

Getting to GO!

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Introduction

Navman, a manufacturer of marine electronics and Global Positioning System (GPS) products, is currently implementing HPPD (High Performance Product Development) process to improve the way it designs, builds and introduces new products to the market.

As part of implementing product development process, Navman has recognised that for the process to work, there needs to be the mechanisms in place to make effective decisions at the right time during project execution. This paper firstly highlights why decision making is so important, gives some examples of the types of decisions that need to be made in a product development environment and the different groups of decision makers. It then reviews a number of attributes of effective decision making as well as meeting rules, what are referred to as “Decision Busters”. It finishes with some lessons learned from implementing this process and a conclusion.

Effective Decision Making is Key to Delivering Business Results

While is good to have structured process to help develop new products, it needs to be accompanied by an effective decision making mechanism to deliver business results.

In a product development environment, there are a number of types of decisions that need to be made:

- **Portfolio**
“Product B needs to launch in the marketplace before Product A is due for EOL¹”
- **Program Approval**
“Approval for \$x in capital for Program C for a June market launch”
- **Product**
“The time to first fix² should be x seconds”
- **Execution**
“Voice of the customer data will be collected to feed into the product design”
- **Functional**
“The mechanical design relies on a new moulding technology that has yet to be proven”
- **Resourcing**
“2.5 FTE software engineers from May to June are assigned to Program D”

¹ End of Life, when a product ceases manufacture and is no longer delivered to market.

² Time To First Fix (TTFF) is the time it takes a GPS receiver to find satellites after the user first turns it on (when the GPS receiver has lost memory or has been moved over 300 miles from it's last location)

It has been shown³ that companies with a structured product development process without an effective gate review process fall short of the expected benefits:

- 20% to 40% longer development cycle times⁴
- 10% to 20% larger development budgets
- Up to 40% less throughput per \$ million of R&D investment
- Up to 15% more in target cost overruns
- 10% to 20% lower commercialisation success scores

The Decision Makers

In Navman, the two decision making authorities are the SPMT (Strategic and Portfolio Management Team) for strategic/portfolio decisions and the PAC (Program Approval Committee) for program-level decisions. This paper focus's on PAC decisions, but what is described still applies in most cases to SPMT decision making.

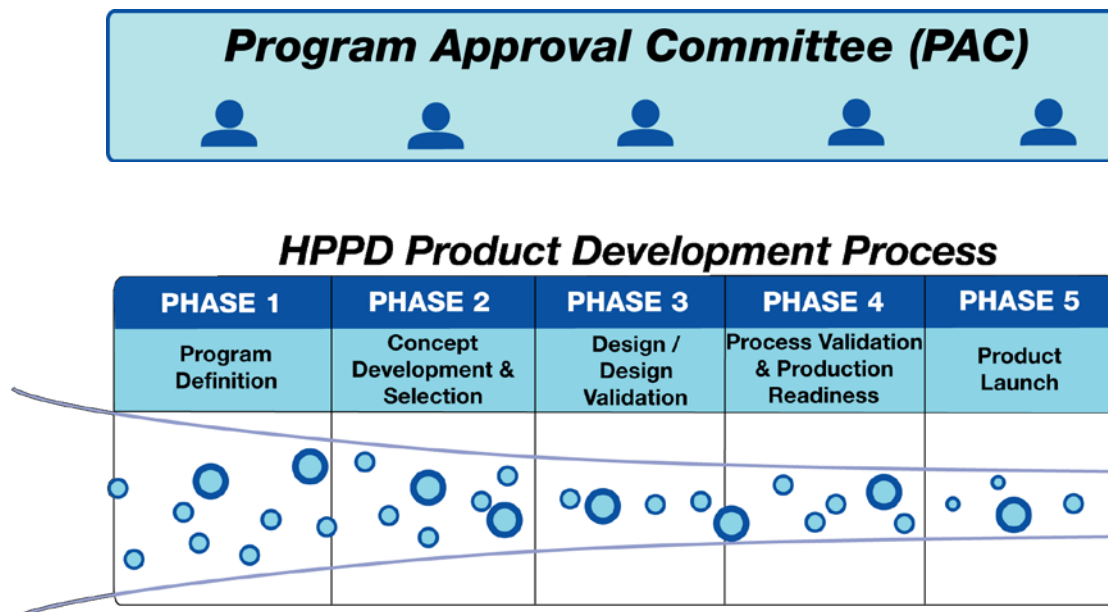


Figure 1: HPPD Stage-Gate Process and PAC

³ Source unknown

⁴ The time it takes to develop a product, from inception to in-market.

Attributes Of Effective Decision Making

1. Early, Event-Based Decisions Add the Most Value

The further the program is down the track, the more difficult it becomes for management to affect the outcome of the program (refer figure 2).

However, what typically happens is management getting involved nearer the end when the launch of the product gets closer (refer figure 3). What should happen is management getting involved up front, firstly from a strategic point, ie: which product should we deliver and then, making commitments to execute on the plan based on scope, cost, resource and risk. This will also help to avoid significant changes late in the program requiring rework that may put the delivery of the product at risk.

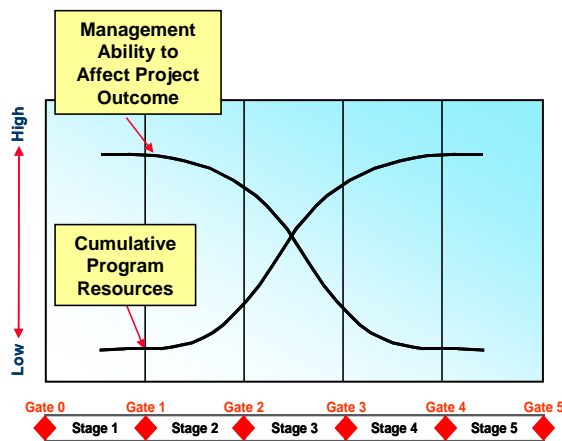


Figure 2: Management Ability to Affect Outcome

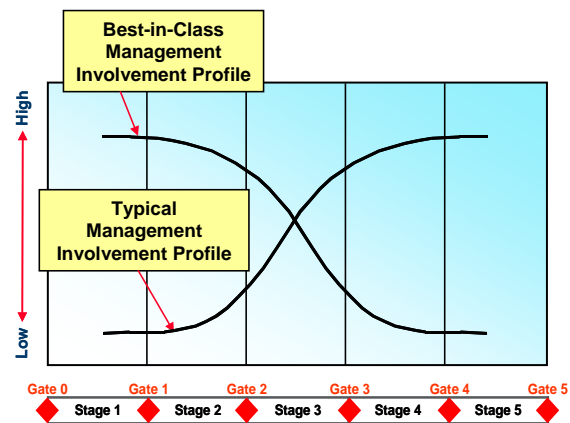


Figure 3: Management Involvement

Also, decisions should be event based – gate reviews should happen when they are required. While it is good for communication getting the PAC together, it has potential to waste peoples time (both the team presenting and the decision makers). This risks devaluing the formal decision making, something that should be avoided.

2. Decisions are Complete

A decision that is complete is unambiguous (everyone should be clear on what decision was reached) and sticks (the decision doesn't subsequently get overturned outside of the decision making forum).

Suggested decision outcomes are:

A. Go:

- Authorises and empowers the program team to proceed through the next phase based on agreed performance parameters
- The PAC commits staff, capital, expenses, facilities, etc. through the next phase
- Note that there may be some open action items to be completed, but they are clearly documented and the assigned person is held accountable to complete the action item by the date specified.

B. No-Go

A No-Go happens when the program:

- Does not fit the agreed strategy or risk/return criteria
- Does not meet the agreed market requirement
- Is not technically feasible to develop
- Requires resources that are beyond the capacity or capabilities of the organisation

C. Redirect:

- Applicable when there is not enough information to make a Go or No-Go decision
- Also happens when the preparation is considered incomplete
- PAC must identify the specific information missing (so the program team can focus on gathering that information) and the timeframe to reschedule the Gate Review
- If it is clear prior to the gate review that the information will not be available, it may be a good idea to postpone the gate review rather than waste the PACs time.

3. Decision Authority is Appropriate for the Decision Domain

It is important to know which decision domains each decision authority can preside over. The decision makers for strategic decisions (agreeing a product roadmap, which programs should be initiated) are likely to be different than for operational decisions (is the program delivering what it said it was going to deliver and when? Is the program ready to pass through its gate?). If it is determined that a decision must be made by another decision authority, it should be redirected to that decision authority, clearly highlighting what decision(s) are required.

4. Clear, Unambiguous Information Forms the Basis for High Quality Decisions

The program team is responsible to provide the decision makers with the information they require to make a high-quality informed decision. But the decision makers are equally responsible to make sure they have received the information they require to make the decision.

5. Decisions are Actionable

Gate Review ends with a mutually-binding ROD (Record of Decision) between the PAC (commitment of resources and funding) & program team (commitment of deliverables and schedule).

The ROD documents decisions taken and commitments made, including:

- The decision outcome, ie: Go, No-Go or Redirect
- Key discussion points
- Action items for the PAC
- Action items for the program team
- The timing, resource needs, and deliverables for the next phase (with +/- tolerances)

6. Decision are Rapid

For most programs, they are working to a tight schedule. When a decision needs to be made, it needs to be made in a timely manner in order to not impact the program.

To help with this, Gate Review Logistics are put in place (refer figure 4).

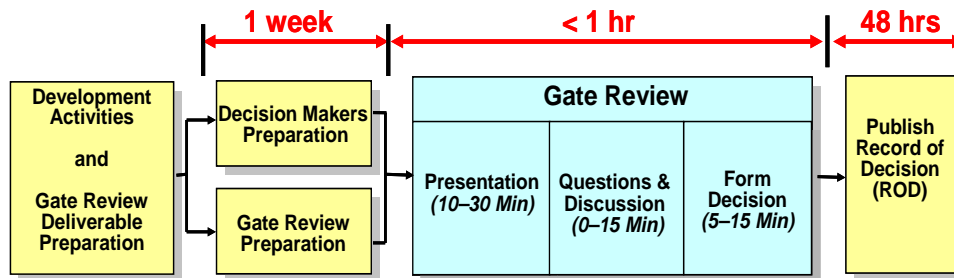


Figure 4: Gate Review Logistics

A. Development Activities and Gate Review Deliverable Preparation
Program team members prepare the deliverables for the gate review. They should be reviewed with their line managers to make sure they are of the quality required for the Gate Review.

B. In preceding week
Deliverables (review package) are distributed 1 week before the Gate Review meeting. During the preceding week, the PAC members should review the material in detail so that they are fully prepared for the gate review.

It is important that if a PAC member identifies any issues with the gate review material, then they should contact the Program Manager well in advance of the gate review. This then gives the program team an opportunity to address the issues prior to the gate review. Also, there should not be any surprises at the gate review. The gate review is not a forum to discuss the issues and solutions in-depth; it must remain focusing on making the decisions required.

C. Gate Review
The PAC Chair runs Gate Review meeting and should only be attended by the agreed PAC members and the Program Manger. However, the Program Manager may require certain key program team members to attend if it is likely that there will be questions on subject domains that the Program Manager is not sufficiently knowledgeable enough to answer. The PAC chair should approve any additional people attending.

The high level agenda for the Gate review is:

- I. Presentation (10-30 Min)
 - The Program Manager gives presentation based on standard template
 - Questions are kept to the end of the presentation (and this should be highlighted in the agenda)
 - The presentation should include a recommendation by the program team, eg: proceed to the next phase,

II. Questions & Discussion (0-15 Min)

- PAC members asks clarifying questions of the Program Managers as background for the decision

III. Form Decision (5–15 Min)

- PAC makes decision and all present are clear on what the decision reached is

D. Publish Record of Decision (ROD)

ROD is written and initially approved by the PAC Chair. It is then sent out to the PAC members for their approval.

E. Post Gate review

The Program Manager ensures that the ROD is communicated to all the stakeholders and program team members. The Program Manager is responsible to follow up on recorded actions. Note that the action items should be reviewed at the next PAC meeting to ensure that all action items are followed up and outcomes communicated.

7. Clearly Defined & Known Roles and Responsibilities

For decision making meetings to run smoothly, everyone present needs to understand their role and responsibilities for the meeting.

A. PAC Member

The PAC membership should be understood and clearly communicated in the organisation. Each PAC member has certain areas of responsibility on the PAC, eg: Marketing, Engineering, Finance, Portfolio, etc. For their area of responsibility, they are to make judgement (Go, No-Go, or Re-direct) on the program being reviewed and highlight any issues to the other PAC members. Note that these issues should be addressed with the Program Manager prior to the gate review – there should be no surprises at the gate review.

For a Go decision, the PAC members are committing to provide the resources requested. When inter-program conflicts occur, the PAC members are responsible to address those conflicts.

B. PAC Chair

The PAC chair runs the meeting. He/she ensures organisational commitment and accountability to enable success of the Program Core Team. The PAC Chair should encourage active, open, and honest participation by other PAC members and the Program Manager to bring issues to the table and address them during the review.

The PAC Chair should aim to provide objective cross-functional perspectives when required and acts as the tie-breaker when PAC members are deadlocked

C. PAC Facilitator

The PAC Facilitator facilitates PAC meetings to ensure that Gate Review logistics are adhered to. The PAC Facilitator should ensure that only the PAC members and Program Manager are present. Any additional people should have approval from the PAC chair so that there are no bystanders that may

take the meeting off track. The PAC Facilitator should ensure that the ROD is published upon conclusion of the meeting.

Decision Busters

There are several situations that can grind PACs to a halt, which we refer to as "Decision Busters". These situations are not uncommon and they are likely to occur. There are 4 types of decision busters. Included below are specific examples and expected responses:

- **Attendance**
If the PAC Chair, any PAC Member or Program Manager is unavailable for scheduled gate review, the Program Manager should discuss it with the PAC Chair in advance to assess the risk to the review. The outcome may be that the gate review is rescheduled or a suitable alternate stands in for the absent person.
- **Process, Program Manager - initiated**
If the Program Manger fails to send pre-read materials to the PAC one week in advance of scheduled gate review, the PAC Chair should decide whether to reschedule or hold an interim review
- **Process, PAC-initiated**
There will be situations where the PAC cannot make a unanimous decision. It may result in the PAC Chair and Business Unit Sponsor to make final judgment. It is important that the PAC members agree to communicate a unified message
- **General**
The meeting may have been taken off track resulting in the agenda not being adhered to and time allotments are being overrun. The PAC facilitator should highlight this to the PAC chair and a decision should be made whether the meeting can continue or a redirect be called in order to allow the issues to be discussed outside of the gate review forum.

The PAC should define the list of decision busters and expected response for each of them.

Lessons Learned

There have been many lessons learned from implementing these changes to improve decision making in Navman. Many are simply reminding ourselves to follow the agreed guidelines and decision busters, but are worth reiterating:

- **Live up to the Record of Decision**
If the gate reviews are to avoid becoming a "rubber stamp", the PAC must be able to enforce the decisions it makes – the Record of Decision (ROD) is the key document to do this
- **Don't allow projects to work ahead of the next gate**
The Gate Review process is an important mechanism to allow the PAC to maintain control of the level of investment in a project as a function of risk and priority – allowing teams to work ahead of the next gate can undermine this level of control.
- **Prepare, Prepare, Prepare**
Good decisions require good preparation – by the team, preparing the gate review material, and by the PAC, reviewing the material and providing feedback.

The gate review is for making decisions, not in-depth discussion on issues and solutions. It's a good idea for the Program Manager to follow up with each PAC member one-on-one prior to the gate review to discuss gate content and issues prior to the gate review. There should be no surprises at the gate review.

- **Live by the “Decision Busters”**
Creating the decision busters should be done up front by the PAC outside of the “heat of a gate review” to prevent these situations from becoming showstoppers. They should be well known and visible of all involved. Anyone should be able to pull someone up referring to the decision busters that were agreed on.
- **Be prepared to follow the gate review logistics**
Gate material should be out on time and PAC reviewed the material giving feedback to the Program Manager. The PAC complains when the material doesn't come out on time. The Program Manager complain that the PAC doesn't read the material before the gate review. It's tough to balance following process vs. impact on project. But we need to “break the cycle”
- **Clearly communicate the roles of the PAC and what they are responsible for considering when making a decision**
What are they signing up to by giving a “Go”? Budget? Resources?
- **When there is a major change that is outside of the decision makers domain, it should be escalated to the appropriate authority**
- **Follow-up on the ROD action items**
Don't let ROD action items “fall through the cracks”. Outstanding ROD action items should be reviewed at each gate review.
- **The ROD should be completed and sent out within 48 hrs of gate meeting**
The ROD has most effect while the gate review is fresh in people's minds. Some action items resulting from the gate review may have time urgency, so they need to be communicated ASAP.
- **A “No-Go” decision can be a positive outcome**
It's important to recognise that a “No-Go” decision is actually a positive outcome if the program isn't able to meet its specific objectives. It means that the organisation can refocus its resource on other programs that better meet the organisations objectives and strategy. So the PAC should not “shoot the messenger” when the Program Manager presents the information leading to a No-Go decision
- **PAC Facilitator is not just an secretary/administrator**
They need to be able to stand up and reinforce the gate review logistics in the gate review, which sometimes may be reminding the PAC chair of them (they are often part of the discussions).
- **Meeting Etiquette**
In the “heat of a gate review”, people can get emotional and forget basic meeting etiquette. A list should be drawn up and made visible. Some examples include:
 - We shall start and end on time
 - We shall permit the facilitator to keep group focused and capture other issues
 - We shall allow only one speaker at a time
 - We shall listen to each other
 - We shall keep an open mind to all issues

- We shall be fair
 - We shall attack the issue not the person
- The PAC facilitator should remind people of these issues as they occur. Alternatively, if more appropriate, this could be done outside of the meeting.

Conclusion

In Navman, we've already seen significant gains in formalising the gate review meetings. Ultimately, it wants to get to the point where effective decisions that are made early, and therefore, less fire-fighting occurs because decisions are made before they turn into a fire.

But people are only human and more often than not they need some reminding....

Bio

David Stokes PMP is currently managing the implementation of HPPD (High Performance Product Development) process across Navman, referred to as the Thunderbirds Program. With 12 yrs IT and 9 yrs Project Management experience, he has been applying his knowledge and experience of Project & Program Management in a high-tech product development environment.