







CASE STUDY

BUILDING KNOWLEDGE MANAGEMENT FROM THE GROUND UP AT UBISOFT ENTERTAINMENT

ORGANIZATION PROFILE

Ubisoft Entertainment SA is a French video game company.

- » Software
- » €2.13 billion (EUR) in sales (FY 2021-2022)
- » 20,000 employees
- » Founded in 1986

PARTICIPANTS

Adrienne Smith, manager of knowledge management services, Ubisoft

Jens Degn-Andersen, content strategy team lead, Ubisoft

BUSINESS CHALLENGE

Ubisoft scaled up rapidly and had a complex, messy content management environment and a competitive organizational culture that was not conducive to knowledge sharing.

SOLUTION

Ubisoft is building a holistic knowledge management program by focusing first on the most tangible business need—content management across distributed teams—to expand buy-in for knowledge sharing and collaboration.

BUSINESS RESULTS

- » Aligned the business on standard content management processes and tools
- » Performed internal and external research to identify (and where possible, propose mitigation strategies for) the biggest barriers to knowledge sharing
- » Increased employee satisfaction with KM-provided solutions and support
- » Contributed to time and cost savings for game development



What You'll Learn

- Why Ubisoft's KM team privileges embedding KM experts in the business via its organizational structure
- » How the KM team is gradually shifting the business toward a centralized content management strategy and solution
- » How the KM team aligns its goals and measurement with high-priority business needs
- » The steps Ubisoft is taking to build a knowledge-sharing culture

Organizational Background

Ubisoft Entertainment is a French video game company. Founded in 1986, Ubisoft is headquartered in Montreuil, France, and has development studios and offices in 55 countries around the world. The organization is a pioneer in gaming and entertainment, best known for popular franchises such as Assassin's Creed, Far Cry, For Honor, Just Dance, Rabbids, Rayman, and Watch Dogs. Ubisoft is also expanding into film and television in partnership with companies such as Apple, Netflix, and Amazon. Ubisoft has 20,000 employees and reported €2.13 billion (EUR) in sales for fiscal year 2021-2022.

APQC interviewed Adrienne Smith, manager of knowledge management services at Ubisoft, and Jens Degn-Andersen, content strategy team lead at Ubisoft, about the organization's knowledge management strategy, tools, and approaches.



Ubisoft Entertainment

Ubisoft cultivated good content management practices and a knowledge sharing culture in an industry where employees are hard-pressed to prioritize content management and knowledge sharing.

Origin of the Knowledge Management Effort

Ubisoft has engaged in some form of knowledge management (KM) for two decades. The organization's game development projects have large teams and lifecycles of five years or more, so they create a lot of knowledge artifacts (whether assets, code, or documentation) that need to be shared and managed. Ubisoft's early KM efforts consisted of several small teams with different names, tools, and approaches providing content management support directly to willing game development teams.

In 2015, Ubisoft created an enterprise content management (ECM) team to standardize its content management approach and toolkit. The ECM team provided game development teams with standard packages (tools, processes, and content structures) to enable more efficient information management. The organization also encouraged production teams to hire dedicated content managers to ensure that documentation and collaboration approaches evolved according to project needs and in alignment with KM best practices.

However, Ubisoft soon recognized that ECM alone was not enough to enable productivity and innovation at scale. As the ambitions of the company scaled to keep pace with the market, so did the team budgets and headcount, which naturally meant an exponential increase in knowledge content to be managed (Figure 1).

Growth of Game Production Teams, 2010-2019

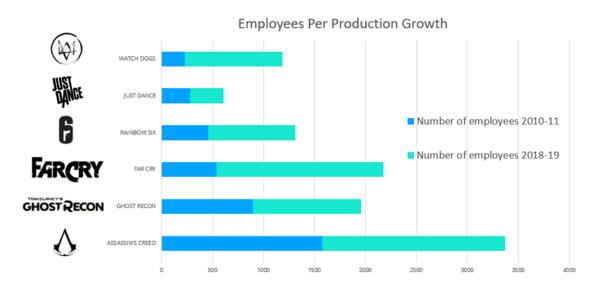
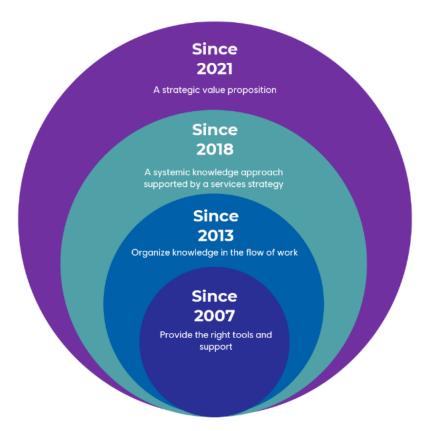


Figure 1

Furthermore, game developers are highly competitive (since they vie with one another for investment) and accustomed to selecting their own tools and workways. While ECM helped standardize content management processes across teams, each team—and all its content—was siloed. Teams wasted time recreating content and assets that already existed elsewhere in the organization. Additionally, longer lifecycles for games and employee turnover created a need to invest in knowledge capture, retention, and transfer. Ubisoft wanted to ensure that critical knowledge was available across game teams and within game franchises years or even decades after a game's initial release.

Thus in 2018, Ubisoft started shifting to a more holistic approach to KM (Figure 2). The team adopted a KM services approach to provide focused support to teams while connecting individual practices to enterprise standards around content management, collaboration, and knowledge sharing and reuse. In the first two years of this evolution, KM services applied a consultatory model and provided services to any team that asked for support. Now that interest in KM is growing across the organization, KM services is moving toward a more strategic and scalable approach to ensure it is focused on enabling business objectives.

Growth and Evolution of KM at Ubisoft



KM Strategy

At Ubisoft, KM focuses on ensuring knowledge is captured and accessible so teams can spend more time on innovation, creativity, and other value-added tasks. The core objectives of KM at Ubisoft are to:

- » Reduce barriers to knowledge sharing and reuse
- » Improve information findability and discoverability
- » Facilitate collaboration in the digital workplace
- » Optimize workflows to enable organizational efficiency

These objectives stem from high-level business needs at Ubisoft. As both demand for its products *and* marketplace competition increases, Ubisoft needs to produce innovative games more efficiently. "The market is crowded, and changes are lightning-fast," said Smith. "Because our teams need to master the latest in cutting-edge expertise, we can no longer afford to spend lots of time on routine tasks."

KM AUDIENCE

The audience for KM at Ubisoft includes more than 20,000 employees, most of whom are involved in the development and support of video games. The nature of Ubisoft's competitive, rapid-paced industry and distributed structure makes its employees less likely to prioritize knowledge sharing. Employees hesitate to share knowledge due to concerns about security measures and confidentiality guidelines, as well as the belief that another team might "steal their ideas."

As the KM services team explained, newer and smaller game development teams are more receptive to the idea of sharing and reusing knowledge. Those working on big projects in well-established franchises know that their budget is almost guaranteed, but smaller teams need to focus as much time as possible on innovation so they can sell their ideas and gain, retain, or grow their budgets.

KM followed this trend by proposing standalone knowledge hubs focused on core tech knowledge, such as around Ubisoft's game engines, to ease the burden for development teams trying to quickly access reliable information. These efforts complemented those of other internal teams such as the Technology Group, responsible for providing reusable middleware including asset banks that developers can browse to accelerate basic tasks without compromising the unique artistry of each game.

Importantly, the KM audience at Ubisoft includes (and will continue to include) many new hires. The organization has grown significantly over the past three years and continues to onboard new recruits. Strong KM and content management is essential to get new hires up to speed quickly.

KM SERVICES TEAM

The KM services team has a dual reporting structure. It reports into the global talent management group within HR as well as the production intelligence group (a collaboration and innovation group best known for producing the organization's annual Ubisoft Developers Conference) within international production.

"These two different angles help us ensure that our efforts are aligned with business objectives," said Smith. "The talent team helps us focus on the employee experience and identify where workflow efficiency issues lie. Production intelligence helps us understand what content matters most to our users and allows us to reach a broader audience with their events and promotion capabilities."



audience.

KM services also partners with other functions, such as IT and digital workplace products, in its efforts to build a more integrated and employee-centric environment across Ubisoft and works directly with business leaders to fund and execute pilot projects.

Overall, KM services includes about 55 full-time equivalent (FTE) employees. Many of these individuals are in "satellite roles" where they provide embedded support for content management, content strategy, and/or KM within a specific technology or game development team (Figure 3).

Satellite Roles

SATELLITE JOB FUNCTIONS FOCUS Maintenance & Operations FOCUS Sustainability & Growth FOCUS Culture & Change Management

Figure 3

Most satellite roles have a dual reporting structure where they report into KM as well as the business group they support. (The exception to this is that some content manager roles were established prior to KM services, and these individuals report solely into the business groups they support.) Some satellite roles focus on cleaning, centralizing, and archiving content, whereas others spend more time harvesting content for a broader audience and cultivating knowledge sharing behaviors. The duties assumed by each satellite role depend on the seniority and expertise of its respective business group, as well as an initial needs assessment that the KM team conducts when contacted to source someone for a new satellite role.

The satellite model is being rolled out for other KM expertise areas, such as community development. Individuals in this role will receive coaching from KM, but report directly into the business groups they support. The KM services team recognizes that the satellite model has the potential to create new silos, so the team works closely with satellite roles that do not report into KM and encourages people in these roles to collaborate with each other through communities of practice. "We don't want to have people feeling isolated, or going off in their own direction, which the name 'satellite' can obviously imply," said Smith. "For us, it's about

making strong connections to both the mothership of KM and among the satellites themselves so we can all go further together."

ENABLING TECHNOLOGIES

Ubisoft leverages a suite of technologies for collaboration and content management including:

- » Confluence, which serves as the main project site platform for game development and technology teams
- » SharePoint, which teams use to store files and create project homepages and calendars
- » Microsoft Teams, which is used for work-related conversations and collaboration among team members
- » Miro, which helps colleagues across teams and studios collaboratively brainstorm

These tools offer many similar capabilities, and development teams are also prone to integrating their own "shadow IT" tools. While KM services does not have the power to mandate which technology should be used for what, the team has been working with leaders to refine product positioning and encourage tool consolidation as a way to combat a large and often unfederated ecosystem that contributes to siloed information.

KM Approaches

KM services' core approaches are content management, knowledge sharing, and communities of practice. The team is also exploring tacit knowledge capture.

CONTENT MANAGEMENT

Ubisoft's content management approach focuses on cultivating and providing access to the organization's most reusable explicit knowledge. KM services provides the business with standard tools, processes, and governance structure for information architecture (Figure 4). The team also partners with the business to develop taxonomies to structure content, which will be used to improve enterprise search results, federate content across multiple tools, and eventually recommend content to users based on their job, location, and interests.



Success Factor

Shifting to a new content management solution overnight rarely works, especially in environments such as Ubisoft's. KM services focuses instead on centralizing the most critical and reusable content and linking content based on topical tags.

STORAGE NEWS & POST PROJECT GATEWAY GAME WORKSPACE PROJECT DOCUMENTATION IDEATION REPORTING PROJECT PLANNING PROJECT PLANNING PROJECT MONITORING PROJECT MONITORING SOLUTION SOLUTION SOLUTION SOLUTION

Ubisoft's SharePoint and Confluence Environment

Figure 4

At present, Ubisoft does not have a single one-stop shop for content, such as a centralized KM hub or intranet. However, KM services is gradually shifting employees toward a more centralized content management approach. The team created several enterprise-wide knowledge hubs for the organization's game engines, key technology teams, and job domains (e.g., audio, animation) (Figure 5). This makes it easier for employees, as well as KM services, to add and extract content around the organization's most important topics.

Additionally, KM is working on rolling out a standard intranet solution with interoperable global and local versions to organize and more easily share corporate information, news, and announcements.

Example Knowledge Hub

TECHNOLOGY ECOSYSTEM STRUCTURE





Figure 5

"We're taking a bottom-up approach to centralizing our content," said Degn-Andersen. "We started with teams and partners who were willing, proved the value, and plan to do more and more. We'd like to go further and build out hubs for artists, designers, and other domains, but it's going to take time. It's not something you can do in one clean chain or all in one day."

KNOWLEDGE SHARING

Ubisoft's knowledge sharing efforts prior to 2021 had been primarily "above the flow," or dedicated activities that were not necessarily integrated into experts' day-to-day work. For example, Ubisoft had long hosted internal sharing events, such as the annual Ubisoft Developers' Conference (UDC), to bring together team members from different projects to share best practices and network with a larger circle. Multiple teams, including a sub-team of KM services, also have mandates to capture and promote knowledge internally by either creating new or curating existing content on strategic topics, targeted to specific experts or audiences. Teams appreciate this knowledge content—whether video demos, postmortems, live interviews, or case studies—as measured by internal survey data (Figure 6).

Sample Survey Results on Content Impact and Engagement

	TOPIC	CHALLENGE	CONTENT	
	F2P	Missing visibility on learnings	Production Post-Mortem Video	
27%	Said the topic w	s useful for their job "This kind of insights		
46%	Said they will us	e what they learned at their job	from other projects work is most useful. Getting to know	
52 %	Said it inspired t	hem in their project and work	best practices, mistakes and leverage all this knowledge between production teams is	
49%	Said it made the	m discover a new methodology best kind of content for me"		
65%	Said that overa	l, the content was both useful and		

Figure 6

Ubisoft's explicit focus on cultivating a knowledge sharing culture is relatively new. In 2021, KM services recognized that the organization needed a more focused approach to convince employees to share and reuse knowledge. The team gathered research from external sources such as APQC and collaborated with professors from McGill University's School of Information Studies to understand the barriers to knowledge sharing inside Ubisoft. The team identified several major barriers and is taking action to address them.

One of these barriers was a lack of clarity around policies. KM services found that Ubisoft's confidentiality policies were not overly strict, but they were difficult for employees to understand. Employees who were unsure whether they could safely share something defaulted to not doing so. Thus, the team is working with business partners to define clearer policies for internal knowledge sharing.

Another barrier centered on technology and process problems. Teams' content management and collaboration platforms were set to private by default, so teams had to manually go through their content and decide what was and was not okay to share outside their teams. Most teams delayed this work until the latest stages of development, which meant content was not shared in a timely manner. Thus, KM services reorganized its site templates to create clearly defined spaces for sharable and un-sharable content. It also validated a sharing policy aligned with development's stage-gate process to encourage knowledge sharing when it is most useful (rather than too late).

The biggest barrier to knowledge sharing, though, was a lack of incentives. Employees were not rewarded for sharing and could in fact be "penalized" for prioritizing documentation when more urgent tasks were waiting. Many employees saw knowledge hoarding as a path to grow their careers by becoming irreplaceable experts. While KM cannot set measures for employees, the team is socializing the issue with management in an effort to shift toward a performance measurement strategy that is more amenable to knowledge sharing. KM services also plans to

lower this barrier through targeted training and communication (see the Communications and Change Management section).

COMMUNITIES OF PRACTICE

Ubisoft's communities of practice are groups that collaborate and share knowledge around topics, disciplines, and methodologies (e.g., Artificial Intelligence, DevOps, Agile). Some communities are open to all employees, some are invitation-only, and others are restricted to certain individuals based on their position or mandate.

Whereas KM's community activities were previously focused on animating the worldwide internal community via the company's social network, today it is a partnership between KM and the Production Communities & Competitive Intelligence team (with whom KM has a reporting line). Ubisoft defined three levels of community maturity:

- 1. Informal (the community serves as a hub for informal exchanges among like-minded peers)
- 2. **Defined** (the community has defined its focus from a knowledge perspective and is building out a base of documentation)
- 3. **Value-driven** (the community's efforts contribute something valuable to a specific use case or Ubisoft as a whole)

The teams conduct regular community of practice polls to understand the maturity levels of different communities and help them grow. Less-mature communities can use KM's self-service templates, guidance, and trainings to define their goals and increase their maturity (Figure 7). Defined and value-driven communities, especially those focused on the most business-relevant topics, can gain official sponsorship and receive a dedicated community manager from the Production Communities & Competitive Intelligence team. (The team includes five community leaders who split their time across different communities.)

Community of Practice Proposed Mockups

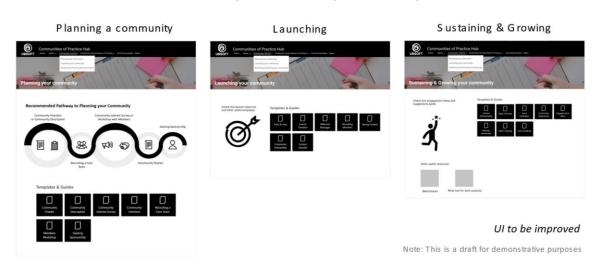


Figure 7
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Learn more about Ubisoft's communities of practice in <u>How Internal Peer Communities Help</u> Developers Share Best Practices and Expertise.

TACIT KNOWLEDGE CAPTURE

KM services is also exploring tacit knowledge capture through approaches like lessons learned, knowledge mapping, and expert interviews. "This is something that's less developed and systematic in our program today, but it's a real focus area for the coming years," said Smith. "There's been quite a few people leaving Ubisoft over the last couple of years, so I think KM can prove a lot of value by having an impact there," added Degn-Andersen.

Communications and Change Management

KM efforts often face uphill battles in complex and competitive environments, and Ubisoft is no exception. Ubisoft's KM services team researched the knowledge-related needs and challenges of both end users and leadership to understand how best to manage the change toward KM, content management, and a knowledge-sharing culture.

Marketing for KM focused on the need to support new hires and the time savings that the organization could achieve by investing in better KM (Figure 8 and 9).



Marketing for KM Services: Example 1

Figure 8

Marketing for KM Services: Example 2



YOU ARE NOT ALONE

Newcomers spend over 12 hours weekly looking for knowledge

Figure 9

The team used examples of KM game development sites with and without dedicated content strategists to illustrate the pitfalls of not devoting resources to maintenance (see the Measurement section). "KM will deliver your setup with a consistent information architecture, and you won't have to commit to hiring someone," said Degn-Andersen. Without committing to hiring someone, teams can use this scaled-down version without benefits such as lifecycle management or a continuously improving organizational structure.

KM services pitched this idea to different game development teams across Ubisoft, focusing its

efforts on those who were open to it. Gradually, grassroots interest started to build, and teams began to see the value of bringing on dedicated content strategists. Now, Ubisoft's competitive culture is starting to help—rather than hurt—KM. "Now, we get contacted by productions who say, 'Oh, we heard about this other team that has a content strategist, can you help us find one or hire one for us?'" said Degn-Andersen.



KM services also plans to target newcomers, who don't have the legacy of the Ubisoft way of working, to instill strong KM practices from day one.

Measurement

KM services uses several measurement approaches to identify improvement opportunities and prove its value to the business. The team uses built-in activity metrics in Confluence to understand how and to what degree teams are using content. The team also sends out workspace surveys to gather feedback from specific game development teams on the effectiveness of KM and content management.

As Smith explained, workspace surveys often help team leaders make the decision as to whether to hire a dedicated content strategist or not. KM services rolled up the results from teams before and after they hired dedicated content strategists. This showed that teams experience the following results from hiring a content strategist:

- 27 percent increase in the number of users who say they can easily find content
- » 35 percent decrease in the number of users who believe content is out of date
- 30 percent increase in the number of users who access their spaces (i.e., Confluence sites) daily or weekly
- 33 percent increase in the number of users satisfied with KM support and training

KM-related questions are also included in Ubisoft's biannual enterprise-wide employee satisfaction survey. KM services uses the findings to assess the level of cultural support for KM.

In terms of KPIs, KM services continuously seeks out measures that align with evolving business objectives. For example, Ubisoft wants to encourage development teams to use supported reference branches of its engines. Thus, the percentage of teams using the reference branches versus divergent ones is a KPI for both KM and the business.

KM services also shows results through its KM maturity model (Figure 10), which includes four vectors:

- 1. Resources—How is KM supported?
- Scope—What is KM's reach?
- 3. Approach—How are KM projects managed and delivered?
- 4. Impact—How is KM's impact measured?

The model shows that the KM effort at Ubisoft has significantly increased maturity since 2019. A wide majority of KM resources are now full-time. The scope of KM has moved to the enterprise level and become, in the words of Smith, "one major brand." The KM approach has moved from a tools-focused, service-oriented approach to a more holistic people-and-culture model. The team's impact hovers between level 3 and level 4 in the maturity model. KM services can show qualifiable cost and time saving for individual development teams, but it hopes to go further in proving its contribution to efficiency and innovation enterprise-wide.

Ubisoft's KM Maturity Model

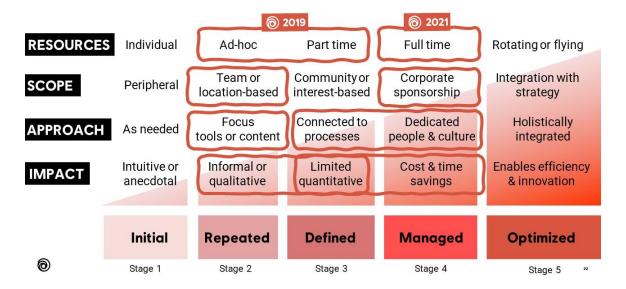


Figure 10

Critical Success Factors and Lessons Learned

At Ubisoft, the critical success factors for KM are patience, persistence, and understanding business needs. Most KM efforts face some challenges in securing buy-in, whether that's because employees think they don't have time for KM, leaders don't want to pay for it, or it is difficult to measure causal and concrete impacts of doing it. But in an environment such as Ubisoft, there are tangible reasons why employees and leaders would not only fail to buy into KM, but even actively resist it:

- » Employees are accustomed to using their own tools and approaches for documentation
- » Employees may hoard knowledge to become recognized experts
- » Employees are reluctant to share knowledge due to the company's competitive culture and fears of "leaking" IP
- » Employees are not explicitly rewarded, and indeed may be penalized, for spending time on documentation
- » Leaders don't want to spend money on support roles when budgets are tight

Thus, KM services had to work carefully and gradually to build KM support from the ground up. The team worked with those who wanted its support, proved value, and over time, grassroots enthusiasm began to grow.

The team's lesson learned is one that is not uncommon among bottom-up KM efforts. Over the past two years, KM services sometimes over-extended itself and became overwhelmed with too many disconnected projects. "We need to be more focused and not try to be everything to everyone," said Smith.

Next Steps

Moving forward, KM services plans to increase strategic alignment with satellite roles and shift toward a business partner approach. The team's vision is that satellites will have the skills and capacity to handle all direct support needs, but also the strategic understanding to funnel more big-picture needs and channels into enterprise or domain-wide KM initiatives. This will allow KM services to tackle a smaller number of projects and ensure that each project provides significant value to the enterprise. KM services will use the Agile methodology to iteratively deliver and continuously improve the solutions it provides to the business.

We're going to start focusing on what knowledge really counts instead of trying to shoot all over in the dark in the hopes that we hit something.

We're looking at what KM means more holistically.

-Adrienne Smith, Ubisoft

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