
| **Session 1 Part 2: Implementing Digital SETRs** | |
| For your designated SETR event, please use the space below to answer the following questions. If continuing your answers on a different page, please use the question number, e.g. 1.c, to indicate what you are responding to. | |
| **Circle your table’s designated SETR Event** | |
| 1. Systems Requirements Review (SRR)  2. Systems Functional Review (SFR)  3. Preliminary Design Review (PDR)  4. Critical Design Review (CDR) | 5. Test Readiness Review (TRR)  6. System Verification Review/Functional Configuration Audit  7. **Production Readiness Review (PRR)**  8. Physical Configuration Audit (PCA) |
| **Specific Digital SETR Gate Criteria (as specified by your table marker)**  For the Digital Engineering criteria proposed for your selected SETR event in the provided “Digital SETR Gate Criteria” document,   1. Do the listed digital engineering criteria make sense for your selected SETR event? 2. Are there any criteria you would add, change, or remove? (Annotate the Gate Criteria doc if helpful) 3. Do the listed criteria represent a reasonable digital maturity for the SETR event?   **a)**  Digital models updated is critical  - written for product model, not process changes  **b)** there are criteria on one page that are not on the other page. → need to bring those in to these  what about stable Model  **b**) - Don't see agile execution   * ﻿﻿How does this replicate down to all the suppliers * Fist Bullet: Digital Product i Production Process models need to be up baselined * ﻿﻿2nd Bullet: ...based on manufacturing readiness level. cross out stable design * ﻿﻿Break out 2nd Bullet to 3 Bullet → production cost for M. R.L.   process stability of design and change impact  Take it down to supply chain   * ﻿﻿How to plan fer observability & adaptability - see errors when occur   **C** Look at from a lens of MRC, then go back and identify what do I want my model to tell me with that in mind  -covers so high level that anything can work | |

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| **Table Number: Facilitator Name:** |
| **Session 2: Future State of Technical Reviews** |
| Under the premise that we are now in 2045 where DMM has been actualized, what would the process of technical reviews be?  1. How would you change / eliminate / redesign the technical reviews in this new world?  2. Map out the new technical reviews process to make it a reality   * Need a digital twin of the facility (Power, cooling, security, manpower, automation)   + show interaction b/t production & facility * Need digital Production twin (model the M.R.L. w/ manufacturing simulation) * Need digital Product twin (leverage T.R.L f/ OTRR) * Built in Test Feedback to ensure meeting standards along the way vs waiting till the end * Need to connect all the Digital threads together   + Facility → Production → Product * Technical/ Aquisition/ operation working together in some digital environment  → specitications /outputs / desgn/ performance/ cost/ schedules * If collaborating intervenly along the way, then NO, you do not need the SETR * Change mindset to communicate often to look at different assurity of system along the way instead of set reviews * Need SETR's for the model itself * Bring in a Delta queue to identity domains that I can reuse * Models to have cross-domain intrepretation across fields (ie. Electrical to Mechanical * Assume all Legal matters have been answered . * AsoT is not single source of truth * Central database that tools can reach into and adapt to meet the needs of the function accessing the data   + Think internet * Seperate our views into looking the behavior of the system as the stable model that identifies how it should perform, then bring in other support models to allow the adoption of the product * Transparency in the model throughout   Dream PRR  - No surprises - efficient communication across all fields - facility tours – outcome space (what do I get out of this) - production validation using process, What are ways this can go wrong - optimize results   * Reviews along the way should leverage what has been done before * Have a maturity model that can be referenced to ensure on right track * Need Tech Roadmap is/ modularity at beginning * By Bringing Tech/ Au/ Ops together in a single digital environment, then when a requirement comes down, it replicated down through manufacturing and supply chain * Include mission threads to identify gaps w/ each iteration, change in requirement gets replicated all the way through * SETR's tun into Sprints which get implimented w/ backlog w/ neutral 3rd party for quality   + Independent Party can view, so model needs to be mature enough that one can do this to include decision makers   b) There are criteria on one page that are not on the next one  → need to bring them in  Dream PRR   * can shotgun design to multiple vendors, driving down cost throngh increased competition. * Push virtual prototype us physical prototypes * Shared test database that we can access * More Artificial Intel for data review & processing * Can see further down line to check blind spots * Bring in a data quality SETR * Focus of "Gates" on building blocks  → data → Cyber → Supply LIP protection  → interface controls |
| **Additional Comments/Feedback** |
| Please provide any additional comments or suggestions on SETRs, Digital Transformation, or other areas you would like to express to the Air Force Material Command.  Please also include on feedback on the workshop, or recommendations for workshops or events you would like to participate in the future. |