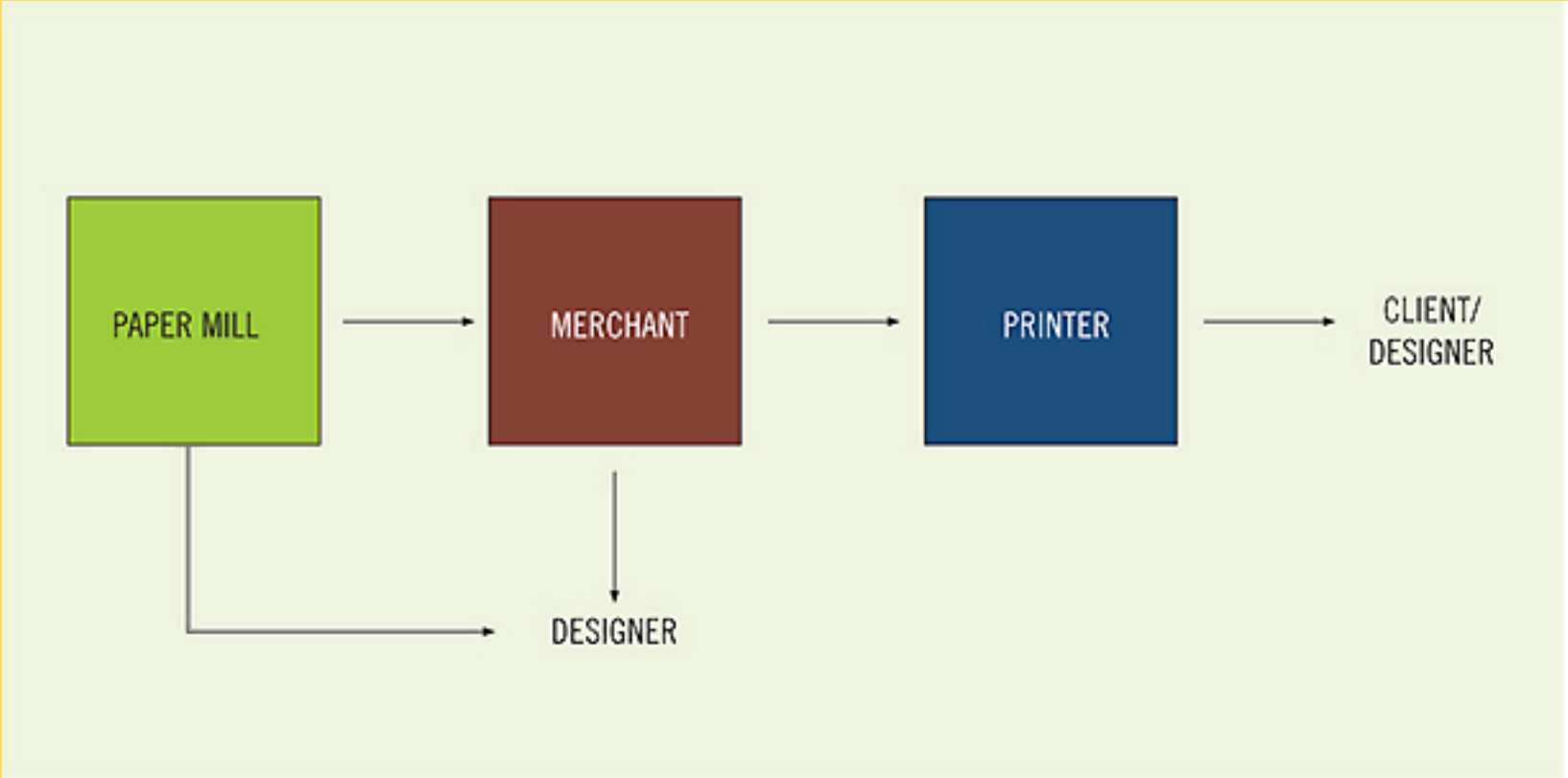




PAPER WORKFLOW

FROM MILL TO DELIVERY



THE MILL

MILL

Mills sell to paper merchants who sell to printers and print buyers

Mills provide swatch books to merchants to distribute

Swatch books: small, unprinted samples of a brand of paper and its weights, finishes and colors

A few mills make swatch books that cover their entire line by brand, color and weight



THE MERCHANT

MERCHANT

Paper merchants or distributors operate regionally & locally

Merchants in the same area may carry the same papers

Merchants may carry their own brand as well as other brands

KELLY PAPER™

 **unisource**

**sterling
paper**

xpedx™

MERCHANT

Representatives are hired to:

Keep design studios, advertising firms and printers informed about paper availability, trends, cost and varieties

Host events and support trade organizations

Provide swatch books and printed examples

Provide dummies

Dummies: blank sheets folded and bound to the size that you will need them. important for understanding the look, feel and size of the final layout

MERCHANT

Since merchants also call on designers to specify paper from them specifically, they are often willing to send samples of the paper you need cut to the size you will need it

You can also get parent sheets as samples

Usually designers will call a sample department for these requests

The caller often pays for shipping

MERCHANT

Some paper merchants have self-branded papers in inventory, purchased from a mill and sold under the merchant's name, not the mill's

MERCHANT

When a merchant does not have the item in stock in a warehouse and has to order it from the mill, it is called a **Mill Item**

A **Mill Item** can take up to 2 weeks to arrive where you need it

THE PRINTER

PRINTER

The printer will order the paper for you

Many paper distributors have high annual minimums to open an account

Printers mostly buy their paper from certain merchants – established relationships

Better rate due to long term relationships built on trust & volume buying

If you know what printer you will use in advance, find out what merchants they use before you choose paper

PRINTER

If you have a paper in mind but are committed more to the look than the brand, ask your printer to recommend a comparable paper if you chose a paper from a merchant other than the one they normally deal with, can save money

You can also order samples and dummies through your printer

PRINTER

Some printers keep 2 or 3 types of paper in stock for routine printing jobs

These are called **house sheets**, usually a white paper

Before selecting a white paper, you can ask what these are, ask for samples and evaluate whether they will apply to your job can save cost

With current shipping and trains and trucks arriving daily at print shops, not as common as they once were

PRINTER

If ordering paper from a printer, and if you have not already checked with the merchant on paper availability with the paper rep, have them check

Let them know your due date so they advise you of delays

PRINTER

Each time a print job is run, printers order enough paper to account for waste, an amount of paper used to set up the job on press, a percentage determined by the printer

This paper is use mostly in **makeready**, or when the press is getting the job to the point of approval: ink density, register etc.

PRINTER

Sometimes, you can reduce paper costs by ordering one kind for several jobs at a time

For example: if you you will need reprints with slight variations of a brochure later in the the year, sometimes you can order all the paper at once (if the printer has storage)

PAPER CHARACTERISTICS

Types of paper

Finish

Grain

Opacity

Thickness

Strength

Color

Brightness

Basis Weight

A NOTE ABOUT SIZES

Why paper is 8 1/2 x 11 as a standard:

The Dutch invented the two-sheet mold in 1690.

The average maximum stretch of an experienced vat man's arms was 44".

Many molds at that time were around 17" front to back because the laid lines and watermarks had to run from left to right. This limited the size of the two sheets.

NORTH AMERICAN SIZES

8 1/2 x 11"

11 x 17"

17 1/2 x 22 1/2"

19 x 25"

23 x 35"

25 x 38"

INTERNATIONAL SIZES

A4 8 1/4 x 11 1/4"

A3 11 3/4 x 16 1/2"

A2 16 1/2 x 23 3/8"

A1 23 3/8 x 33 1/8"

A0 33 1/8 x 46 3/4"

2A0 25 1/2 x 36 1/8"

COATED / UNCOATED

Coated sheets have less ink absorption and therefore can support a higher level of detail.

Coated sheets have a greater smoothness, opacity and color fidelity

COATED / UNCOATED

Uncoated sheets require that designers and printers account for dot gain. This means keeping the artwork more “open”.

Dot gain can lead to an overall darkening of an image, reduction in contrast and loss of detail.

Colors can appear stronger or duller than expected.

FINISHES

Uncoated sheets come in a series of finishes that generally increase smoothness.

examples: antique, eggshell, vellum

Uncoated sheets are also available with finishes that are embossed into the paper as it is made.

examples: linen, laid and cockle

FINISHES

Coated sheets come in a series of finishes that generally increase smoothness and gloss.

examples: dull, matte, velvet, silk, gloss, high-gloss

GRAIN

Grain refers to the position of the fibers in the paper. Most of the fibers align their length parallel with the machine or machine direction, and their width runs across the machine or cross direction.

Grain affects paper in the following ways:

Paper folds smoothly with the grain

Paper is stiffer in the grain direction

When exposed to moisture paper expands more in the cross direction.

OPACITY

Opacity relates to the show through of the printed image to the other side of the sheet.

Thickness has the most impact.

THICKNESS

Is often referred to as its caliper and is measured in thousandths of an inch and expressed as a point size.

Caliper is used most when discussing cover stock.

STRENGTH

Strength is more determined by the nature of the paper fiber than its thickness.

COLOR

The color of paper is an important factor due its direct influence on color perception.

BRIGHTNESS

Brightness is a measure of how much light is reflected by paper under specified conditions and is usually reported as a percentage of how much light is reflected, so a higher number represents a brighter or whiter paper.

BASIS WEIGHT

Basis weight is used to define the weight in pounds of a ream of paper cut to a given size.

PAPER TYPES

Bond / Writing

Text

Cover

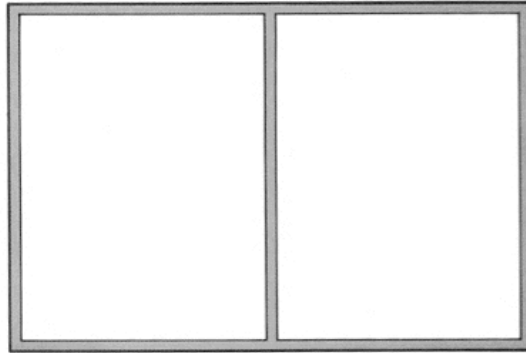
THE DESIGNER

DESIGNER

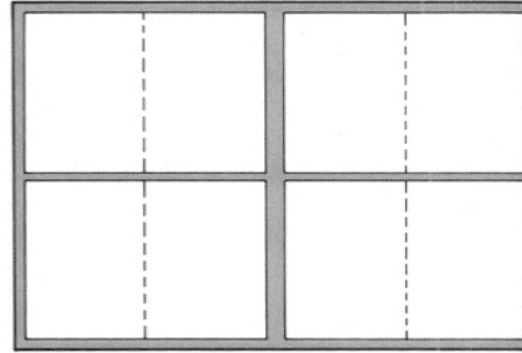
Design to fit: be space efficient

Know the size of the paper you will be printing on and try to maximize the area

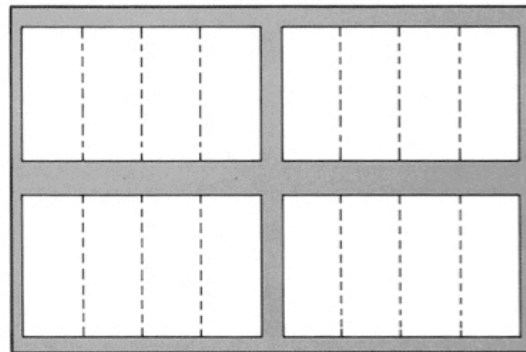
Remember that the standard page size that most sheet measurements are based off of, especially text papers, is 8.5 x 11



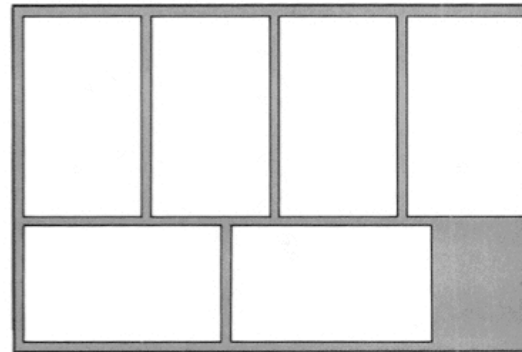
two 17 x 22 posters



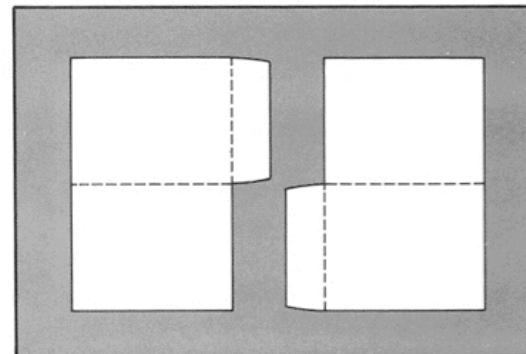
four 4-page 8 1/2 x 11 booklets



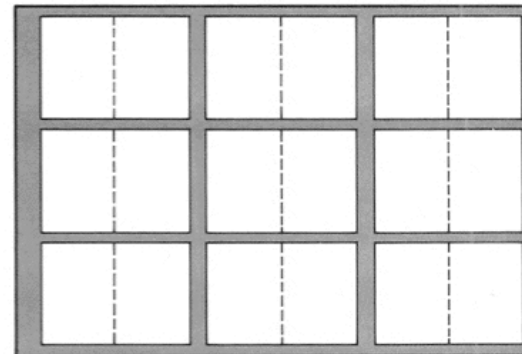
four 8-panel 4 x 9 rack brochures



six 8 1/2 x 14 newsletters



two 9 x 12 pocket folders



nine 4 1/2 x 6 1/4 greeting cards

6-11 Products to cut out of a 23" x 35" sheet Understanding how paper in standard sizes cuts to yield printed pieces leads to more efficient use of paper. Above, solid lines represent trims and dotted lines folds. Shading represents areas of the paper that become waste.

Mark Beach:
Getting It Printed

DESIGNER

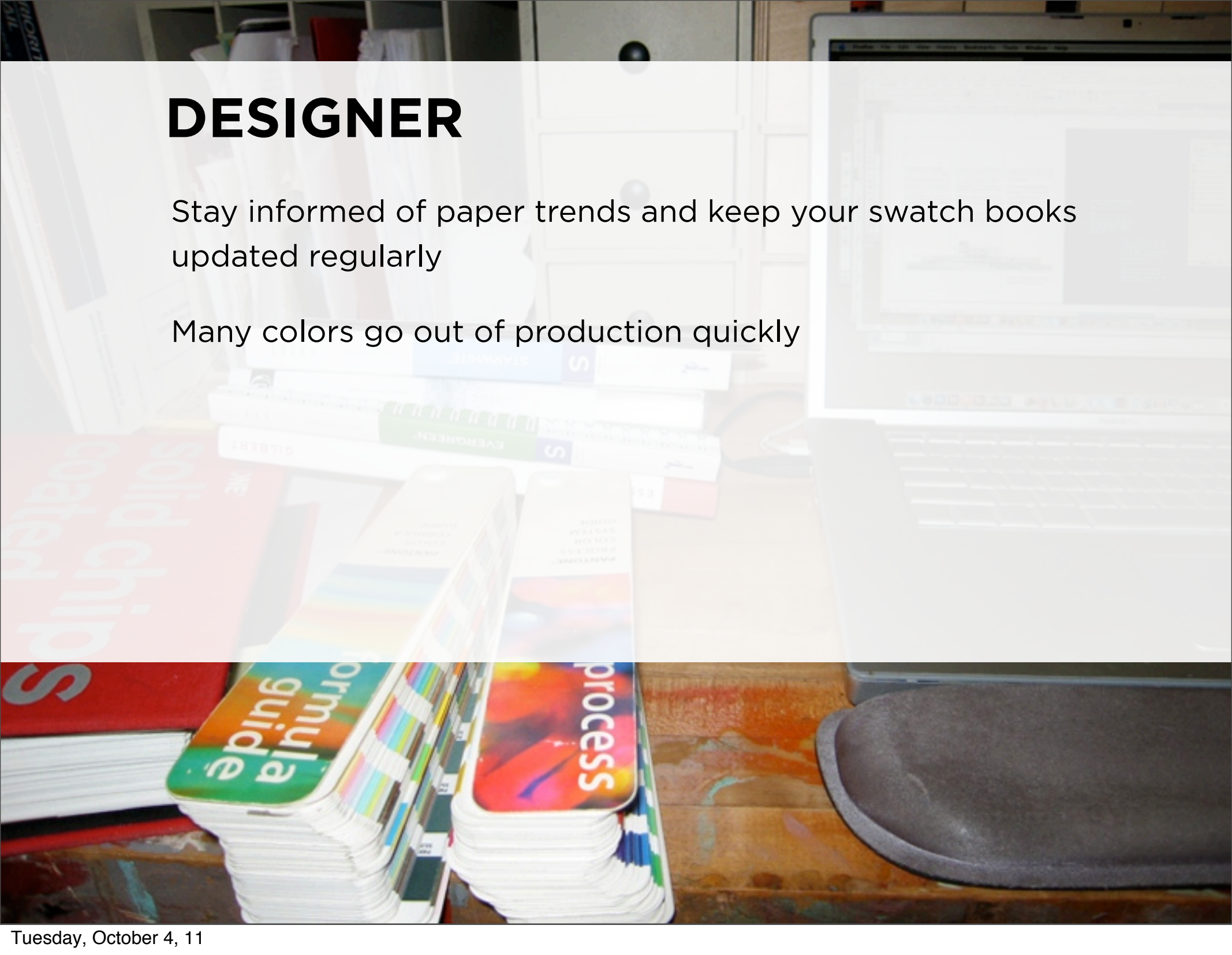
Design according to budget, plan for larger sheets and be prepared for cost increases if you need to add bleed

Bleed: extra extra amount of printed image or graphic which extends beyond the trim edge of a sheet or page

DESIGNER

Stay informed of paper trends and keep your swatch books updated regularly

Many colors go out of production quickly



DESIGNER

Money saving tips:

Ask your printer to list out comparable papers to what you spec'd when you quote, what they recommend that might be less

Change the basis weight of the paper
ex: cover to book

DESIGNER

Most larger paper companies are now selling small quantities of paper through online stores.

Fewer actual retail outlets for commercial paper, most consolidated

DESIGNER

Build good business relationships with your paper merchants

If you always shop for bargain prices, you might just end up with bargain service

