Practical Guide to Product Management in Digital Media

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Executive **SUMMARY**

This guide provides practical strategies and tactics for implementing the product management function in a media organization.

In general, a product manager sets the vision and direction for a product in collaboration with cross-functional stakeholders. Specifically in media organizations, the product manager is also responsible for understanding audience needs in order to define and prioritize product features and work with technical and creative teams to prototype and validate product ideas.

In the rapidly changing media market where organizations face a range of new competitors and rapid changes in audience behavior, a mature product development team can help accelerate the delivery of new products and improve the performance of existing products. A product manager can also help increase the efficiency and effectiveness of teams by helping the business prioritize feature requests in the context of a cohesive product strategy.

Does your organization suffer from these kinds of problems?

- No clear understanding of who the real customer is for a product or feature?
- Trouble deciding which features to build, fix or improve for existing products?
- Having difficulty getting all stakeholders on the same page?
- Do you feel that your investments in digital aren't yielding measurable results?
- Do you feel that there is a lack of communication and coordination between the technical and content teams?
- Do you feel that you are spinning your wheels because your organization is struggling to set priorities?

This guide is intended both for new product managers and those who want to develop into product leadership roles as well as media executives and managers who want to gain an understanding of the product management function and how it can benefit their organizations.

This guide is structured around a product lifecycle and provides an overview of the activities that take place during each phase, accompanied by inline links and references to more detailed explanations and resources at the end of the document.

What is a Product?

A key consideration before implementing the product lifecycle process is to agree on a shared understanding of what the word product means. A product is a collection of features and functions that deliver a solution to a problem. For example, a website for a media organization is managed as a product. As a digital product, it contains various features such as comments, user login, media players and interactive story formats that can contain their own subset of embedded features.

A product is managed towards achieving agreed upon business objectives. These can be commercial or non-commercial. In some organizations, hard revenue metrics drive new product feature prioritization based on their ability to help achieve certain revenue targets. In other organizations, audience growth alone can drive product strategy, in which case features that deliver audience reach goals are prioritized. In a media organization, there can be three broad product areas: Content, commercial and technology. From a content perspective, a product can be a news story, told through a variety of formats such as video, text and increasingly audio.

From a commercial perspective, a product can be an ad unit or subscription package, also made available in a variety of formats. From a technology perspective, the product is the platform and vehicle through which content is packaged and

▷ Key Takeaways

A PRODUCT IS A COLLECTION OF FEATURES AND FUNCTIONS THAT DELIVER A SOLUTION TO A PROBLEM. A PRODUCT IS MANAGED TOWARDS ACHIEVING AGREED UPON BUSINESS OBJECTIVES. THESE CAN BE COMMERCIAL OR NON-COMMERCIAL.

distributed to audiences. In this guide, we focus on the product lifecycle for technology products, where commercial and content teams have direct inputs as stakeholders throughout the various phases of the product lifecycle.

In a media company, where both content and technology platforms are considered to be products, strong products arise when there is synergy between content and technology.

The platform is often capable of driving content and sales strategy and vice versa. Understanding this key distinction and an appreciation of the content side of a product is an important part of ensuring that the products that are developed have a solid backing across the commercial and editorial parts of the media organization.

What is a Product Manager?

A product manager in a media organization is responsible for setting product vision and strategy. Given the wide range of activities involved in defining and championing a new product idea, the product manager's responsibilities range from strategic to tactical.

On a strategic level, they own the strategy behind the product, along with its roadmap, and must work with a wide range of stakeholders to agree on the vision and bring the product to market.

Figure 1: Product manager reviewing wireframes with stakeholders

One of the key responsibilities of a product manager that mixes strategic and operational responsibilities is collaborating with key internal stakeholders, and it is important to understand key product owners in a media organization. While the product manager sets the vision and manages the delivery of products, it is in concert with key leaders in the organization.

For instance, sales, marketing and content teams often take an active role in owning the content that is packaged and distributed as a product, while the digital team in a media organization typically owns the technology product.

In scenarios where the commercial team doesn't own the content product, the product manager treats sales teams as key stakeholders who have input into defining success metrics and requirements for a product.

On a tactical or operational level, product managers must motivate the entire team and stakeholders by clearly communicating why a new product or feature matters to users and to the business. They achieve this through understanding audience needs, and based on that understanding, they define and prioritize features, and work with the creative and development teams to prototype and validate product ideas. To ensure that the product meets the agreed upon business objectives, product managers also define and monitor product performance.

Organizational Role of the Product Manager

The product management function within a media company can live within technology, marketing, or strategy. In some organizations, it is elevated into its own division. Historically, in media organizations, digital products lived within the IT department. In such cases, the product management function was owned by the chief technology officer or whoever was the head of the IT team.

As the strategic importance of the role became more broadly recognized, product management began to move closer and closer to its true nature, which is at the intersection of technology, design and marketing. For this reason, product management needs to sit outside of development,

▷ Key Takeaways

A PRODUCT MANAGER IS RESPONSIBLE FOR UNDERSTANDING AUDIENCE NEEDS, DEFINING AND PRIORITIZING FEATURES, AND WORKING WITH THE CREATIVE AND DEVELOPMENT TEAMS TO PROTOTYPE AND VALIDATE PRODUCT IDEAS. THE ROLE IS ALSO RESPONSIBLE FOR DEFINING, TRACKING AND MONITORING PRODUCT PERFORMANCE.

marketing, and design as it drives execution across all of these business functions without having direct management oversight over the people working within those divisions.

The term inbound product management is used across the media and technology industry to refer to the product management activities that are associated with the creative and technical development of the product. Outbound product management is the term that refers to the product management activities that are related to ensuring internal organizational readiness for a new product and also the externally facing awareness-building activities that serve to drive adoption of a new product. The latter is typically referred to as go-to-market activities and includes working with public relations, marketing, and advertising stakeholders to define and execute a go-to-market strategy. In media organizations with small teams and limited resources, the product manager plays a more active role in both inbound and outbound activities.

Project Manager vs Product Manager

The relationship between a project manager and product manager is similar to the relationship between a feature and a product. In the course of delivering a new product to market, multiple fixed projects can be executed to incrementally release individual features, eventually leading up to the fully packaged product launch. Each of these projects have a defined outcome and a start and end date. The project is completed when the outcome is reached.

A product, on the other hand, does not have a start and end date. A product can be sunset, meaning it has been decidedly removed from the market once it fails to meet certain agreed upon Key Performance Indicators (KPIs), but it does not have a defined end date. Project managers typically require little or no domain knowledge as their role is less strategic and more about tactical governance over the resources, risks, scheduling, monitoring, and reporting on progress towards delivering features.

A product manager, on the other hand, is focused on defining and prioritizing the features that will go into the product. Execution of those features can be managed as a project. In a media organization where both roles are not present, the product manager allocates a portion of his time to project management activities. In such cases, a good ratio is to focus 20% of a product manager's time doing project management activities.

Onboarding your First Product Manager

When onboarding your first product manager in a media organization, the most important activity in the first few weeks is to begin relationship building activities. It is good to arrange meet and greet sessions with the teams and stakeholders with whom the product manager will need to work with in order to execute the full set of product lifecycle activities.

An initial casual round of drive-by meetings should be followed by a roadshow presentation with each department within the company to explain the role of product management and the value it adds to their teams and the broader organization.

In parallel to these early stakeholder engagement efforts, the product manager must assess the execution power of the product development team. Execution power refers to the capacity and competence of internal resources in developing new products and features. This involves identifying the size and experience of development and creative teams and any third-party vendor relationships that are in place. In an organization in which the product manager is a new role or where no development methodology exists, the new product manager should also collaborate with the development team to define and agree on the tools and methodologies for developing and releasing software.

Ongoing professional development

As the demand for product managers has increased over the years, so has the amount of training opportunities for someone interested in learning the role. For a product manager in a media organization, however, options are limited.

One of the most popular ways to fast-track the learning process is to forgo formal product management training and opt for an apprenticeship. Learning the role by shadowing a more experienced product manager or applying product management methodologies to an existing project is a great way to get started. Learning as you go is currently the most common way individuals in media organizations learn to become product managers.

Traditional product management training without a media focus include Pragmatic Marketing, General Assembly, 280 Group, Product School and many others.

Building Bridges with Stakeholders

A successful product manager must master interpersonal relationships. Good product managers are able to adapt their communication style to each stakeholder group. Product managers with cross-functional skillsets are better equipped for this task.

Editorial & Business Stakeholders

The most effective tool for initiating and building relationships with editorial stakeholders is the one-on-one stakeholder interview. In this meeting, the product manager seeks to

Figure 2: Example cross-functional stakeholder meeting

understand the current problems and challenges that the editorial team faces on a daily basis and how they currently overcome them.

A kickoff meeting is another technique for getting cross-functional stakeholders aligned on the goals and objectives for the product. In the kickoff meeting, the product manager is able to quickly get decisions and direction on resources and dependencies for the product and capture those decisions in meeting minutes.

Discovery workshops are usually held for large projects where there is a high degree of uncertainty around which problems or user needs should be addressed. A workshop is held to discover the problems and potential solutions to a problem. This group setting is also an effective forum to communicate the product vision, strategy, and known facts about the market and potential user to a captive audience. The problem-solution scenarios that are captured in the workshop are communicated through a playback presentation.

Following any workshop or kickoff meeting with stakeholders, a project's communications should move out of email and into a centralized online collaboration tool such as Basecamp. Sending an invite to join a Basecamp project after a kickoff meeting is a good way to introduce stakeholders to the tool. The first notification they will receive will be your meeting minutes or playback from the meeting. Adding the core team to a Slack channel is another approach for communicating within the core project team.

In addition to the tools and processes for engaging with stakeholders, product managers must also leverage soft skills such as eliciting feedback from silent stakeholders, using their

own words when communicating, and following through on promises and commitments. The best way to maintain trust and confidence is to reset expectations the moment you know that a deadline or deliverable will be missed. The reset should be done in a face-to-face conversation with the key stakeholder and should not happen too frequently.

Technology Stakeholders

Before initiating a new development project, the product manager must first start with why the team is building a particular product or feature and demonstrate the value of solving this problem for users. The value that this delivers to the company is also clearly communicated. Communicating the vision, strategy, and problems is a great way for product managers to lead and motivate the technical team to do their best work. Problems are communicated on behalf of users and internal stakeholders and are referred to as the voice of the customer in traditional product management.

Tips for Technical Stakeholder Communication

- Bring voice of the customer insights into sprint meetings.
- Always keep a handy supply of market facts.
- Think big but start small when scoping new features.
- Reinforce good behavior by recognizing and rewarding it when it happens.
- Catch a developer doing something right, instead of constantly pointing out what they did wrong.

After the why, a product manager then jumps into defining and communicating the what and how of the product development process in clear and unambiguous requirements to the development team.

PR & Marketing Stakeholders

Communicating with public relations (PR) and marketing teams starts with a clear value proposition that articulates why someone would use your product over existing solutions. This is usually captured in a product brief along with other facts about the market and user.

As part of the go-to-market plan for a product, the product manager prepares a product brief that serves as a tool for marketers. In addition to market and user insights, the brief outlines the key features and benefits of the product. This equips the marketing team with the necessary information to know which features to highlight in ad campaigns and also to inform advertising copy and messaging based on the language and images that are most likely to resonate with the target audience.

The most important piece of information that marketers care about is the target launch date for the product. Setting and communicating changes in launch dates have a significant impact on marketing, and resetting expectations when dates change is a core part of maintaining a healthy relationship with marketing stakeholders. A benefit of working closely with marketing on defining the launch date is that it may coincide with a larger PR event that could increase the impact and reach of the launch. Sharing a product roadmap with themes and major release dates over time is another effective tool for communicating and managing expectations with marketing and PR stakeholders.

Questions Answered by the Product Brief

- What features to highlight in online ad campaigns that are mostly likely to resonate with users?
- What messaging should we use in promotional material?
- What's the key differentiator we should focus on in a press release?

PRODUCT LIFECYCLE IN MEDIA

The product lifecycle in media as defined in this guide can be understood as a ten-step process. This process, as illustrated in the accompanying graphic, is best visualized as a wheel that is spun faster as a product team matures.

The product lifecycle starts with researching and defining the product. Next, it moves through the design, development and testing phases leading u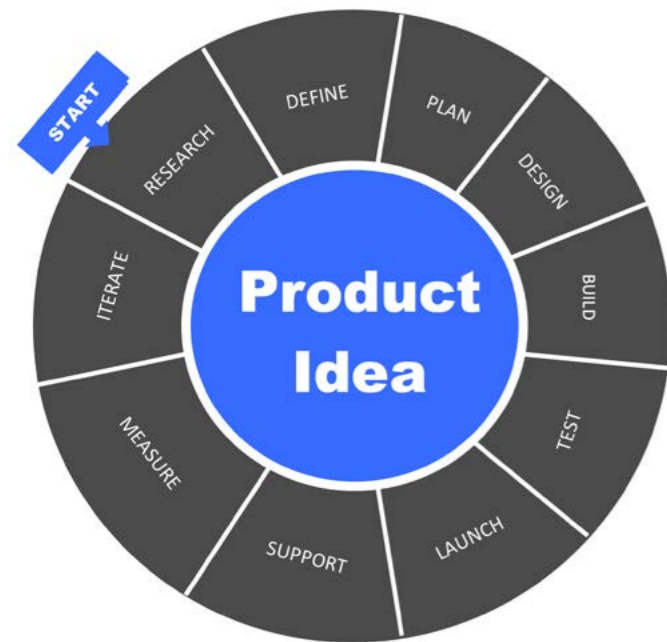p to a product launch. The final phases of the lifecycle involve ensuring that the media organization is operationally ready to support the product, as well as being able to monitor, measure, and continuously improve a product post-launch.

This cycle should be seen more as a mental model, or a form of process thinking for a product manager, rather than a rigid procedure. The following pages have specific tools and tactics that will help the product manager fast track their ability to confidently move through the product lifecycle.

Figure 3: Ten step product lifecycle in media

Research

A product manager in a media company spends a large amount of time researching and understanding target audience needs, competitors, and internal editorial stakeholder needs.

When researching and discovering audience needs, one approach is to segment by age in order to understand the habits and unique behaviors of the target audience. This involves understanding the role that technology plays throughout their daily lives.
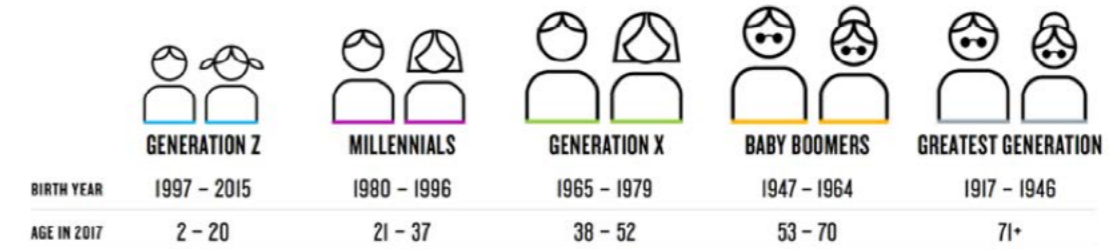
Tactics	Tools
1. Stakeholder Interviews	1. Stakeholder Interview Template
2. User Surveys	2. User Testing Question Template
3. Phone Call Interviews	3. Phone Call Report
4. Competitor Analysis	4. Business Trip Reports

Figure 4: The Nielsen Total Audience Report: Q1 2017

A product manager also uses market research about media consumption habits across digital device platforms in order to inform and validate product decisions.

The primary goal of this research and discovery phase is to equip the product manager with a large supply of market facts about the target audience for a product. It also helps develop empathy towards the problems currently faced by users. There are several tools and techniques that can be used in gathering these facts, some of which are explained below.

situation, and playing back the findings is sometimes referred to as discovery work. If you already have a deep understanding of stakeholders and business needs, and all the relevant facts are readily available, then this discovery phase can be skipped.

However, if more information is necessary, the first step in the research phase is to conduct stakeholder interviews. You will identify the key stakeholders from technical, creative, editorial, marketing and other departments and begin with one-on-one interviews.

Internal Stakeholder Interviews

The process of conducting cross-functional stakeholder interviews, assessing the current

User Research

Following the discovery exercise with internal stakeholders, conducting user research with people outside of the organization is the next

step. User research can be formal or informal, qualitative or quantitative. The goal is to identify audience and customer needs and points of friction and validate assumptions that might inform new products or iterate existing products.

- Online Surveys - If there's no time or budget for formal research, doing popup surveys on your website or app is an effective tool for understanding user needs.

- Voice of the Customer Interviews - If you want to find out how various customers of your business use an existing product, there are a number of ways and contexts to conduct these type of interviews. For example, a product manager at a media company that has other businesses who pay for content and services should first understand the needs of those paying customers. The interviews can be conducted in a number of different ways or in a number of different contexts such as phone interviews or face-to-face meetings at conferences, trade shows and local meet-ups.

- Formal User Research - In some instances, a product management team will recruit strangers from the public who are representative of your target audience to participate in one-on-one interviews while using your product. A user research questionnaire can be used by the product manager or moderator to guide the user through a set of scripted tasks and scenarios.

- Informal user research aka Café Testing - Informal user research is sometimes called café testing because it involves asking a stranger in a coffee shop or café to use your product and give their feedback in exchange for you buying them a cup of coffee. Café testing is a great way to get quick feedback with a negligible impact on budgets and timelines.

- Quantitative Research - The last ingredient for conducting user research for a new media product or feature is to look at quantitative tools and data. Google Analytics, Omniture, or other metrics tools and services offer several ways to understand user needs and pain points by looking at bounce rates, exit pages, depth of interactions and retention. Seeing top paths also helps understand which flows are effective at getting users to target content and which ones require further optimization.

Evaluating problems and articulating them in a clear and concise way is a key deliverable from this initial phase of the product lifecycle and will allow you to define a new product idea or feature or refine an existing product.
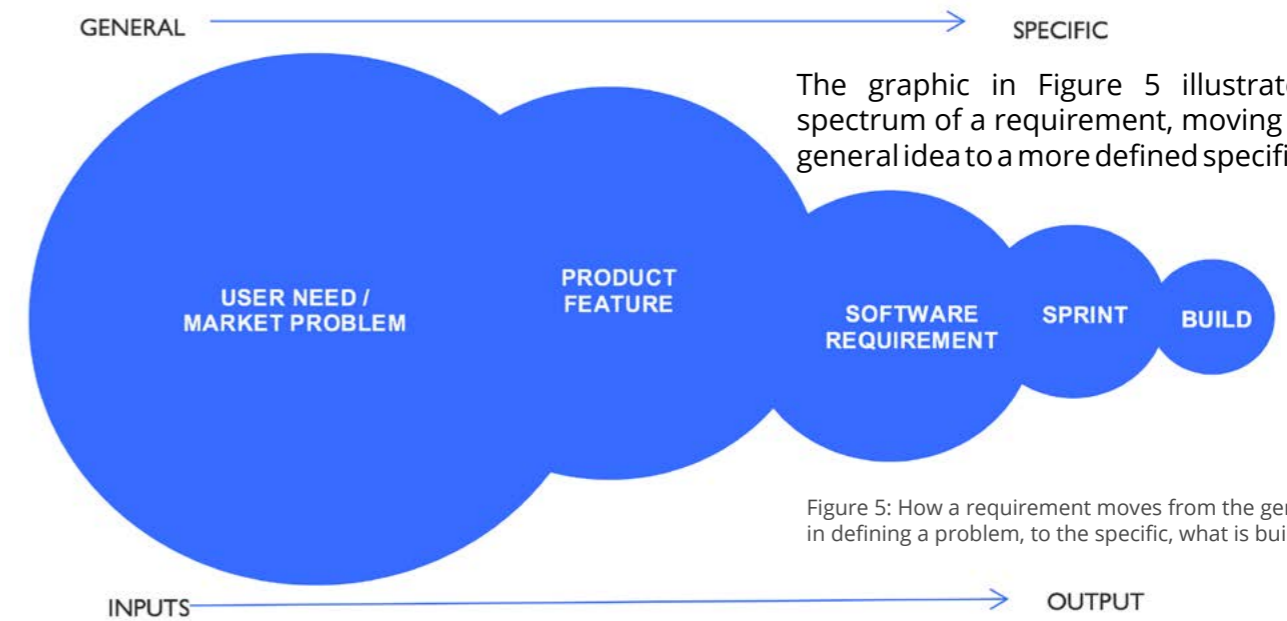
Define

Tactics	Tools
1. Define Requirements	1. Agile User Stories Template
2. Define Product KPIs	2. Traditional Product Requirements Template
3. Validate Requirements	3. Product Brief Template
4. Define User Journeys, Flows and Schematics	

Defining the problem is a critical part of the role of a product manager, but it is also essential to define the solution as a set of unambiguous requirements. Knowing what to build and why you should be building it is one of the core aspects of product management.

Defining Requirements

Product managers should write just enough documentation to enable knowledge transfer between business stakeholders, development teams, and end-users. Most requirements originate from a user need and evolve to become specific features on a roadmap.

The graphic in Figure 5 illustrates the spectrum of a requirement, moving from a general idea to a more defined specification.

Figure 5: How a requirement moves from the general, in defining a problem, to the specific, what is built

A new requirement can be driven by a user need or a market problem. A common problem or need that is experienced by a large number of users can be evaluated and defined as a potential product feature.

For example, a product manager may interview existing paying subscribers of an online news portal and discover a pattern of users complaining about being blocked from accessing content on the website due to lack of payment. Upon probing further, it is discovered that users must submit payments offline every three months, and they simply forget to pay the quarterly subscription fee. This problem is then encapsulated in a single product feature, which is recurring billing.

The next level of detail is specifying the feature as a software requirement, such as giving users the ability to pay for subscriptions online, so that their access to content on a news website does not get interrupted unexpectedly. That requirement ultimately gets prioritized and assigned to a development sprint and is packaged and released to users in a software build.

In a media organization, approaches to capturing and documenting requirements can vary greatly. Some organizations can spend months developing and releasing documents while others are able to operate more like a tech company, opting for user stories over narrative documents. A hybrid approach is the most effective, where the product brief is a simple, one or two-page document that sets the vision and strategy for the product, combined with an Agile user stories template. A user story is a brief software requirement, no longer than two sentences, framed in the everyday language of the user.

The level of documentation that is required when defining requirements for a new product depends largely on whether an organization has in-house or outsourced design and development resources. Internal teams are able to have continuous conversations and explorations that result in notes added to user stories. If the product manager is working with an outsourced vendor, being as prescriptive as possible is useful in order to manage the risks and eliminate ambiguity.

This is especially useful when dealing with outsourced development agencies. Defining and prioritizing features, and managing the execution and scope of those features is a process that needs to be closely managed, regardless of whether the execution is done by internal or outsourced resources.

One of the core responsibilities of the product manager is to define and prioritize features. Product managers need to monitor the development cycles and know when to de-prioritise or even say that a feature should no longer be a part of a product, known as de-scoping, if a feature is eating into valuable development time.

Defining Product KPIs

In a media organization, the product manager is responsible for defining, measuring and monitoring the key performance indicators (KPIs) of a product. For the purpose of this guide, we will focus on product KPIs, specifically related to how the product is performing in the market relative to expectations.

In a media organization, KPIs are often grouped along the themes of reach, retention, engagement and revenue, and the product manager then determines the key metrics to measure and monitor to benchmark performance based on these themes.

Reach can be measured in terms of pageviews, sessions, and monthly active users. It also has geographical dimensions. Retention is measured in terms of next day, seven-day and 30-day retention rates. The retention rate measures the percentage of total users visiting on day one that come back the next day, a week later, or in the next month. Engagement measures how well the features and functions are performing. This requires instrumentation of your app or website to fire events when users take certain actions in your product. It helps with optimizing and improving performance of individual features of your product.

Validating Requirements

Product requirements in a media organization are validated in several ways. The most important validation is through internal stakeholder reviews of the requirements. These meetings serve as part of the product manager's continuous role of championing and communicating the vision and strategy for the product.

In these reviews, you are bringing together editorial, technical, and creative teams as a group or in one-on-one sessions to go through the problems and approaches to the solution. The product manager needs to be able to speak to stakeholders in their own language.

Plan

Tactics	Tools
1. Develop Product Roadmap 2. Define Topics / Themes 3. Create and Manage the Product Backlog 4. Complete Dev Estimates 5. Develop User Stories	1. Product Roadmap Template 2. Prioritized Product Backlog with Dev Estimates 3. Draft User Stories

In the plan phase, the product manager defines and prioritizes product features as a product roadmap and development sprints.

Figure 6: Example Kanban board illustrating work in progress.

In order to effectively manage the scope and delivery of a product feature, the product manager must ensure that requirements are fully defined ahead of each new two-week development cycle with enough detail such that they are ready to be worked on immediately.

Product development teams in media organizations typically define features in the form a user story. A user story is a software requirement formulated as one or two sentences in the everyday language of the user. The primary elements of a user story are the title, description, and acceptance criteria. The title should be descriptive enough to allow people in the team to differentiate it from other stories but short enough to fit on a sticky note. The description usually follows the template: As a [user role] I want to [goal] so I can [reason].

In some media organizations, the responsibility for writing user stories is shared with the technical lead, scrum master or another person from the project team. However, the product manager is held accountable for making sure that user stories are ready for development and needs to able to edit or write user stories when necessary.

Product managers in media companies must work closely with content and technical leads to decide on which features from the backlog should be assigned to a particular sprint. This activity is highly collaborative with the product manager coordinating and leading these exercises to get relevant stakeholders aligned and clear priorities set for the development team.

Design

The design process in a media organization is often referred to as user experience (UX) design or product design. In some media companies, the user experience designers are embedded within the digital product team. At other times, the role can be an extension of an existing creative team that is responsible for the broader creative work, such as managing the design of graphics and visual communications. The most effective approach is for digital designers to be embedded with the product teams in order to foster a more collaborative and agile approach to developing and iterating on product ideas.

A useful tool for connecting a digital design resource with the traditional design and branding team is the style guide. A style guide is an agreed standard for how a media company's brand is translated into digital platforms.

> ▷ Key Takeaways
>
> PRODUCT DEVELOPMENT TEAMS IN TYPICALLY DEFINE FEATURES IN THE FORM A USER STORY. A USER STORY IS A SOFTWARE REQUIREMENT FORMULATED AS ONE OR TWO SENTENCES IN THE EVERYDAY LANGUAGE OF THE USER. THEY MUST WORK CLOSELY WITH CONTENT AND TECHNICAL LEADS TO PLAN AND PRIORITIZE THE USER STORIES THAT NEED TO BE WORKED ON IN EACH SPRINT.

Tactics

1. Design Research
2. Content Map
3. Content Grid
4. Schematics / Flows
5. Wireframes
6. Design Concepts
7. Interactive Prototypes
8. Design Explorations
9. Design Sprints

Tools

1. Google Sheets
2. Draw.io
3. Sketch
4. Principle
5. Invision
6. AfterEffects
7. Marvel
8. Zeplin

The following tactics will help in understanding the various aspects a typical product design process in a media organization.

Easy to Use vs Hard to Use Product

A product manager should always strive to create products that are simple, elegant and easy to use. The following page contains two graphical representations of an easy to use and a hard to use product. Product features are represented by small circles. In the first graphic, the most often used features require the least number of clicks to access. This product is optimized for the top tasks of the user and makes less often used features more discoverable over time. An easy to use product identifies the priority paths of users and clears the road to target content.

Figure 10 illustrates a hard to use product. The features that are rarely used are easier to discover than those that are used more often. Such a product makes frequent use of features that are harder to learn and painful to use. A poorly designed product makes accidental use of lower frequency features.

Product Design Considerations

LEARNABILITY: How easy it is to learn an interface in order to accomplish basic tasks *(easy to learn).*

EFFICIENCY: How quickly can users perform tasks after learning the design *(reduce effort and workload).*

MEMORABILITY: Re-establishing proficiency after a period of not using a design *(hard to forget).*

ERRORS: What kind of errors are made and how quickly can users recover *(anticipates and forgives mistakes).*

SATISFACTION: How pleasant was the experience while interacting with the design *(does what the user wants and when the user wants it, provides feedback, is satisfying and fun to use).*
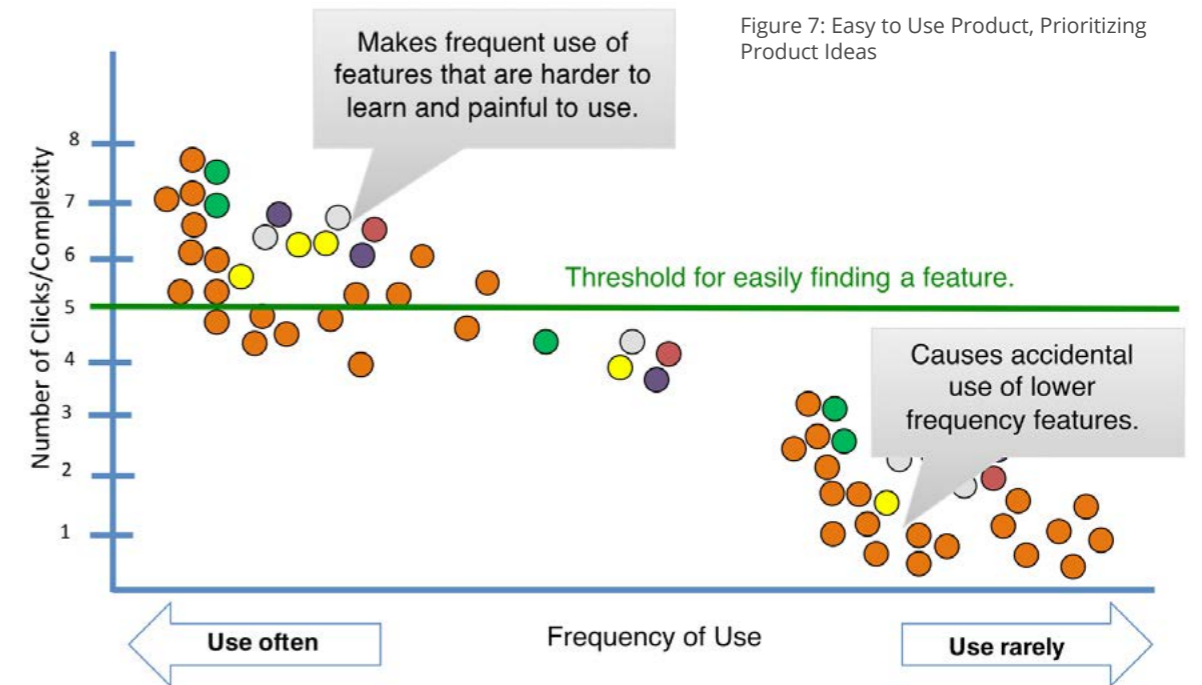

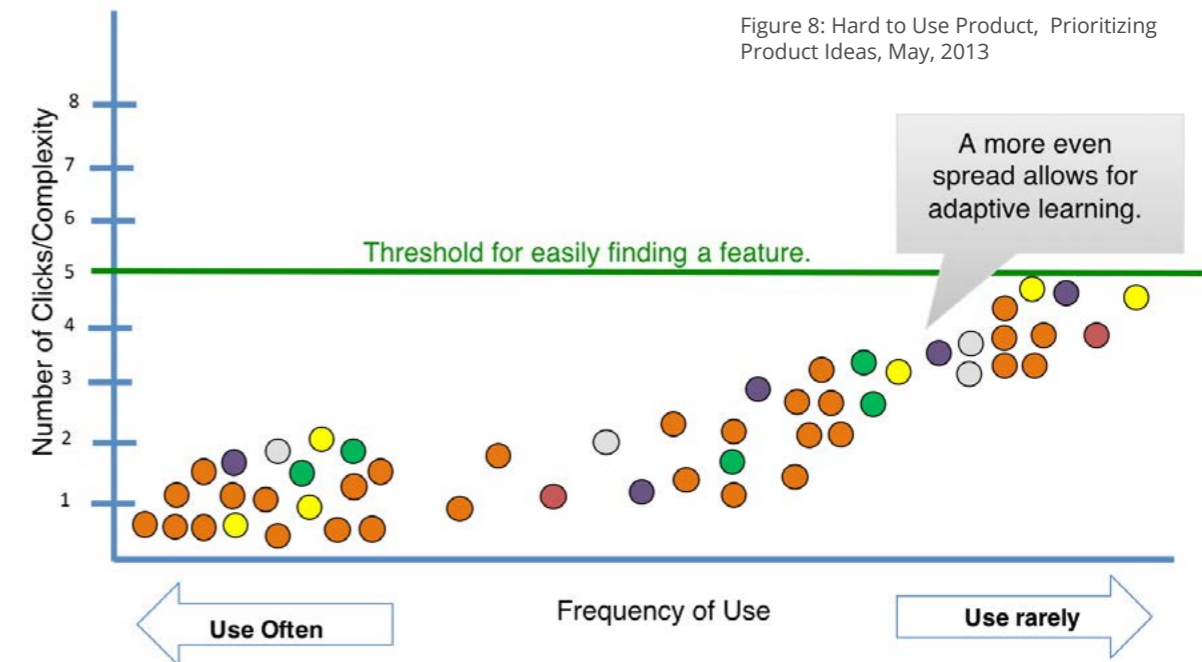Figure 7: Easy to Use Product, Prioritizing Product Ideas

Figure 8: Hard to Use Product, Prioritizing Product Ideas, May, 2013

Design Research

The design process for a new product or feature begins with a visual audit of current approaches in the market. The product manager works closely with a designer to understand design patters and existing user behavior. Visual audits are an informal process and typically involve collecting screenshots of competitor's products and understanding competing solutions to the same problem.
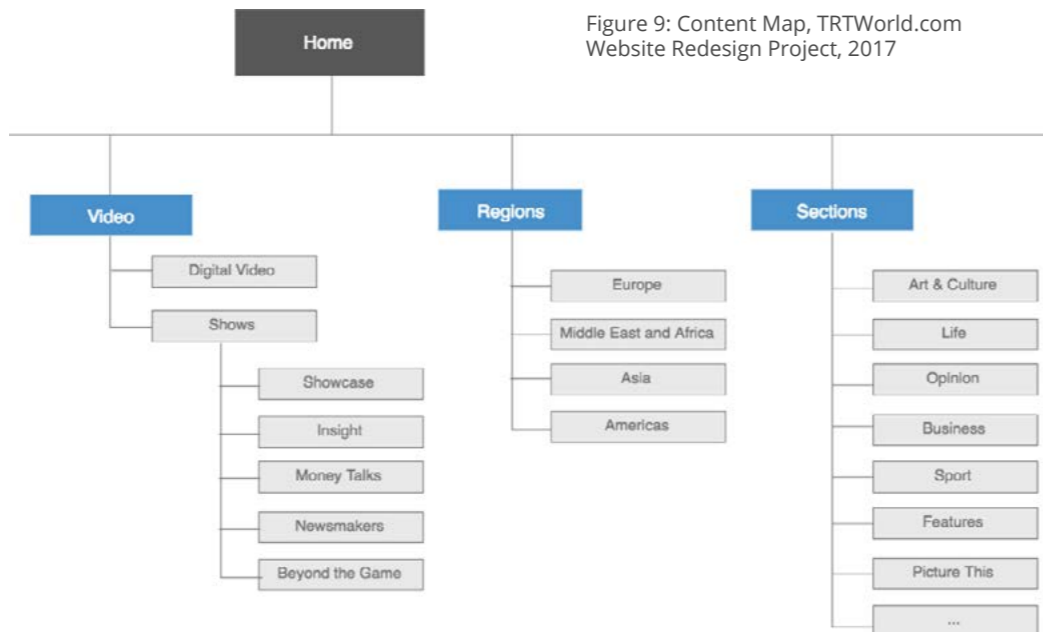
Content Map

Insights from a visual audit are combined with other research to inform a content strategy for the product. A content strategy identifies what information will be most relevant to make available across the primary screens or pages of a website or mobile app. A content map is a visual representation of how this information will be organized and presented to users. The graphic below illustrates a sample content map for an international news portal.

Content Grid

Content maps printed on A3 paper are an effective tool for getting editorial stakeholders to prioritize and decide on not only what information should be presented to users at each step of their journey through a website or app but also to balance the content with the editorial capacity of the organization. This allows the product team to identify content-related design constraints early in the process and proceed with greater confidence as they execute the rest of the design deliverables. The graphic below illustrates a sample content grid for an international news website, featuring from right to left, a home page, category page, and article detail page.

Figure 9: Content Map, TRTWorld.com Website Redesign Project, 2017

Figure 10: Example content grid for a Home Page

Schematics and Flows

A schematic or flow diagram is a tool that is best used for visualizing the way a user will move through various scenarios in a mobile app.

Wireframes

Terms such as low versus high fidelity are often used when referring to the level of detail in a wireframe. In a media organization, some product managers find it good to pair a content map with low fidelity wireframes as a way to keep stakeholders focused on content and logic, and lock those aspects down as early as possible before presenting detailed wireframes. Without agreeing on the logic and components of a page or screen in advance, stakeholders could easily fall into the trap of treating wireframes as though they were design concepts, and the big picture content and product strategy gets lost in the details.

Design Concepts

Design concepts are the next level of detail when translating product requirements into visual artifacts. Design concepts build on the direction and approval of previous deliverables and are the final step in validating the overall design direction of the product. At this stage, a foundational design is approved and serves as the basis for all pages and screens going forward.
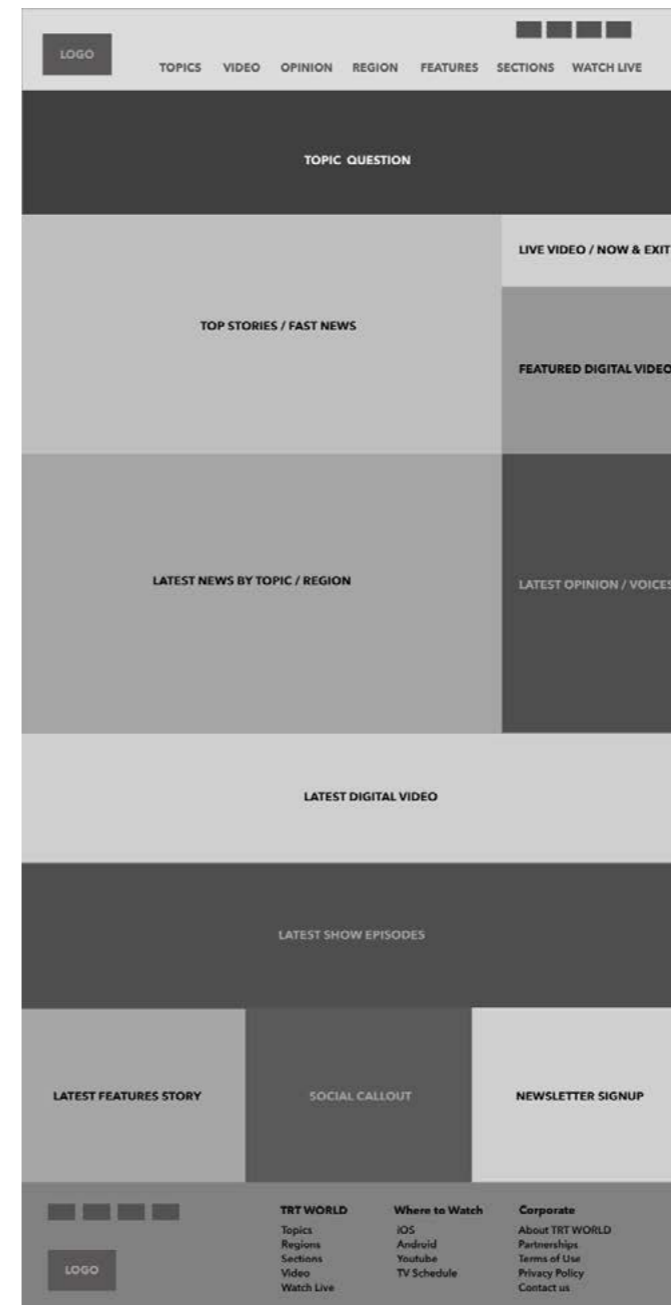
Figure 11: Example wireframes for a mobile app.

Interactive Prototypes

In modern product design, prototyping is an essential step in validating a design direction. The interactive nature of modern digital products make it impossible to approve a product design based on looking at static images or printouts of screen designs. Developing a prototype allows a product manager to quickly get feedback and validate a product with internal and external stakeholders and address problems before a single line of code is written.

Design Explorations

Product managers make a distinction between the problem space and the solution space. The problem space focuses on the user need or benefit that the product should address. The solution is a specific implementation that addresses a user need or product requirement. This separation

allows for a product designer to produce multiple solutions to a problem. These solutions are sometimes presented as design explorations where the alternative approaches to a design are presented alongside a recommended direction. If the product manager feels that multiple directions are strong and need to be validated with users, then these explorations can be put through A/B testing in the product or through user testing of them with real people.

Design Sprints

Product managers who follow an Agile Scrum methodology typically strive to have designs two sprints ahead of development. This is often difficult to achieve but should always be something to aspire to. The work of the design team in preparing assets for the upcoming sprints is called a design sprint because the designers are also working in similar length cycles to deliver assets for the upcoming development sprint.

Build

Tactics	Tools
1. PPrioritize User Stories 2. Conduct Acceptance Testing 3. Plan User Testing and Feedback 4. Collect Internal Stakeholder Approvals and Feedback	1. Sprint Plan Document 2. Test Cases and Scenarios 3. New Features and Functionality

The build phase of the product lifecycle focuses on the software development, testing and incremental release of product features. In the build phase, the product manager assumes the role of product owner and has several key functions leading up to the actual development.

Development Methodology

Agile Scrum is a popular software development methodology in media organizations due to its ability to adapt quickly to the changing needs of users, business and editorial stakeholders. Scrum gives the product manager the ability to
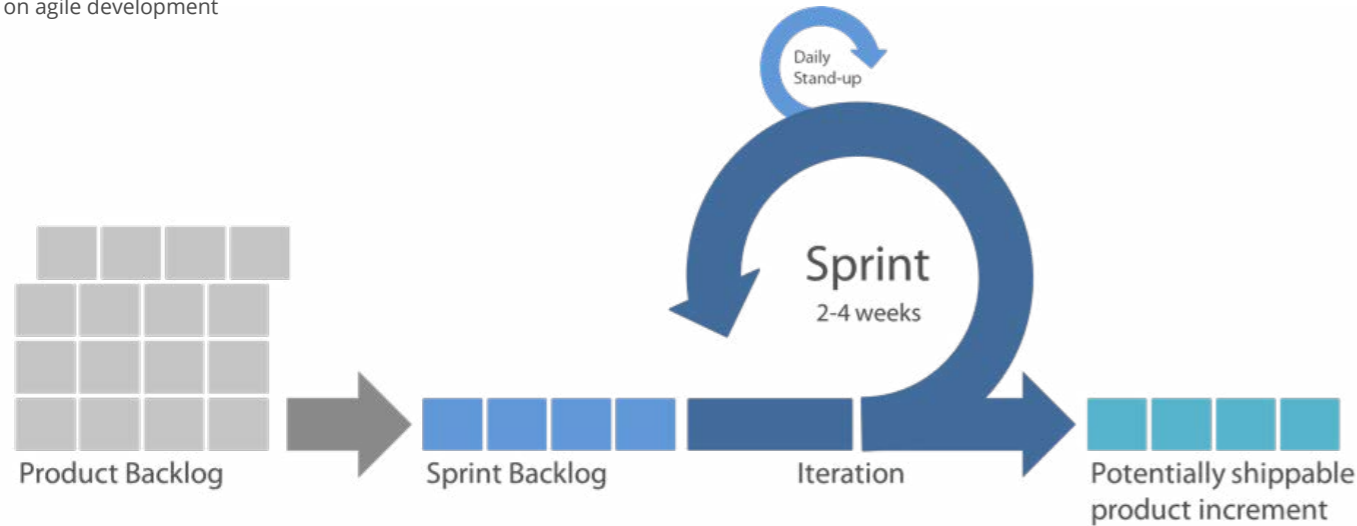
Figure 12: Product manager doing an end of sprint review

effectively manage the return on engineering resource time by making sure the team is working on the features that are delivering the most value for the user and the organization with minimal waste.

FIgure 14 illustrates how an Agile Scrum team operates. A product feature is stored in a backlog until it is ready to be worked on by being assigned to a two-week development sprint. During this two-week period, the development team self-organizes around the work to be done, using a daily standup meeting to discuss the previous day's tasks, today's tasks and any impediments. The daily meetings are called a Scrum. The development team continues to release new features every two weeks until the final product is deemed ready for release.

Kanban is another software development methodology that allows mature product development teams to move even faster by leveraging a process of continuous delivery of features as they are done, rather than waiting until the end of a two-week sprint. In the Kanban approach, development tasks are carefully managed and the team is only allowed to have a fixed number of tasks in-progress at any given moment. In order to start working on new tasks, an existing task must first move out of the in-progress column and into either the verify or done columns.

Some media companies may find the Kanban methodology effective for providing operational support to existing products outside of a sprint if the development tasks are small. As bugs or minor enhancements are reported developers are able to execute and deliver minor updates to existing products without disrupting commitments of the dedicated Agile Scrum teams whose focus is primarily on new feature development.

Figure 13: Scrum: A new perspective on agile development

User Stories

There are several ways in which a product manager can lead feature prioritization exercises. User benefits versus features is one approach that the product manager can take in deciding what features to build or improve. These are not to be taken as actual exercises to be completed for each feature or product idea but should serve more as a mental model for how the product manager should think about building consensus around prioritizing features.

Prioritizing Benefits versus Features

Product managers in a media organization are surrounded by opinions about what features should go into a product and need a framework to assist with prioritization. It helps the team to agree upon what user benefits should be addressed. Figure 14 illustrates a framework that helps to identify which product features to build or improve. The deciding factor is driven by insight into the users' current level of satisfaction with a feature, how important it is to their daily life, and the upside potential if the product team were to invest in developing the feature.

User Acceptance

As the development team begins working and marking certain tasks as done from their side, the product manager and quality assurance (QA) will do a round of user acceptance testing to validate that the feature is being implemented according to expectation. These are mid-sprint review sessions that serve as a way to identify potential issues before making it to the end of the
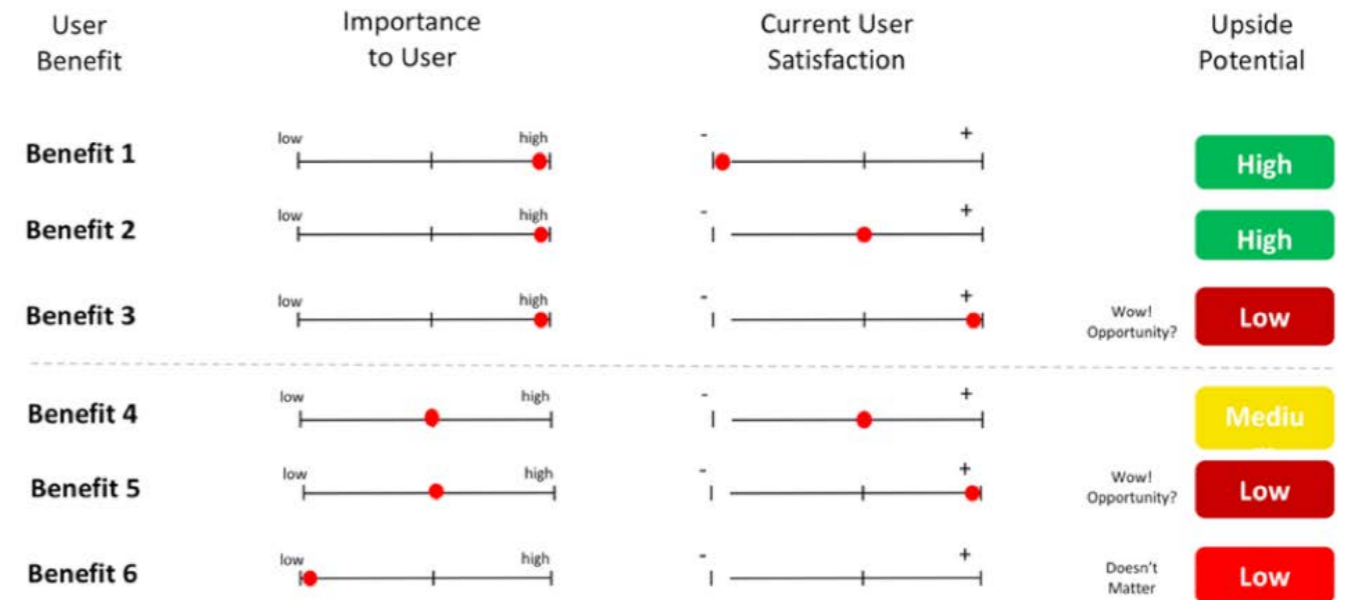

Figure 14: Benefits vs Features, Prioritizing Product Ideas, 2013

sprint. See the appendix for guidance on writing user stories with acceptance criteria. In a media organization that doesn't have a dedicated QA resource or team, the responsibility of acceptance and functional testing rests with the product manager and editorial lead who will review, verify, and close items at the end of each sprint.

Test

Tactics	Tools
1. Functional Testing 2. Usability Testing 3. Exploratory Testing 4. Load/performance Testing 5. Copy Testing 6. A/B Testing 7. Café Testing / Ad Hoc Testing	1. Test Results Summary 2. Prioritized Bugs/Defects 3. New Feature Requests and Enhancements Added to Backlog

Testing against agreed upon acceptance criteria is critical to allow the product team to identify issues early in the development process and resolve them as quickly as possible, and teams need to implement processes to prevent old issues from resurfacing. Otherwise, testing can be a source of major delays.

Functional Testing

As the development team begins working and marking certain tasks as done from their side as work packages are delivered at the end of each sprint, the complete set of features will go through a round of functional testing. There are many types of testing that can be done by a media company such as security, performance, and compatibility testing. However, the most critical testing that should be done is to verify that the design and functionality works as expected on the target devices.

Similar to usability testing, functional testing can be formal or informal. The formal version involves writing test cases with scenarios and expected results. The result of each is captured as a pass or fail status. The informal version involves exploratory testing, where the product owner or other stakeholder will simply use the product on whatever test devices are available on hand and try to discover defects.

Usability Testing

Great product managers have a deep appreciation for design and can quickly identify a good design versus a bad design. A deep sense of empathy towards the user and the pain that the product seeks to alleviate is the reason why product managers perform user testing on a product to validate design assumptions and discover points of friction. Designing a product often involves making guesses and assumptions. Navigating a sea of opinions from various stakeholders can be difficult for a product manager. Introducing data from real-world user testing is the most effective way to make decisions and build consensus amongst stakeholders.

A typical user testing session involves recruiting up to eight participants from outside the organization that are representative of the target users of the product. Beyond eight participants, a point of diminishing returns is reached, whereas the participants fail to reveal any new meaningful insights.

A test plan is devised containing various scenarios and tasks that the user should complete while speaking out loud. The session requires that a facilitator guide the one-on-one session and a note taker captures insights. The session usually lasts 45-90 minutes and the results are presented as a final report for the product manager to review so that he or she can prioritize the issues that are worth resolving.

Exploratory Testing

When there are time constraints and quick validation of a product's design and functionality is needed, exploratory testing is a useful tool. As the name implies, this involves exploring the core features and functions of the product looking for functional defects. This same activity should be done on as many target devices as possible so that there is a reasonable level of confidence that the product will perform as expected on the primary devices that the target audience is likely to use to access the product or service.

Performance Testing

Speed is a major benchmark for a media product, since the product's core purpose gives users the ability to access content and information in a quick and frictionless way. Load times and page speed have direct impacts on key metrics such as retention and bounce rate.

When writing user stories for a product that needs to load content on a screen in a browser or app, acceptance criteria for how fast the complete page or screen needs to fully populate with content should be included. For example, a typical web page should load in the browser completely in less than five seconds.

Copy Testing

Copy testing is often part of usability testing and involves testing the words, phrases, and wayfinding elements that guide and propel users forward and backwards through the desired scenarios in your product. Understanding which copy to use to give users a proper understanding of how they can achieve what they want to do, what they should expect to happen next, and how to get back to where they were are key aspects of delivering a good user experience.

A/B Testing

In some cases, testing with users to determine which design works best may result in a tie or a situation where there is no clear winner. At other times, there may be two very strong design directions for a component or screen. In such cases, A/B testing helps to pick the winning design. There are several tools available in the market for running A/B tests. Two great tools are Optimizely, which can support your entire product portfolio, and Google Optimize. These tools allow you to set up experiments to test your hypotheses about how a user may interact with your product.

Cafe Testing

A more casual approach to testing and validating a product with real users prior to releasing a product into the market is through café testing. This involves approaching a stranger in a coffee shop or café and asking them to use your product in exchange for purchasing them a cup of coffee. The same could be done at dinner parties or social events and allows users to test your product in a natural and unscripted context

Launch

Tactics	Tools
1. Sales Guides	1. Sales Guide Template
2. Advertising Strategy	2. Media Plan
3. Promotion Strategy	3. Advertising Campaign Request
4. Pre-launch Campaign	4. Press Release
5. PR Strategy	5. Marketing Brief
	6. Sample Messaging

The process of figuring out how a new product is going to acquire and retain users is called go-to-market strategy (GTM). Organizations that don't have a product management function, and may rely on the engineering team to define, develop and release products, often miss this critical part of the product launch process. The GTM process includes planning paid online and offline ad campaigns, running house ads, pushing out press releases and building buzz through write-ups and reviews in the industry press.

A product launch is not an event. It is a process. The product manager owns this process and works across various stakeholders to execute media platforms. PR and marketing strategies that drive growth and adoption of the product.

Sales Guides

Digital media products that monetize through advertising, subscriptions or other paid services need effective tools for educating potential customers on the value of these offerings.

A product manager's role is to equip the sales team with tools such as a product brief, ad spot definitions, and audience insights. These can be delivered as a product brief or presentation deck.

Advertising Strategy

The product manager is responsible for the growth and retention of a product post-launch. In order to meet certain growth KPIs, a product manager is able to leverage a combination of paid and organic user acquisition strategies. Paid campaigns involve working with digital advertising and marketing teams to prepare and execute on a media plan. A media plan identifies all the places where the ads will run and the expected yield for each. A third-party product that will display an ad for your product is called a traffic source. Once a campaign is started, it is monitored and optimized to ensure that the budget is allocated towards the most effective and highest quality traffic sources. In this context, quality refers to the stickiness of the users that are originating from a particular source. An ad campaign concludes with a post-campaign analysis report.

Promotion Strategy

In a media organization, especially those with internal video production teams, developing on-air and digital video promos is a standard part of the go-to-market activities for a new product. The product manager will use an existing product brief or complete a special creative brief to provide the necessary messaging and talking points that the promo video producer would need in order to write a script and produce a video for TV or social. For text-based media organizations, promotional ads can be included in print products, if applicable, or via digital ads, and the product manager would provide similar messaging guidance for marketing teams.

Pre-launch campaign

In order to generate buzz leading up to a new product launch, the product manager can begin contacting relevant influencers and publications in an effort to have write-ups about the coming product launch.

PR Strategy

For significant launches that offer a new and novel idea or a major benefit that users were not able to experience before, a press release us warranted. Given that press releases are often sent as a sent to multiple sources, it is best to limit the frequency of press-worthy events. Tools such as PRNewswire and PRWeb are great options for not only getting a press release distributed to audiences in targeted locations, they also provide professional advisory services for preparing releases.

Support

Tactics	Tools
1. Initial Launch Support	1. Support Scripts
2. Develop Support Plan	2. Self-service Support Solution
3. Transition to Ops/Support Team	3. Prioritized Bugs
4. Support Reporting	4. Support Reports
5. Prioritizing Bugs	

The ability to ensure organizational readiness for a new product launch is a key component of the product lifecycle and often plagues organizations that don't have this function in place. A product manager is continually in front of stakeholders and in regular communication with them. He ensures a smooth handover between teams during the development phase and also during the launch phase by ensuring PR, marketing, support and other teams are fully aware of what's coming.

This is achieved through support call scripts. Rather than being on the front line to help users, tier one support should be routed through the helpdesk. It is okay to initially take all support requests during the first couple of weeks after launch and quickly prioritize any urgent issues within the first couple of weeks after launch. This process has several benefits. It frees up the product manager to focus on strategy, understanding users, and managing KPIs. It gives a structured tool to quantify and prioritize bugs based on pervasiveness and impact. It also allows third party providers to be held accountable to service level agreements in the event that managed services are affected.

Measure

Tactics	Tools
1. Monitor KPIs	1. Product Performance Report
2. Communicate Performance Results	2. Product Dashboards
3. Testing and Optimization of Product Features	3. Prioritized Enhancements and New Features in a Product Backlog
4. Track and Monitor User Feedback	

The product manager is responsible for defining, tracking and monitoring KPIs for a product. Three KPIs to use for prioritizing, measuring, and monitoring the success of digital products are reach, retention, and engagement.

Reach metrics track the increase of the size of a particular audience for a product. Monthly active users (MAUs), daily active users (DAUs) and sessions/pageviews are some reach metrics for a digital product. These metrics help product managers understand reach and frequency of use for a given product.

Retention metrics monitor a product's ability to retain loyal users over time. Common measures under this category are next day, 7-day and 30-day retention rates. This is measured by tracking the number of users who continue using the product after their first use.

Bounce rate is another retention metric that is effective at determining the effectiveness of a product's design. Bounce rate is measured by taking the average number of users who visited a page or screen and leave without taking any action.

Engagement metrics track how well the designed features and functions are able to increase discovery and depth of interactions with the content and features of a product. Engagement is measured by tracking events and user flows through a product using funnels and tags.

Iterate

Tactics

1. Plan and Prioritize New Features
2. Measure Performance
3. Test and Optimize New Features
4. Validate Features and Assumptions
5. Test New Ideas and Concepts

Tools

1. A/B Test Results
6. Prioritized Backlog Features and Enhancements
7. Design Change Requirements
8. Functional Change Requirements

Making ongoing refinements to the product post-launch is one of the key aspects of managing a product. Determining which features to improve or new ones to develop is driven by user feedback and performance metrics. The product is developed in a way that allows the product manager to know which features are being used and how well users complete the desired use-cases and scenarios. In addition, the product manager will also monitor and track how well the product is meeting overall business objectives.

All of these inform backlog and roadmap prioritization exercises and help to keep the product evolving to meet the changing needs of users.

Retire

A key consideration for determining when to remove a product from the market or when to continue to invest in new feature development is whether or not a product is meeting defined KPIs.

In other cases, the cost of a supporting a product may be too high or may outstrip revenue, or the resources necessary to support the product are negatively impacting new product development. Removing a media product from the market can be a formal or informal process. A formal process involves sending a series of messages to existing users leading up to the removal of the product and a follow-up after the product is no longer available for use or download.

An informal process typically happens when the need to remove the product is caused by events that are beyond the control of the product manager. For example, a vendor may decide to no longer support a specific hardware device or a service that powers the core features of the product may suddenly cease operations. In some cases, a product may go into maintenance mode, in which there is no new feature development for the product due to business priorities but the product remains in the market and only bug fixes are made.

When a product manager is required to formally remove a product from the market, an end of life plan is created and executed to properly manage the retirement process. An end of life document explains when support will cease for the product along with specific actions that need to be taken before and after the product is removed from the market.

Below is a sample milestone plan for retiring a mobile app product from the market.

End of Life Process Outline

TYPICAL ELEMENTS OF AN END OF LIFE PLAN ARE LISTED BELOW.

- End of life process milestones, definitions, and dates.
- Products affected by this notification and the replacement products.
- Compatibility of the replacement products.
- Current active users that will be impacted by the change
- Tactics for reaching and communicating with current active users.

Milestone	Definition	Timeline
END OF LIFE STRATEGY	Define communication channels, formats, roles and responsibilities for the end of life campaign.	Week 1
END OF LIFE REQUIREMENTS	Document design and development requirements.	Week 2
END OF LIFE DESIGN	Complete the design of in-app messages, email messages, and website placements.	Week 3-4
END OF LIFE DEVELOPMENT	Develop in-app messages, email templates, and website placements.	Week 5-6
END OF LIFE DEPLOYMENT	Deploy in-app notification for end of life messaging.	Week 7
END OF LIFE ACTIVATION	Email newsletter announcement and in-app messaging activation.	Week 7
FINAL NOTICE	Final email newsletter announcement and in-app messages.	Week 10

GLOSSARY

The following table contains a list of terms commonly used by Product Managers in digital media and throughout this guide. This is by no means a complete list. The terms and definitions reflect their context of use when dealing with digital media products.

Term	Definition
PRODUCT	A collection of features and functions that are designed to deliver a solution to a problem.
FEATURE	A piece of functionality within a product that delivers benefit to a user.
PRODUCT MANAGER	A person who leverages market expertise and user insights in developing the strategy, roadmap, and feature definition for a product.
GO-TO-MARKET	The collection of pre- and post-launch awareness building and user acquisition strategies for a digital product.
ROADMAP	A sequential view of planned product features that are to be delivered over time.
METHODOLOGY	A repeatable process for accomplishing a task and managing outcomes.
PROJECT	A planned set of development activities for delivering specific product features according to a fixed start and end date.
PROTOTYPE	A conceptual version of a product used to validate features, functions and expected behavior of the target user.
DEV OPS	A team or team members responsible for delivering ongoing operational support and bug fixes for a product post-launch.
AGILE SCRUM	A software development methodology for delivering new product features in one to two week increments.
KANBAN	An effective software development methodology for rapidly and continuously releasing fixes and enhancements to existing products.
EDITORIAL LEAD	A person who manages content as a product, and synthesizes inputs from key editorial stakeholders and is empowered to think and act on their behalf.
INSTRUMENTA-TION	The process of adding analytics code to a digital product to allow product managers to track feature usage, interactions, and user flows.

TOOLS AND **REFERENCES**

The following section contains a collection of tools and services that can be leveraged to effectively manage the product lifecycle.

Further Reading

Retiring a Product

Why Political Positioning Is Not the Best Long Term Strategy

Project Smart: Stakeholder Management Articles

Guide to Roadmapping (video)

The One Metric Dashboard

Product Metrics

Better Metrics for New Products

Measuring KPIs for a Platform vs Revenue-generating Product

Quora: What are the best metrics for a Product Manager to track?

A Guide to Quantify The Usability of Any System

Product Roadmaps

Roadmapping with a Public Trello Board

Guide to Roadmapping (video)

How to Sell Your Boss on Roadmaps Without Timelines

Themes: A small change to product roadmaps with large effects

Stakeholder Engagement

[The Art of Saying No](#)

[Top Tips for Negotiating with Stakeholders](#)

Project Smart: Stakeholder Management Articles

Why Political Positioning Is Not the Best Long Term Strategy

Newsletter

Product Manager HQ https://www.productmanagerhq.com

Bringing the Donuts https://www.kennorton.com/newsletter/

The Innovator https://innovator.news/our-newsletter-32074e2c176

Product Design Weekly http://designweekly.atomic.io/

Prioritised https://www.mindtheproduct.com/product-management-newsletter/

UX Booth http://www.uxbooth.com/newsletter/

Product Buff https://www.getrevue.co/profile/productbuff

Hack Design https://hackdesign.org

Product Psychology http://productpsychology.com/

Research

Tool	Description	Link
SURVEY MONKEY	Paid service for conducting user surveys.	https://www.surveymonkey.com
PRECISION SAMPLE	Full service survey creation and management agency.	https://www.precisionsample.com
GOOGLE FORMS	Free tool for creating user feedback surveys.	https://www.google.com/forms/about
MAILCHIMP	Cost effective solution for sending email surveys.	https://mailchimp.com
HOTJAR	Track and record user sessions to understand product usage.	https://www.hotjar.com
CRAZYEGG	Track and visualize user interactions on your website.	https://www.crazyegg.com
USER TESTING	User testing service for desktop and mobile apps.	https://www.usertesting.com
TEST OF THE WEEK	Weekly email of A/B test results that share which test won.	https://www.behave.org
USERONBOARD	A critique of onboarding flows for mobile apps.	https://www.useronboard.com
USERVISION	Outsourced agency that runs end-to-end user research.	http://uservision.co.uk

Design

Tool	Description	Link
SKETCH	Industry standard product design tool for Mac.	https://www.sketchapp.com
PRINCIPLE	User interface prototyping tool with advanced interactions.	http://principleformac.com
INVISION	Basic website and app prototyping tool.	https://www.invisionapp.com
MARVEL	Simple browser-based design and prototyping tool.	https://marvelapp.com
ZEPLIN	Design annotation tool for easy handover to developers.	https://zeplin.io
GOOD UI	Learn from real-world examples of good user interface designs.	http://www.goodui.org
ABSTRACT	A version control and collaboration tool for design teams.	https://www.goabstract.com
ADOBE EXPERIENCE DESIGN	An all-in-one tool for designing and prototyping websites and mobile apps.	http://www.adobe.com/products/experience-design.html

Testing

Tool	Description	Link
TESTFAIRY	Mobile testing service that provides a video of the results.	https://testfairy.com
XAMARIN CLOUD	Advanced mobile app testing service with automation.	https://www.xamarin.com/test-cloud
OPTIMIZELY	Multi-platform A/B testing and experimentation service.	https://www.optimizely.com
USERTESTING	Remote usability testing service with videos of session playback.	https://www.usertesting.com
FIVERR	Low-cost service for finding freelance testers.	https://www.fiverr.com/search/gigs?query=tester
VMC	Multi-lingual testing vendor professional testers.	https://www.vmc.com/services/qa

Analytics

Tool	Description	Link
GOOGLE ANALYTICS	Free analytics tool for websites and apps.	https://analytics.google.com
MIXPANEL	Analytics tool for actions and sending notifications.	https://mixpanel.com
FIREBASE	Analytics platform by Google built for mobile apps.	https://firebase.google.com/docs/analytics
FABRIC	Free crash reporting tool for mobile apps.	https://fabric.io/kits/android/crashlytics
GECKOBOARD	KPI dashboard with deep 3rd party data integrations.	https://www.geckoboard.com
GOOGLE DATA STUDIO	Free product dashboard solution for Google Analytics data.	https://datastudio.google.com

Development

Tool	Description	Link
GITHUB	Popular tool for source code management, collaboration and project management.	https://github.com
BITBUCKET	Low cost solution for source code management.	https://bitbucket.org

Project Management

Tool	Description	Link
JIRA	Project management support with Agile backlogs and sprints.	https://www.atlassian.com/software/jira
GITHUB	Project boards with sprint planning and backlog support.	https://help.github.com/articles/creating-a-project-board
BASECAMP	Collaboration tool for cross-functional stakeholders.	https://basecamp.com
UNFUDDLE	Service for managing source code, features, and dev tasks.	https://unfuddle.com
SLACK	Internal messaging and content sharing tool for product teams.	https://slack.com
TRELLO FOR PRODUCT MANAGERS	Product roadmapping and task management tool.	https://trello.com/teams/product

Support

Tool	Description	Link
ZENDESK	Automated self-help and user feedback management.	https://www.zendesk.com
GOOGLE COMMUNITIES	Free online space for setting up private beta test communities.	https://plus.google.com/communities
PINGDOM	Proactively manage website uptime and performance.	https://www.pingdom.com
PAGERDUTY	Monitor and measure API performance and downtime.	https://www.pagerduty.com

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