

QA Procedures for Keymedia

Overall procedures

Definition of goals

Every project begins with the definition of goals. This must be done as precisely as possible to ensure smooth running of the project and the meeting of client expectations.

Specifications

Wherever necessary, full specifications will be produced in consultation with the client. These need to cover all the functional detail of any interactive elements and applications, the enumeration and quantification of all information, preliminary screen roughs, storyboards and scripts for video and animations, and all technical constraints.

The specification will be signed off by the client, and becomes the guide to development during the project.

Project teams

Every project has a dedicated project manager. The project manager will assemble a team suitable for the requirements of the project, using external specialist skills where needed to ensure a full set of professional talent is available for the project.

The project manager clearly allocates responsibilities, tasks and deadlines to the project team. External resources are brought under contract with any changes to reflect our contract with the client.

Communication

The project manager also ensures smooth internal communication by monitoring progress and encouraging dialogue wherever necessary. This ensures that everyone working on a project fully understands their tasks, changes to the project are quickly and clearly communicated, problems are solved rapidly and any ideas for the improvement of the product or our process are noted and utilised.

Regular reviews

The project manager organises regular internal project meetings, including:

- Initial briefing
- Creative session
- Internal reviews

These meetings are designed to ensure progress to the agreed schedule and the early recognition of any problems. Efforts are focused on meeting the goals and specification of the project. Anything outside the agreed scope of the project is noted and discussed with the client for evaluation.

Resource management

The project manager works with the Creative and Technical Directors to ensure that:

- Suitably skilled resource is allocated to individual tasks
- Good progress is being made at key stages
- Backup resource can be made available if required

Project Management Procedures

These procedures will ensure that the quality of the project that the Customer/Client expected is delivered on time and to budget.

The key elements of the project management procedures are:

- Identify
- Agree
- Check
- Report
- Assign
- Check
- Deliver

Understanding the project

Keymedia will meet with the client to establish the goals and vision for the project, and define the success criteria. From these meetings and discussions a clearly defined set of goals, milestones and deliverables is agreed. This will then form the project plan and specification.

In some circumstances through the project life cycle, the project plan may be redefined as Client requirements, technologies, or resources change.

Defining milestones

At the outset of the project Keymedia and the Client will agree and set milestones for delivery. These may also form part of the payment schedule that can be agreed at this time.

Scheduling

As milestones are agreed, resources will be assigned to them and the required actions and resources to reach these will be placed in a timeline.

Where the Client has input and responsibilities, these will also be placed in the timeline to ensure all parties are aware of the deadlines.

Reporting/Tracking

Keymedia will provide a project report on a regular basis to check and ensure that all actions are continuing to planned timelines. Where appropriate, extra resources will be assigned to remedy any overrun at the earliest possible time.

If meeting milestones is dependent on input from the client, Keymedia will inform, and include in the timeline, the responsibilities and deadlines at the start of the scheduling phase.

Where Client feedback and involvement is not being met to the agreed deadlines, Keymedia will inform the Client and revised delivery of milestone deadlines will need to be agreed between Keymedia and the Client.

This may affect the final delivery deadline if small slippages cannot be made up before the consequent milestone.

Risk assessment

When setting milestones and delivery deadlines, Keymedia will assess any risks that may affect the successful completion of a milestone. In doing so, Keymedia will provide detailed actions to counter the risks and identify responsibilities for both parties.

Documentation

We have a standard notation for defining document and design versions that allows all parties to easily identify the most recent files and times of major change.

We also have a number of standard and exemplary documents that are used to meet project requirements. These may be modified where necessary.

Our standard documents are constantly being adapted and evolving to meet client needs and the demands of new projects.

Keymedia can, if requested adopt different documentation principles more suited and recognisable to the Client.

Security/Confidentiality

Keymedia recognises the need for security and confidentiality when undertaking sensitive or innovative projects. Keymedia are willing to sign up to Non-Disclosure Agreements or any other required by the Client at the outset of the project to ensure that the product is managed in strictest confidence and in a secure environment.

Client involvement and meetings

Keymedia always involves the Client in the project procedure as much as possible, and considers the project as an involved partnership between the two parties with a shared vision and goal. At regular stages throughout the project Keymedia would expect to meet with the Client to report and check on progress and discuss any changes or new requirements.

Cost/Budget control

Keymedia will keep up to date and accurate records on spend on the project. Where new or unforeseen costs arise outside of the original scope of the project, Keymedia will immediately inform the Client.

Delivery

Throughout the project each milestone will be checked and tested by Keymedia and where necessary an independent party to test the functionality of the product, such as user testing.

When all acceptance criteria have been met, Keymedia will handover the product to the Client along with all Intellectual Property Rights and Copyright. (where appropriate)

Creative Department Procedures

Understanding the job

The creative department after a meeting with the client, and internally with the project manager and technical representatives on the project, will research the design implications of the work these will include:

- How other organisations have dealt with similar projects (good practice examples)
- Technical constraints
- Branding issues and the gathering of relevant assets (fonts logos etc)

Concept and creative

Once the research period and gathering of assets has been completed an internal creative will be held with the relevant representatives of each department in attendance.

The purpose of the meeting is to produce a creative concept that will cover;

- Goals of the Project
- Method by which this will be achieved
- Information structuring, (Navigation usability)
- How to address the target audience
- How to convey the message of the client organisation/company - following style guides and understanding guidelines previously laid down (or in the case of developing new identities, what these guidelines should be)
- Unique, Innovative ideas that will engage and give benefit to the end user

Creative Brief

Once the most appropriate creative concepts have been chosen, a creative brief will be written with the aim of documenting all the information needed by the designers. Wireframe / screen rough diagrams will be drawn up that cover information structure and content. This is approved by all parties present at the creative meeting and is signed off by the client.

Allocating work

After approving the creative brief and wire frames, the most appropriate designers will be allocated the task based on the skills needed to successfully execute the brief.

Concept visualisation

The allocated designers then produce visuals that show the graphic style and direction, with information structures and content in place for key elements of the work. These help the client visualise the graphic and creative direction.

A pre defined amendments period follows where the design concept is refined.

Once all parties are agreed the concept is signed off.

Design Production

After concept sign off, the project manager with technical and creative will produce a specification of all the design elements needed for the project. These will be broken down into relevant sub-projects that can be monitored (as technical - no one part of a project lasting more than a week) and allocated to the most appropriate designer. These will be incorporated into the timeline and key signoff points identified.

Through out this process the creative director will oversee the work and make sure the graphical direction and design standard is in keeping with the agreed concept.

Technical Department Procedures

The technical department is responsible for the creation of client-side HTML pages and server-side applications. When the technical department is given a project, they must follow a number of steps to complete it:

1. Specify
2. Create
3. Test
4. Deliver

Additionally, there may be an element of maintenance involved. These steps are discussed in detail below.

Specifying the project

Specifying the project is the process by which the client tells the developer what he wants done. This is a process fraught with danger. Particularly, the client may change his mind during development, or not know how to explain himself in the first place. Once both parties are happy, the technical department can divide the project into smaller pieces and provide informed estimates of how long each will take. This information is presented to the client as a tracking tool for both him and the developers.

Understanding the job

The client meets with the developers (or their representative). Through a process of discussion a technical brief is created specifying the required functionality.

Factoring the milestones

Once an understanding of the required functionality is available, the developers then break down the task of developing the project into milestones. These milestones should strike a balance between independence and size - ideally, any developer should be able to carry them out, and it should take them no more than a week.

Scheduling the milestones

Creating the resources

The technical department is responsible for the development of a number of different kinds of resources. These include databases, client- and server-side scripts and applications, and HTML files. Each of these has its own set of development and testing requirements.

Creating the project

Once a description of what needs to be done by when is available, the developers can get to work. Throughout the process of creating the software resources and integrating resources external to the technical department, an eye is kept on adhering to the brief and talking to the client, to ensure that he is getting what he wants.

Once the milestones are known, they can be placed on a timeline describing the duration of the project, according to the availability of developers and the dependencies of the milestones. The client can then be presented with a development schedule for agreement and signoff.

During this process, potential risks can come to light. For example, if a section of the project cannot be satisfactorily factored into a milestone of less than four weeks, there is a larger risk of overrun. Smaller milestones are easier to track, and smaller overruns are easier to recover from. It is more likely for a four-week milestone to overrun by 25% than it is for four one-week milestones to overrun by the same amount, since a trend emerges earlier and can be caught and dealt with.

Database design and data collection

A database may be required to provide information for the dynamic creation of HTML files. Additionally, there may be a requirement for the collection and storage of data from users. All data collection and feedback mechanisms (e.g. forms and reports) need separate testing by referring back to the original brief for compliance. The test process is trivial since the collection and feedback is stateless.

HTML implementation

HTML files are written to the highest standards to ensure robust deployment over as many platforms as possible. W3C provides conformance-testing software for HTML.

Scripts and applications

Scripts and applications require rather more thorough testing - indeed, they could be entirely developed following this QA procedure.

The complexity of these aspects of the code is such that they should be addressed on a case-by-case basis, using this QA framework as a starting point. Most importantly, scripts and applications should not be left out of the QA process as they are in the area of highest risk.

Integrating other resources

Projects do not consist solely of databases, HTML files, scripts and applications. The technical department is only responsible for developing a part of the project - it is not responsible for the development of artwork, animations, audio and video footage or copy.

These resources are generated by other departments and must be integrated in to the project as described by the original brief. Since the technical department is responsible for finishing the project, it is their responsibility to perform this integration.

Tracking and feedback

Throughout the process of creating the resources and integrating them in to the project, the client must be kept aware of how the project is developing. He must be given the opportunity to spot deviations from his perception of the brief and notify us about them as soon as possible.

The milestones provide an obvious point for client review. The client can be notified as each milestone is passed and invited to comment on the progress so far. By providing the client with a regular feed of deliverables, the schedule can be assessed, as can the budget and workload.

Change management

Of course, giving the client the opportunity to review development means that you also give the client the opportunity to express dissatisfaction. He may want to introduce changes - for example, some of the copy might not be factually correct, or the navigation may not be appropriate. We may have misinterpreted the brief or simply missed something out.

If we have made an error, we have an opportunity to fix it sooner rather than later if the error is discovered immediately after its corresponding milestone. If the client has a different interpretation of the brief from ours, then both parties must find a resolution and the impact on the schedule of making the changes must be assessed by the developers. If the client has agreed earlier work as satisfactory and subsequently changes his mind, then contract variation issues arise and should be dealt with by the project manager. Changing good work or adding extra work should incur penalty on the client's behalf.

The importance of sign-off cannot be underestimated. The client must be asked by the project manager to sign an acceptance form at each milestone, declaring that he is satisfied with the work so far. Developers should be aware of the risks of proceeding past a milestone without receiving a sign-off for it. Changing earlier work may impact upon later work. For example, if the client decides at the first milestone that a font is inappropriate,

changing the font becomes an increasingly larger issue as milestones are traversed. If he has given a sign-off that covers the font, then his change can be billed. It may be a small change, but it still takes time from the schedule and resources from the budget. This prevents "feature creep" and other similar problems that beset on-time, on-budget projects.

Testing the project

Once the final resource milestone has been passed and signed off, and all the resources have been integrated, the project is ready for testing before delivery.

Developing the test plan

Testing a project requires careful consideration - everything the user could do must be anticipated, and the effect his actions have upon the system must be accommodated. Therefore it is vital that a thorough test plan be conceived before testing commences. Every link must be tested and validated, every form must be filled out and submitted, every page must be visited, every transaction must be carried out.

The test plan is unique to each project. It is not possible to provide guidelines beyond these recommendations. Therefore great care should be taken in developing this plan to ensure a complete and thorough test can take place. Attention should be paid to mechanisms for error feedback to the developers.

The test plan should be submitted to the client for sign-off. Early development is advised - it is possible and desirable to develop the test plan in parallel with the rest of the project.

Alpha

Once a test plan has been developed for the project, it reaches the Alpha stage. At this point, internal testing can take place following the test plan. No member of the development team should carry out this testing. Their familiarity with the project may blind them to unusual client behaviour.

Any errors should be reported back to the development team for immediate repair, and the entire test plan should be restarted. It is important to remember that fixing errors may affect other parts of the project, even parts already tested.

Beta

After internal testing has been completed, the client is advised to undertake his own testing prior to launch. He may have a different interpretation of parts of the test plan, and he may be able to throw up fresh errors.

Again, all errors should be reported immediately.

Delivery and Maintenance

Once the project has been tested and signed off by the client, it can be delivered to the client as complete and then launched.

Launch

Launch of the project will depend upon its nature. A website is launched by making it available to the end-users. For a CD, either the client or we will duplicate sufficient copies and deliver them (or sell them) to the end-users. Print media are handed over to the client.

Review of feedback

Involvement does not end there. Client and user feedback should be monitored for praise or problems. Errors may have slipped through the test plan that we will have to fix. Good pieces of work should be examined in case there is an opportunity for reuse.

Summary

The varied nature of the projects we carry out means that no QA plan can cover every eventuality. Project Managers are encouraged to specialise this plan as appropriate for each project. The most important aspects of QA are:

- Clear and agreed definition of the project goals with formal specification where required
- Maintaining regular and good communications, internally and with the client
- Monitoring development of the product internally at regular intervals
- Thoroughly testing the product before delivery
- Agreement on achievement of quality from the client in the form of sign-off.

Only then will a project run and complete smoothly.