HOW TO DESIGN GREAT PRODUCT INSTRUCTIONS

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HOW TO DESIGN GREAT PRODUCT INSTRUCTIONS

Instructions that accompany your product should make putting it together and using it a painless and easy process. Ironically, the design and development of well-crafted instructions for use (IFU) is not as easy as 1-2-3.

A good IFU design provides a service that is pleasant, flows well, and feels “very doable” to its audience. Quality IFUs are like any other well-designed functional product: the result of thoughtful planning, careful engineering, and adherence to design principles that speak to not only good user experience, but also to the psychology behind how people learn.

Prior knowledge

Product/device

Limited working memory capacity

Abilities

Instructions for use (IFU)

Complex interactions

IFU design must address complex interactions between the user, the product or device, and the instructions themselves (Ganier, 2004).

As part of the design process, it is vital to understand user characteristics with respect to the product. Who is the target audience for your product? What prior knowledge (and/or related knowledge) already exists in their minds regarding the product’s use, and how should that existing knowledge be taken into account? Additionally, there are certain expectations surrounding your intended audience’s abilities with respect product use. IFU designers must be able to address users’ knowledge and abilities (and possible ranges of ability) as part of the instructional experience in order to produce designs that are appropriate for and will resonate with the intended audience, for example:

• An IFU design for a particular toy assumes an audience of both adults (e.g., parents, caregivers) and children ages 8 to 11. How might this information affect IFU design with respect to the written text? The visual design of the included graphics?

• The audience for another IFU consists primarily of patients with rheumatoid arthritis ages 55 and above for a new medical device. In what ways might the design treatment for this IFU be different from the IFU for the toy?

For the IFU to be successful, one must consider how the intended audience will (and won’t) be able to interact with not only the product, but also the instructional materials—which are actually a product in their own right.

Along with users’ prior knowledge and abilities regarding product use, an IFU designer must also take into account their working memory capacity (Cowan, 2008), which is limited by nature; human beings can process and remember only so much information at once. The IFU’s design should strategically map out the instructional experience to not overwhelm the user yet still function and flow well in terms of both the amount of information and how that information translates into user action with the product.

A progression of activities

While addressing the complex interactions described earlier, an IFU must also be able to guide the user through five major activities related to product setup and use (Ganier, 2004):

1) Maintaining the underlying goal
Throughout the entire journey (and each step along the way), the user maintains the overall goal of task completion (successful product use) until that goal is fulfilled.

2) Comprehension of process and steps
The user must integrate information from multiple sources in order to understand what must be done. This involves not only comprehension of each individual source, but also the ability to make useful connections across them:

• IFU contents
• product interface
• user’s own prior knowledge

3) Application
The user applies the information by creating an action plan and executing on it.

4) Activity monitoring
The user confirms success (or failure) at the different steps throughout the task in order to progress toward task completion.

5) Storing task knowledge into long-term memory
This is optional, depending on the nature of intended product use. The user integrates the procedure into long-term memory for later retrieval; this process may require additional practice and support from the IFU.

Good IFU design will usher users through these activities, along with the transitions that occur between them.

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Imperfect design situations
A characterizing feature of “design” is that the work is accomplished under certain constraints and/or must comply with a set of ground rules. Much of the information described previously helps illustrate the types of boundaries within which IFU designers must operate. IFU design, however, should not have to compensate for poorly designed products.

In ideal situations, instructional considerations and IFU design occur concurrently with product design.

In ideal situations, instructional considerations and IFU design occur concurrently with the product design to ensure a great user experience (AAMI, 2013). Product refinements should be considered when limitations or shortcomings become apparent from a learning and usability standpoint. Though recommended, this approach is often not the case. Sometimes the reality is that IFU design must help compensate for a product or device’s limitations and flaws.

The good news is that IFU design is a creative, problem-solving process that can offer great flexibility and additional control regarding the design and shaping of users’ initial experiences with the products they use. Good IFU design facilitates successful product use, helping to ensure success of the product itself.

Strong IFU designs meet five key challenges
Designers of IFUs have a lot to keep in mind as they create instructional solutions to fit the features, needs, and idiosyncrasies of products and devices. The ability to take users through a learning pathway for a product successfully is no small feat.

The success of a product’s accompanying IFU depends on the strength of its design. The following is a list of five design challenges that IFUs designers should meet in order to produce effective, user-friendly instructions:

Challenge 1:
People use instructions in different ways

Challenge 2:
Communication and comprehension

Challenge 3:
Turning knowledge into action

Challenge 4:
Keeping users engaged

Challenge 5:
Selecting the right medium(s)
Findings indicated that 82 percent of users used the IFU, while 19 percent of users chose to ignore it. About half of those who did make use of the IFU did so while attempting to use the product; others chose to read the instructions the entire way through prior to attempting to use the product. These results demonstrate a wide range of use that complicates IFU design considerations.

CHALLENGE 1: PEOPLE USE INSTRUCTIONS IN DIFFERENT WAYS

How do users go about using your product’s IFU? They won’t all do it the same way.

Four categories of use
Research by Karen A. Schriver and her colleagues (1997) examined users’ IFU interactions with respect to several different consumer products. Results yielded four categories of use shown in the graphic below, along with their distribution by percentage across users.

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Two types of learning strategies
The above results support the notion of two main learning strategies through which users of IFUs tend to approach their instructional experience (Schriver, 1997; Wright, 1999; Ganier, 2004).

The first is an instructions-based approach to product use by which users will move through the IFU in a linear fashion; users learn information about product use in the order presented by the instructions.

The second strategy, a task-based approach, is more interactive; users move around the IFU in a non-linear fashion, searching/browsing for information and then choosing which information suits their current needs. In this strategy, the IFU supports the user in the given task or exercise. This is distinctly different from the former approach, for which the user’s learning experience is driven by the IFU.

Users of your product could make use of its accompanying IFU with either approach. Good IFU design takes this into account, producing instructions that will work well no matter which method a user may adopt.

Due to rounding, numbers do not add up to 100.

**IFU use**

- **42%** Worked with product/device concurrently with instructions
- **23%** Read instructions before using product/device
- **17%** Learned by doing (and did not refer to the instructions)
- **19%** Referred to instructions when unsure, to correct a mistake or to confirm

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CHALLENGE 2: COMMUNICATION AND COMPREHENSION

A more obvious challenge regarding IFUs is to ensure they communicate as intended without proper communication, comprehension as intended will not occur. Good IFU design manages to orchestrate all instructional information so that it communicates clearly to users:

- where they are with respect to the task(s) of product use
- what must be done
- how it ought to be done (for best results)

Organization

A first priority regarding IFU design is to create order from “the chaos” - the information about the product and product use in its raw form, which can be haphazard, unorganized, and sometimes filled with gaps. To do this, designers must gather and evaluate all product use information and perform a task analysis (Jonassen, Tesmer, & Hannum, 1999). Findings from the task analysis, along with product use goals and an understanding of users’ instructional needs, aid in the formulation of performance objectives. Designers then discern which procedural details are relevant and helpful to users and which are not. This guides the organizational structure of the information, which provides a logical framework from which the individual steps of product use can be derived.

Depending on the nature and complexity of the product’s functionality, the organization and flow of information may consist of just one major task, several tasks, or even sub-tasks. The IFU designer must decide which of these makes the most sense with respect to how users will actually approach and use the product. For example: an IFU designer may choose to create instructions that first help users get up-to-speed on the basics of product use. This allows the new user to engage in “productivity” more quickly, boosting confidence and enjoyment of the product before diving into more advanced aspects of product use, which the designer places later in the organization of the IFU as separate sections.

Design considerations with respect to the uptake of information and how best to facilitate that process occur in conjunction with decisions about the IFU’s organizational structure. The design treatment for the introductory section of an IFU, for instance, should take into account the product’s complexity in terms of components/parts or use. An IFU designer may choose to make it short and sweet, provide a high-level overview, or put together an in-depth orientation to the product and its use. Any of these approaches can be effective (depending on the product’s design and users’ educational needs) at setting the stage for a good learning experience.

Organization of instructional information begins at a high level, but inevitably IFU design must also address the finer details of conveying product use in the form of easy-to-understand procedural steps that will walk users successfully through their first-time use of the product. The instructional design should take into consideration not only the process of product setup and use, but also how a given process may be broken down in a way that facilitates both comprehension and action, for some users will choose to read the instructions concurrently with their first attempt at product use (Schriver, 1997).

In addition to the product use steps, the IFU may contain cautions and warnings that are either general in nature or relevant to specific steps in the process. These pieces of information may be regulatory and required by law; they may also be additions created by the designer, who deemed the cautionary information important enough to include based on findings from the task analysis (ANSI, 2008). This is because the IFU must succeed as not only conveying what steps users should do, but also at helping users avoid possible pitfalls and errors with respect to those steps. Along with the organization and presentation of the product use individual steps, so too should one carefully consider the placement of cautionary messages, in terms of their context and how they fit into users’ thought patterns regarding what they must and must not do.

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Layout

Layout is another early priority of IFU creation. Similarly to the organization of the information, an IFU’s layout must be addressed at multiple granularities in terms of design.

For instance, from a high-level perspective it is important to know the final delivery output of the IFU. What form will it take? IFUs are produced (and consumed by users) in many shapes and sizes, for example:

- a letter-sized sheet of paper, printed on the front side only
- a tri-folded document, similar to a brochure, printed on both front and back
- an insert folded many times so that it fits inside the product’s packaging
- a booklet or manual
- a hang-tag that is attached to the product
- instructions found externally on the product’s packaging or box
- instructions found on the product itself, placed on stickers or molded into the product’s surface

Regardless of delivery format, an IFU must be able to convey its information in a way that makes sense to users and helps them learn. Consider the unfolding of a paper IFU found within a product’s packaging. For the sake of this example, assume the IFU is in the form of a large piece of poster paper that has been folded several times into a small, flat rectangle. Imagine the user taking out this document and then unfolding it. What information should users initially see when laying eyes on the folded IFU for the very first time? What information should they see as they unfold the document, bit by bit?

The design constraints of an IFU’s layout will be different, depending on the delivery format. The instructions that appear on the product’s outer packaging, for example, would be designed and developed quite differently from instructions designed for a folded insert – in terms of both the organization and layout of information. Each type of delivery format brings with it certain limitations and affordances regarding the information presentation. The designer must consider how these relate to communications pertaining to product use in order to create an IFU that works well for that particular delivery format. In addition to the delivery format, one must reflect on who the intended users are, along with the nature of the product (and product packaging) as part of designing an appropriate layout. The presentation of information to users will vary based on these factors.
As design decisions move from high-level down to the details, the IFU's layout remains a point of consideration. The layout must be addressed with respect to each page of manual, each panel of a folded up IFU insert, each step outlined for product setup and use, and more. At each level, the designer must make decisions about how the information will fit best, and how the presentation of that information will communicate successfully.

### The organization and layout of information is paramount to successfully designed instruction.

The organization and layout of information is paramount to successfully designed instruction. The layout of IFU design translates the organization of information, along with the content itself, into a visual display of direction and support. At every level of granularity (the “woods” vs. the “trees” vs. the “branches” vs. the “leaves”), IFU designers must devise strategies for how the information may be presented effectively - strategies they implement using text and graphics.

#### Text and graphics

Together, text and graphics form a dynamic duo that designers can apply toward the effective communication of information. When text and graphics are used successfully as part of IFU design, users are able to understand what they have to work with and what must be done in order to use the product correctly - without error and without confusion. The combination of text and graphics and how they are able to function so formidably as a unit in terms of communication is quite a tour de force with respect to human comprehension. It is important for designers of IFUs to understand and appreciate the contributions of each so that they can be used successfully - both individually and together.

For the IFU to be successful, the text must be readable and facilitate user comprehension. Countless resources exist today that outline good design principles with respect to the written word, such as The Elements of Style by Strunk and White (1999) and Writing Plain Instructions by Achtelig (2012). The contents of procedural instructions call for good technical writing that speaks to the types of thinking processes required by the given task(s). The text should address users’ ability to understand the product and procedure while also preparing them sufficiently for the actions they must take.

Consideration of the intended audience is key (i.e., age, level of education, prior knowledge, subject matter expertise) because the technical nature of the written information must match user needs and expectations in order to provide the appropriate level and style of communication (Schriver, 1997). Regardless of who the audience may be, the clarity of textual information is the main priority so that users' interpretations reflect an accurate understanding of the communication.

As mentioned earlier, all users have a limited working memory capacity and can actively process only so much information at once. Miller’s Law (1956), for instance, states that the number of objects an average human can hold in working memory is “7 plus or minus 2.” Thus, the amount of information provided to users at any given time is also a major design consideration. Luckily, good instructional design can help reduce the amount of cognitive load on learners (Sweller, 1988). One way to combat cognitive overload is the strategic grouping of information into meaningful “chunks” that make the processing of information more manageable (Lindley, 1966). Good IFU design presents textual information as simply as possible, providing users with what is necessary while leaving out extraneous detail.

#### Good IFU design presents textual information as simply as possible, providing users with what is necessary while leaving out extraneous detail.

The design of text is not just about selecting the right words with which to communicate; it is also about how that text is displayed. For text to be readable, one must take care to choose an appropriate font that encourages the eye to follow its printed form. Many font types exist as choices for the designer; each differing with respect to the lines, curves, and spacing of the lettering. In addition, the size and color of the font, along with the background color, can make a difference in how easily users can read the information. And the list goes on: Is there a pattern in the background that could obscure recognition of the text? Is the text adjacent to other objects that might hinder its readability in some way? Such questions about typography and the display of text alongside other elements of the IFU demonstrate how design considerations can span from the lexical into aspects of visual design.

Interestingly, visual design was not a major concern in the creation of IFUs until the 1980s. Up until that point, instructions generally consisted of words only (Ganier, 2004), and researchers focused mainly on the readability of the text in terms of difficulty. Thankfully, words-only IFUs are no longer the standard, and users now benefit greatly from the use of graphical imagery as part of their learning experiences with respect to new products and product use.

Just what does the addition of graphical content offer in IFU comprehension? Graphical depictions of instructions make processing that information easier by allowing users to bypass the additional cognitive effort they would otherwise put forth in order to create a mental model of the given task. A mental model is a representation of a concept or situation created in individual users’ minds that explains their understanding of how things work in the real world. Ideally, mental models will have a structure that corresponds to the structure of that which they represent (Johnson-Laird, 1983). When relying on text only, users must create their own mental models based on their interpretation of the textual information. They are thus more likely to form mental models that are inaccurate, increasing the possibility of error. By providing graphical imagery, IFU design ensures higher levels of accuracy in comprehension because rather than requiring users to form their own mental model based on the text, the imagery provided depicts the intended mental model directly to users (Gyselinck, 1994; Ganier, 2001). In so doing, the presence of graphics provides greater clarity (and clarification) of information to the user.

The following are a couple examples that illustrate the optimization of text for improved user comprehension:

- **Before:** The knob should be set to HEAT.  
  **After:** Set the knob to HEAT.

- **Before:** Don’t leave the segments unhooked from each other.  
  **After:** Keep the segments hooked together.
Today the value of graphics in procedural instructions is widely known, and the inclusion of graphics in IFUs is considered desirable, generally speaking. In addition to more accurate mental models regarding product use, graphical imagery aids in IFU comprehension in a number of ways. For instance, communication in modern society may need to address global audiences and readers of varying ability. This includes speakers of other languages and those with limited literacy skills. In such situations, there are limits with respect to what the manipulation of text can do; the display of well-designed imagery can overcome language barriers and illiteracy in ways that words cannot.

Graphic design includes the use of elements such as whitespace, shading, lines, curves, and color. It is the strategic use of these elements that tap into how we process information, influencing our perceptions with respect to any visual display. To illustrate, color theory is an area of design that addresses the psychology behind color and its effective use; the close visual positioning of items can lead viewers to assume that these items are related or can be thought of as a group in some way. As with the use of text, many resources exist with respect to principles of visual design (Samara, 2007; Malamed, 2011; Lidwell, Holden, & Butler, 2003). By applying these visual design principles, the IFU can subtly communicate information that is very effective at helping users along. For example, these techniques can:

- **Orient viewers with respect to the information.** Visual design can help users easily and quickly identify what they see.
- **Guide viewers along a desired track.** Visual design can draw the eye through the proper pathway(s), ensuring that users experience the flow of information as intended.
- **Highlight what’s important.** Visual design can help users take notice of items that are important for the task.
- **De-emphasize extraneous detail.** Visual design can lessen users’ cognitive load and help keep their focus on what’s important by minimizing superfluous information.
- **Reveal details.** Visual design can help users see and understand details more clearly, when the situation calls for it.
- **Provide perspective.** Visual design can frame items and information in a way that helps users recognize how they can expect to see them, so they will “know it when they see it.”
- **Depict action and movement.** Visual design can provide cues with respect to directionality and spatial orientation, helping users to envision themselves doing the task.

Text and graphics provide the building blocks upon which a good organizational foundation can be laid out for users to learn and begin to use new products and devices. This is accomplished successfully when the design of these elements helps users to understand the product and its associated task(s) accurately and as intended.

As an informational medium, IFUs are unique in that they are specifically designed to elicit physical action from the user with certain end results in mind. Successfully ‘moving’ users from a knowledgeable state to one in which they use their knowledge to accomplish something by being in action is a huge indicator of victory with respect to the IFU’s design. Getting users from “here” to “there” is an involved process that designers must manage and coordinate in IFU development. The following sections outline various aspects of this that designers must be aware of as they work.

**CHALLENGE 3: TURNING KNOWLEDGE INTO ACTION**

**Comprehension.** Users must understand what the task entails with respect to both the product and oneself. This involves integrating the information found in the IFU with the product’s interface, along with the added input of one’s own prior knowledge.

**Action planning and execution.** As users gain comprehension of what must occur and how, they must work on transforming that information into the physical movement of their own bodies in order to accomplish the action in question.

**Progressing toward task completion.** While engaging with the IFU, users work toward meeting their overall goal of successful product use. Doing so requires the following to occur - at each step - as users make their way from processing the information found in the IFU to translating that information into behavior with respect to the product (Ganier, 2004):

- **Comprehension.** Users must understand what the task entails with respect to both the product and oneself. This involves integrating the information found in the IFU with the product’s interface, along with the added input of one’s own prior knowledge.
- **Action planning and execution.** As users gain comprehension of what must occur and how, they must work on transforming that information into the physical movement of their own bodies in order to accomplish the action in question.
Activity monitoring and regulation. As users act on the steps described in the IFU, they must check that they do so correctly. This is done at two levels: 1) Confirming overall progress toward the end goal of successful product use, and 2) Confirming progress on the performed instruction. If the “feedback” users receive by observing the results of their own actions is not consistent with what is expected (as outlined in the IFU), then they must cycle back and try again, reevaluating their own understanding of how they should perform the action in question.

Switching back-and-forth
When designing for the transfer of knowledge from IFU to user behavior, IFU designers must also consider the “back-and-forth” nature of this entire experience (Ganier, 2004). There are several types of back-and-forth occurrences users experience as they switch their focus and attention throughout the whole process:

- text and graphics at each step in the IFU
- different sections of the IFU
- the IFU and the product’s user interface
- different elements of the product’s user interface
- observed actions and the IFU

The designer of the IFU must contemplate and take into account the user experience at each of these different junctures as well as how they all connect together to form a learning pathway that makes sense to users and flows comfortably.

Long-term vs. one-time use
What the IFU must accomplish with respect to the end goal of product use will vary based on the product. In some cases, the instructions outlined by the IFU need only be performed once; in other cases, users will partake in the procedural sequence again and again as part of regular product use. IFU designers should take this differentiation into account, for what constitutes effective design in each case can also vary. For instance, if the product is reusable, designers should consider the re-use of the IFU as a possibility, and gear its contents and even its physical makeup to accommodate this. Additionally, the specific instructional techniques applied within the IFU may differ. Designing for successful recall of information over time requires a different approach than helping users through a one-time task (Eiríksdóttir & Catrambone, 2011).

Evidence and accountability
Because procedural instructions guide users through performance-based tasks (yielding observable actions pertaining to product use), their strength as learning resources can be objectively measured and evaluated. Doing so is highly recommended and can provide incredibly valuable design insights about the IFU experience that can be used to improve the IFU. Depending on the nature of the product and the needs/ concerns of the manufacturer, the IFU design process may include formative and/or summative user testing in order to ensure the effectiveness of the instructions. To that end, several resources exist that provide guidelines and standards with which IFU designers should aim to adhere for both medical and consumer products (ANSI, 2008; ANSI/AAMI, 2009; ISO/IEC, 2012; IEC, 2012; AAMI TIR49, 2013). In the case of medical products and devices, human safety depends on successful product use; the stakes are high, and user testing of the instructions makes good sense as a necessary precaution.

As a best practice, you can objectively measure and evaluate the strength of your product’s IFU to ensure its effectiveness.

CHALLENGE 4: KEEPING USERS ENGAGED

"If you build it, they will come." That line may have worked out well for the lead character in Field of Dreams, but if you’re in the business of building IFUs, you’ll want to rethink the sageness of that advice. Will users come? And will they stay? Not necessarily, but if they perceive a good enough reason. This is where motivational aspects of good IFU design come into play.

Gaining users’ interest and willingness to learn
These days, people have compressed schedules and a lot of distractions to contend with. Time is a commodity, and a first inclination of many upon coming across a product’s IFU is to think, “I don’t have the time for this.” A well-designed IFU can actually help shave time off users’ struggles regarding initial product use - but how will you convince users that it is worth their time and attention? You can do so with the IFU design.

Audience characteristics are once again an important consideration; however the focus is somewhat different. What drives these users from a motivational standpoint? How does the product relate to their likes and interests? Is the product a fun new gadget or a means to an end where the user is fulfilling a necessity? The answers to questions such as these can provide some insight into the user’s frame of mind with respect to the product and its use.

Designing for engagement from a motivational perspective involves setting the right expectations with respect to the IFU experience. Research has shown the influences that first impressions can have on how well people learn (Jameson et al., 1987; Manning, Lawless, & Mayall, 2011). This can be explained by the concept of the self-fulfilling prophecy, where impressions about a situation - which may or may not be accurate - evoke behaviors that actually confirm those beliefs (Merton, 1948). We act based on what we perceive, and the role of design is, ultimately, to shape perception.

To fulfill on the motivational aspects of an IFU, designers can use Keller’s (1987) ARCS (Attention, Relevance, Confidence, Satisfaction) model of motivational design for learning and performance as a guide.

Attention. Designers must first gain users’ attention. Because human beings are highly visual, the IFU’s visual design should be used to accomplish this goal. The design should give the appearance (and elicit the expectation) that the IFU experience will be easy - on both the eyes and the brain. The IFU should be visually appealing and elicit curiosity. Ideally (thanks to well-written content and visual design), users will perceive it as a resource that’s credible, trustworthy, useful, and pleasant to use.

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**Relevance.** There are certain strategies designers can apply in order to achieve perceived relevance from users. The IFU design should align well with users’ goals regarding product use in a way that resonates with them and the kind of value they place on the product. The use of language should appeal to users, and the presentation of information should aim to foster in users the sense that that “this is for me.”

**Confidence.** The IFU must establish positive expectations for success. It must inspire confidence in both the ability of the IFU to do its job and the user’s own ability to achieve at the given task(s). Confidence levels are related to learners’ motivation to engage and the amount of effort they will put forth in meeting an objective (Bandura, 1997).

**Satisfaction.** Satisfy users’ expectations by following through with good design and providing a great learning experience. First impressions can set things up well in terms of users’ mindsets, but IFUs are subject to accountability – the evidence of their effectiveness is apparent in the end results of successful product use. Basically, the IFU needs to imply to users that it will do an excellent job, and then live up to that first impression.

**Good design is motivational.**

The good news about influencing users’ willingness to engage and learn is that good design practices tend to be inherently motivational. Those highly knowledgeable and experienced in the areas of design and usability can often intuitively make the right decisions about users’ motivational needs with respect to instructional design. By applying known principles of good design into IFUs, you are likely implementing solutions that also favorably influence users’ motivation to learn.

**Challenge 5: Selecting the Right Media**

As part of the discussion on IFU layout, you know that the delivery medium is a very important piece of information for the designer. Selecting the most appropriate medium(s) for the delivery output of your product’s instructions is a challenge that also deserves thoughtful contemplation.

**Multiple channels of communication**

Traditionally speaking, the delivery output of IFUs manifest in a number of formats: on paper, as a book/manual, as a hang-tag, on the external packaging of the product, and even produced to display right on the surface of the product itself. The decision of “which delivery format” is one that the organization/manufacturer – along with the IFU designer – should consider carefully, for this decision is not just about producing effective instructions; it’s also about the manner in which an organization chooses to engage with its customers.

From an instructional perspective, the choice of delivery format should be conducive to product learning with respect to its features and intended use. Which delivery format will help the user most in this respect?

From a business perspective, the choice of delivery format also speaks to opportunities with respect to marketing and brand perception. Consider, for example, the option to display instructions on the product’s outer packaging. By displaying instructions there, you not only inform what the product is and how it works (providing prospective buyers a service); you also influence how anyone who sees the packaging views your brand. Likewise, the instructional insert users pull out of the box has the potential to both delight and disappoint your customers. What kind of experience would you like the IFU to provide as users get to know your product?

From the standpoint of consumer engagement, the IFU presents an often overlooked opportunity to connect with your customers during the “out-of-box” experience.

Good IFU design ensures the success of that experience and makes good business sense because it is a means through which businesses can actively shape perceptions of both product and brand.

Additionally, the choice of “which format” is not a mutually exclusive decision; a product IFU can exist in multiple forms and venues, positioned strategically to communicate with your customers: on the box, in the box, on the product, and in the digital domain.
Digital IFUs: These days, you can choose from more than the traditionally available options for IFU output. IFU creators can also optimize designs for digital consumption, providing more ways with which to connect with your customers, including mobile technologies—anytime, anywhere.

Digital IFUs expand on the instructional capabilities of traditional IFUs in five noteworthy ways:

- **Spoken audio vs. written text.** Much of the instructional content in IFUs is best presented as text. Digital IFUs can display written text, but they also can “speak” it, providing the option of audio.
- **Animated graphics in addition to still images.** Paper IFUs use illustrations to show how procedures are performed. To convey complex movements, digital IFUs can provide animations to show users how to perform the procedure.
- **Navigation by step vs. static layout of all steps.** With paper IFUs, the page layout helps direct the reader’s attention to each step. With digital IFUs, each screen can be placed on its own screen with navigational functionality. Users will have an easier, simpler experience—the relevant information will be provided to them, one step at a time.
- **Interactivity.** Users who interact with digital IFUs can benefit in several ways:
  - An instructional experience customized according to their needs
  - The ability to provide input as well as receive feedback
  - Control over viewing and playback
  - The ability to take different pathways
- **Video.** This is a proven and popular method of instruction. People flock to YouTube, for example, to learn how to do all sorts of things. With sound IFUs, the page layout helps direct the reader’s attention to each step. With digital IFUs, each screen can be placed on its own screen with navigational functionality. Users will have an easier, simpler experience—the relevant information will be provided to them, one step at a time.

There are so many ways to connect with your customers with respect to IFU design that yield positive outcomes, including successful product use and how users perceive both product and brand. Which options and techniques are appropriate for your product’s out-of-box experience?

For information about our package and instruction design services, contact Flori Manning (Flori.Manning@gfk.com or +1 630 320 3944).

**REFERENCES**

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