

Gnome Business Plan



Phase 1: Collect Underpants

Phase 2: ?

Phase 3: Profit

Dan's Business meta-Plan

Phase 1: Find something people love

Phase 2: Minimize or transform the tedious bits

Phase 3: Success

Overview

1. Video: What is YouPatch?
2. Hacking Groucho
3. A Lean Startup
4. Racket and exploratory programming

Part One

Play Video: What is YouPatch?

Part Two

Hacking Groucho

The original hack (September 2013)

DrRacket + 2http/image library + a weekend of programming...



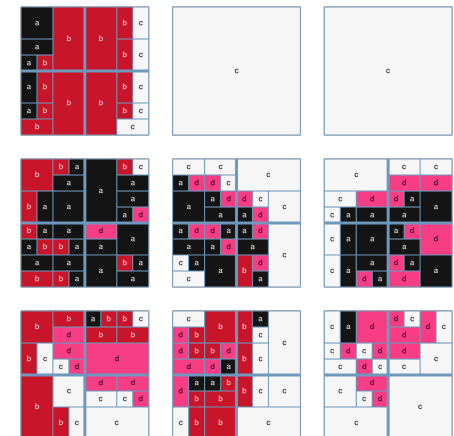
Original Groucho



Reduce resolution



Recolor



Merge "pixels"

square rectangle line text beside above overlay

What to buy



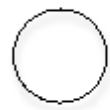
Fabric 1: 1 yard (95 cm)



Fabric 2: 3/4 yard (70 cm)



Fabric 3: 1 2/3 yard (1.6 m)



Fabric 4: 1 yard (95 cm)

What to cut



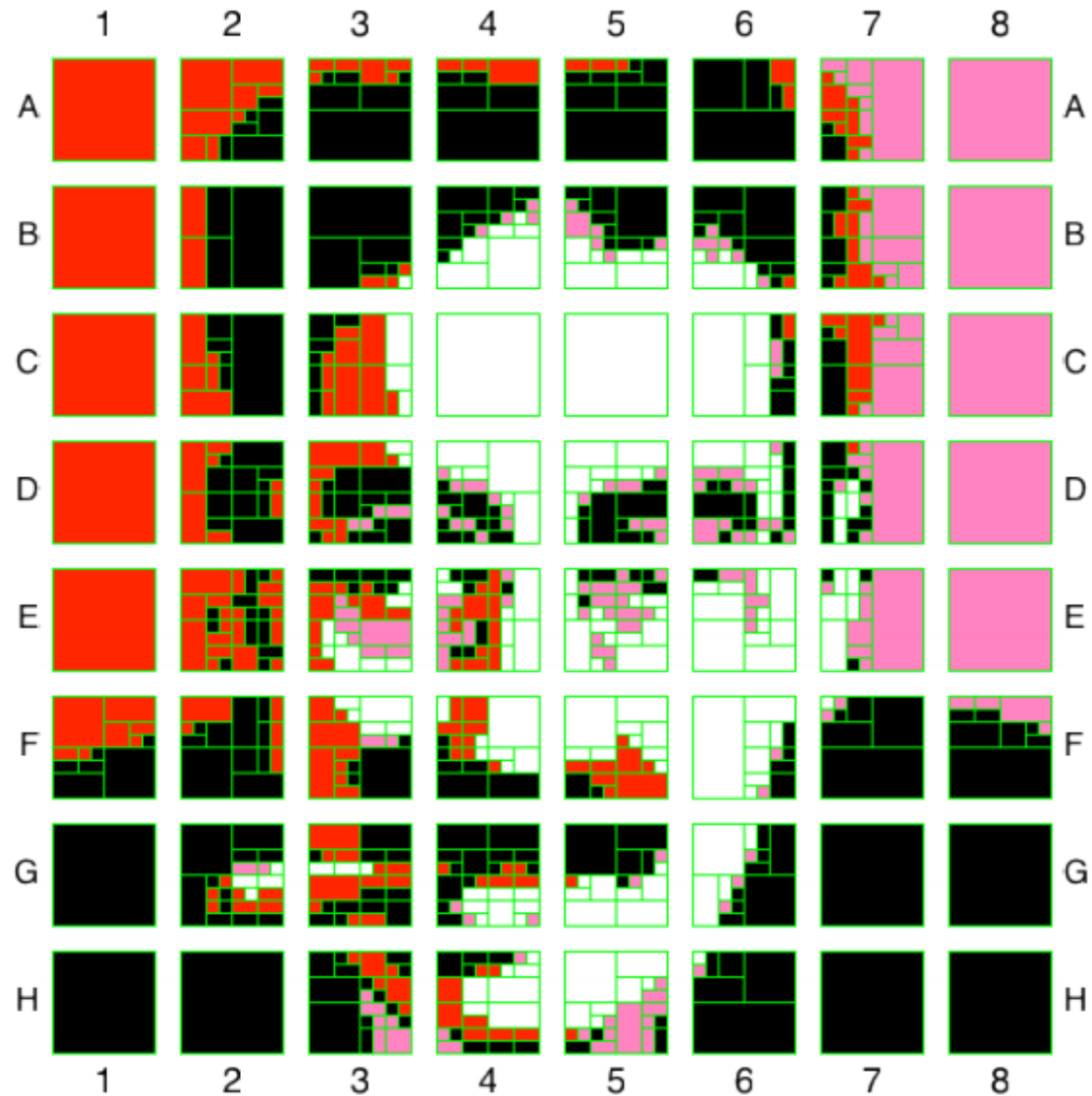
From fabric 1, cut:

- 5 squares of 8.5" x 8.5"
- 2 squares of 4.5" x 4.5"
- 23 rectangles of 4.5" x 2.5"
- 23 squares of 2.5" x 2.5"
- 77 rectangles of 2.5" x 1.5"
- 75 squares of 1.5" x 1.5"



From fabric 2, cut:

- 5 squares of 8.5" x 8.5"
- 3 rectangles of 8.5" x 4.5"
- 2 squares of 4.5" x 4.5"
- 5 rectangles of 4.5" x 2.5"
- 7 squares of 2.5" x 2.5"
- 49 rectangles of 2.5" x 1.5"
- 97 squares of 1.5" x 1.5"



Andi and Groucho



Part Two

A Lean Startup

"A Startup is an organization formed to **search** for a repeatable and scalable business model." - *Steve Blank*

#lang lean-startup

```
(define (search product market resources morale)
  (cond [(fit? product market) ???]
        [(low? resources) ???]
        [(failing? product market) ???]
        [(low? morale) ???]
        [else ???]))

(search MVP initial-market ...)
```



The Initial Market and MVP (minimum viable product)

YouPatch is a web-site where Patchwork Quilters can

- i. Upload an image
- ii. Pixelate and edit for **free**
- iii. Pay to download a customized PDF for 9.50 USD

Our Team



Patch Andi

Domain Expert, Marketing, etc.



Dan Prager

R&D, UX, Agile, etc.

Racket, Scribble, Bootstrap



John Barham

Web design, development, deployment, etc.

Python, Django, Mezzanine, JavaScript, Bootstrap

Product Design Challenges

- Make YouPatch easy to learn and use
- Key Trade-off: Image detail vs Ease of making
- Apply a User-Centered Design philosophy
 - Users make decisions, and exercise their creativity
 - Software handles the tedious bits

Product Development Challenges

- Research
 - Color reduction algorithm
 - Custom PDF generation
- Development: Racket in production
 - Performance?
 - Integration with other tech?

We started with a teaser site (December 2013)



Turn your favorite image into a stunning quilt!

Coming soon: YouPatch makes pixel quilt design easy and fun.

1. Upload



2. Pixelate



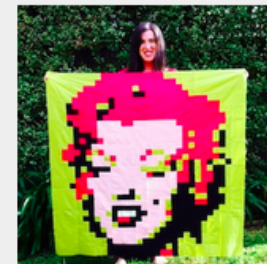
3. Recolor & tweak



4. Finish & order



5. Awesomeness!



FREE Marilyn Pattern

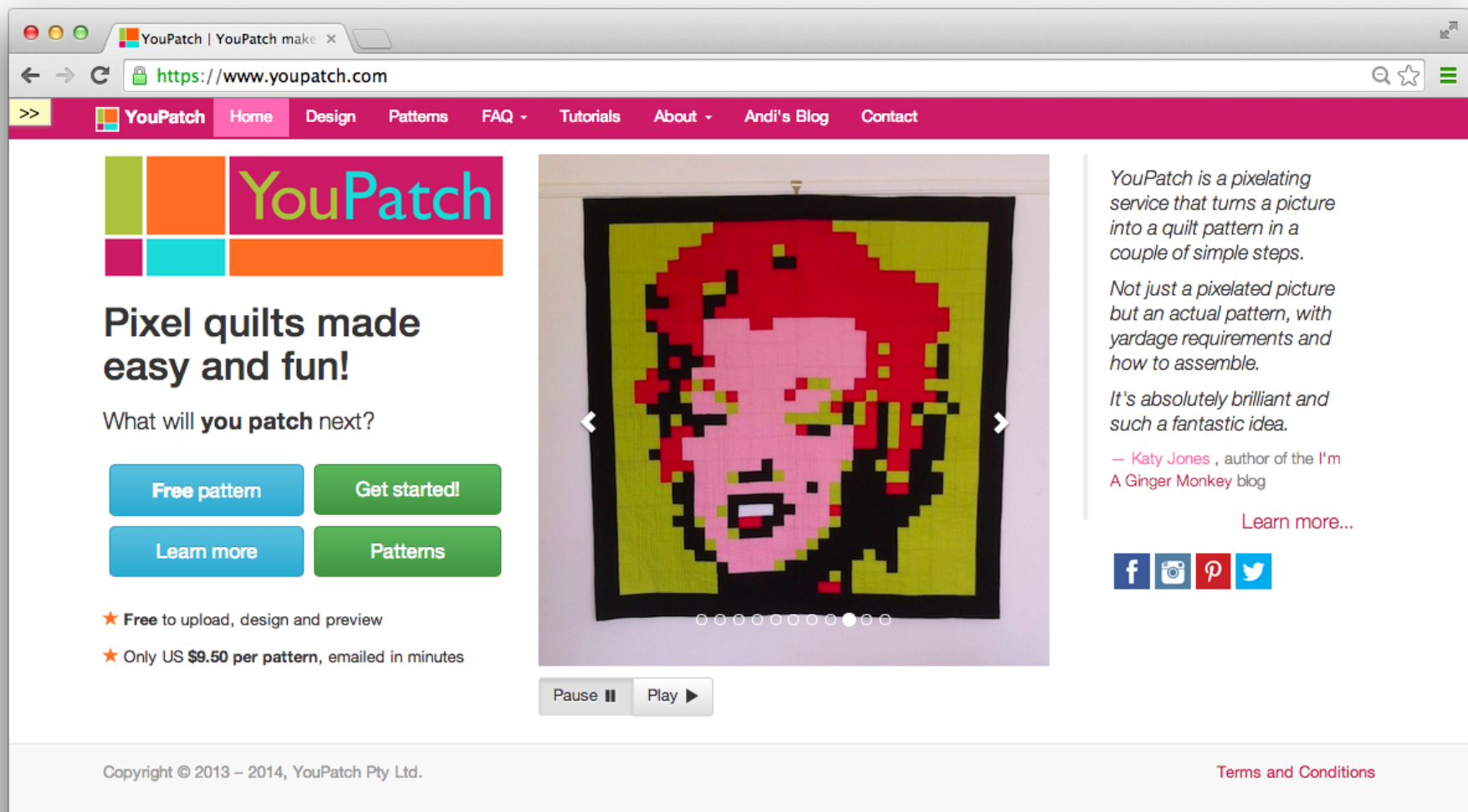
Register for updates and we'll send you the Marilyn pattern for free.

Your name

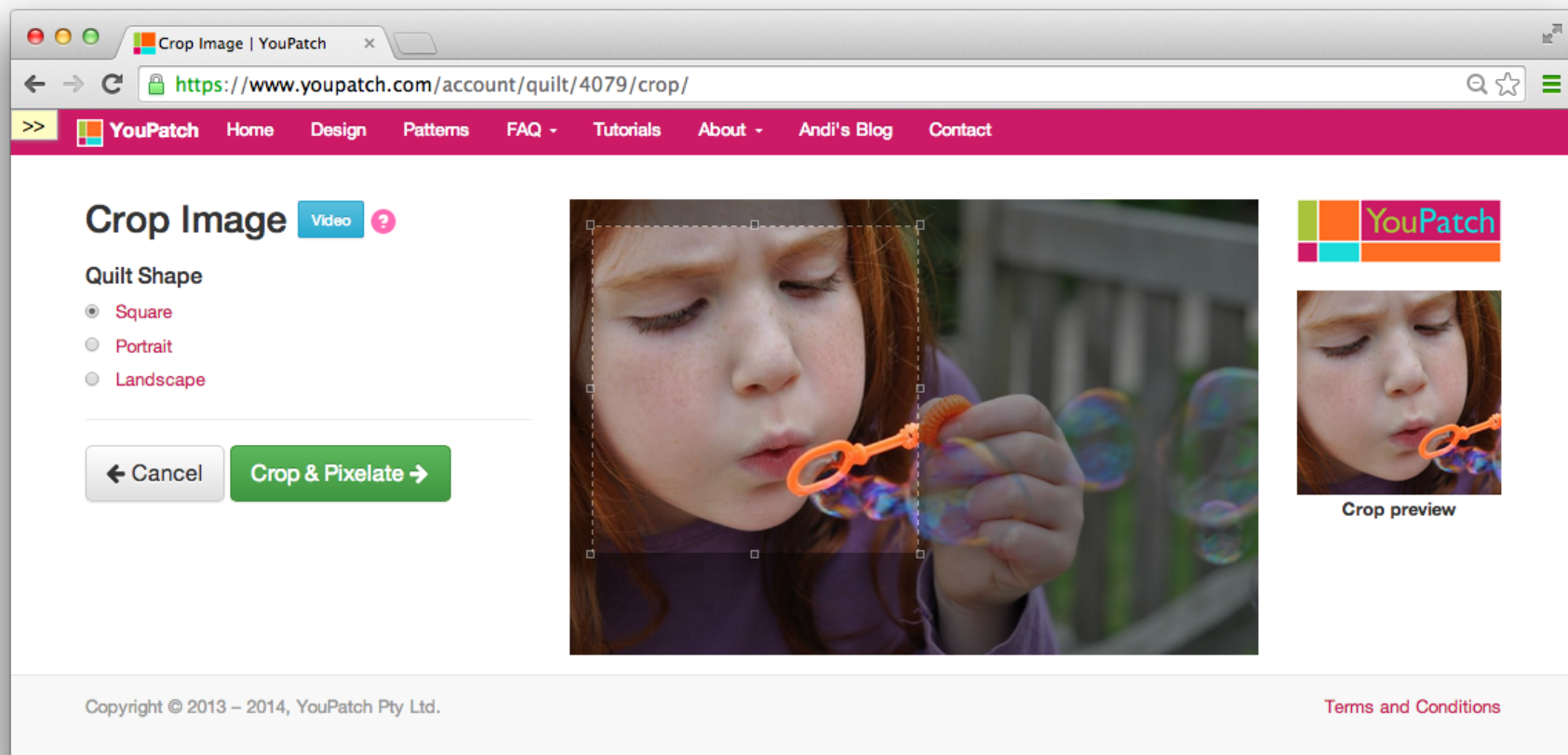
Email

Register

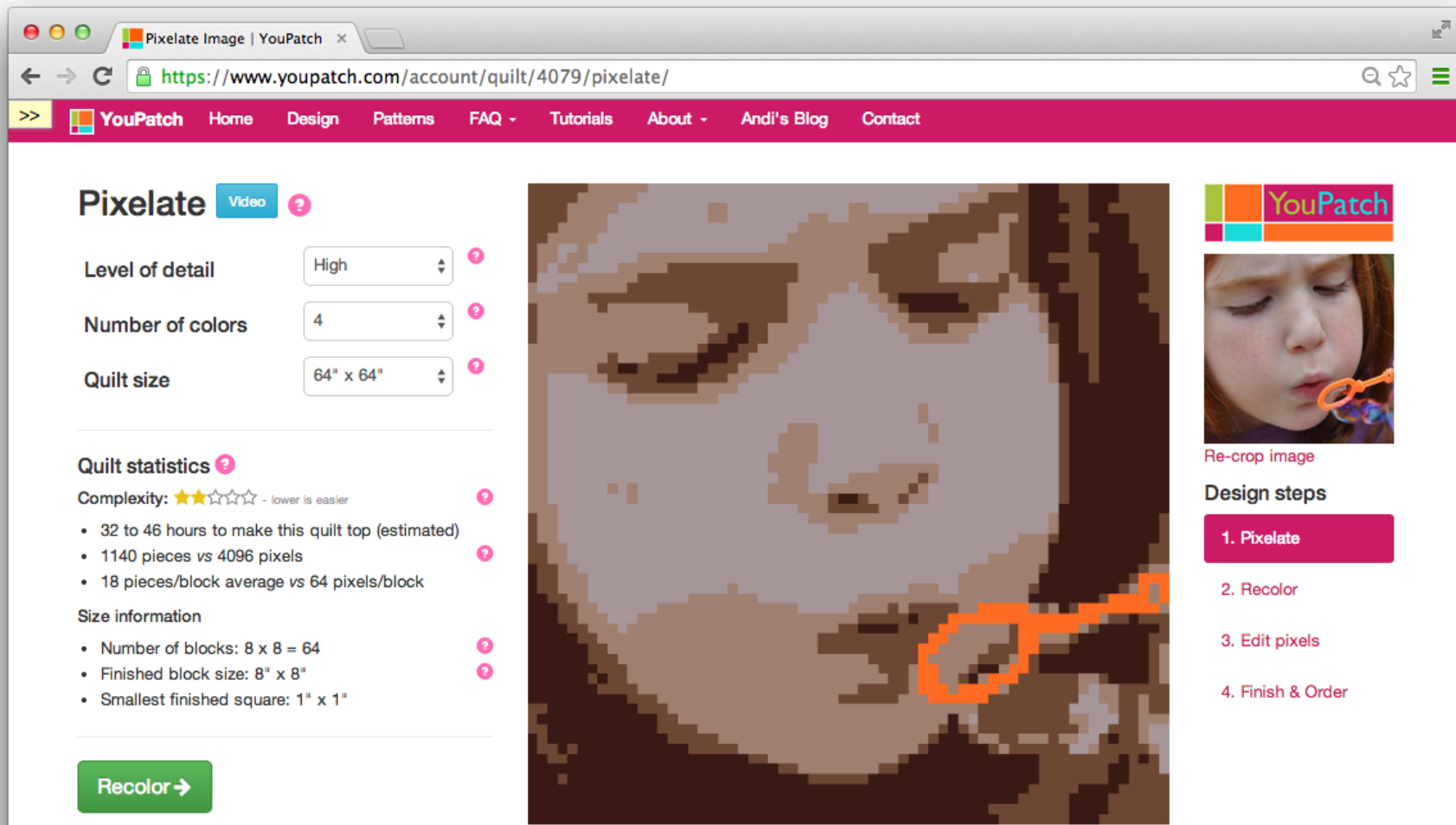
In February 2014 we launched!



Step 0. Upload image & crop



Step 1. Pixelate



The screenshot shows the YouPatch website interface for the 'Pixelate' step. The browser address bar displays <https://www.youpatch.com/account/quilt/4079/pixelate/>. The navigation bar includes links for Home, Design, Patterns, FAQ, Tutorials, About, Andi's Blog, and Contact. The main content area is titled 'Pixelate' and features a 'Video' button and a help icon. Below the title, there are three settings: 'Level of detail' set to 'High', 'Number of colors' set to '4', and 'Quilt size' set to '64" x 64"'. A 'Recolor' button is located at the bottom left. The central part of the interface shows a pixelated image of a child's face, with an orange selection tool visible. To the right of the image, there is a 'Re-crop image' button and a 'Design steps' section with a list of steps: 1. Pixelate (highlighted), 2. Recolor, 3. Edit pixels, and 4. Finish & Order. The 'Quilt statistics' section provides information about the complexity of the quilt top, including estimated hours to make, number of pieces vs pixels, and average vs pixels per block. The 'Size information' section provides details about the number of blocks, finished block size, and smallest finished square.

Pixelate [Video](#) [?](#)

Level of detail: High [?](#)

Number of colors: 4 [?](#)

Quilt size: 64" x 64" [?](#)

Quilt statistics [?](#)

Complexity: ★★☆☆☆ - lower is easier [?](#)

- 32 to 46 hours to make this quilt top (estimated) [?](#)
- 1140 pieces vs 4096 pixels [?](#)
- 18 pieces/block average vs 64 pixels/block [?](#)

Size information

- Number of blocks: 8 x 8 = 64 [?](#)
- Finished block size: 8" x 8" [?](#)
- Smallest finished square: 1" x 1" [?](#)

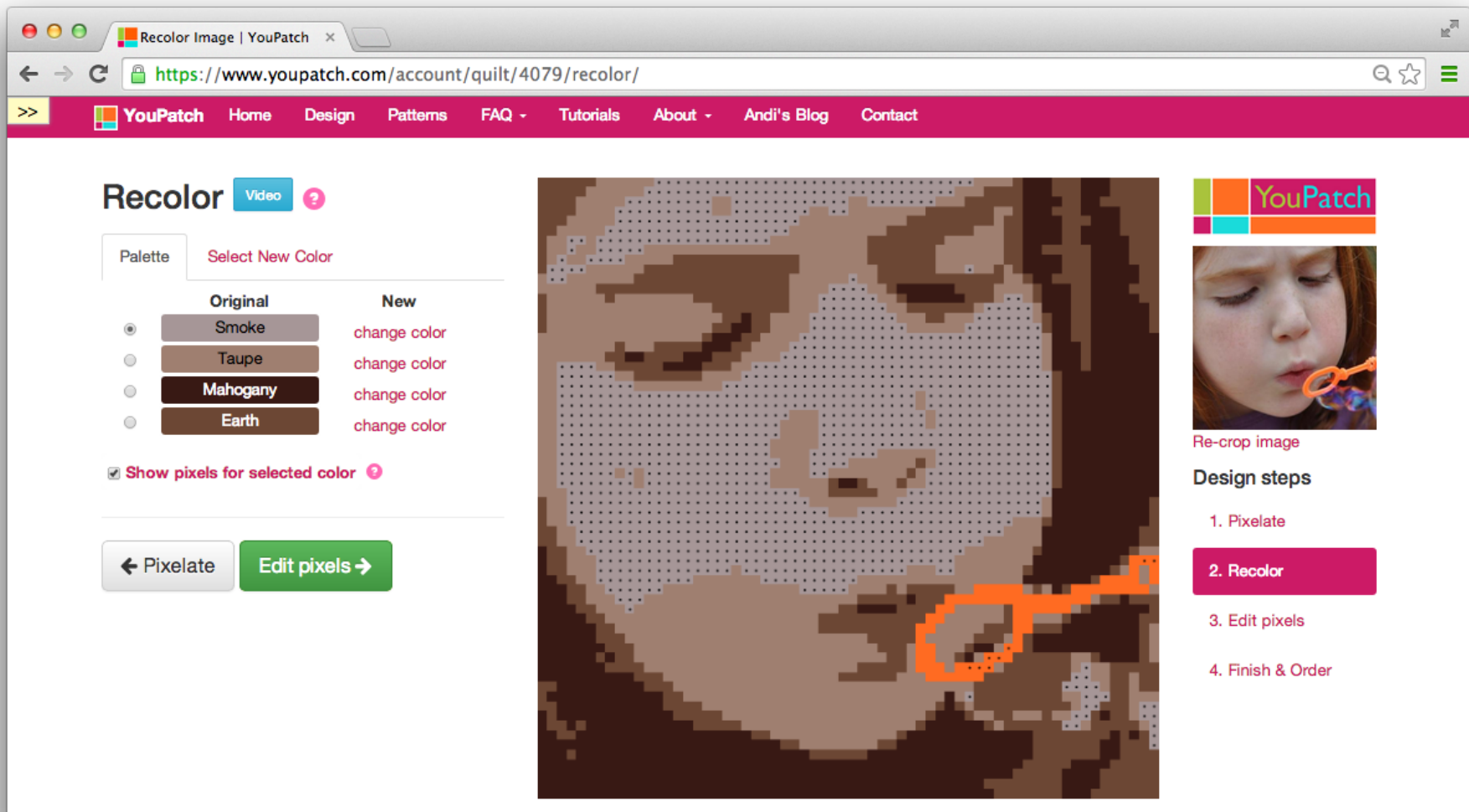
[Recolor →](#)

Re-crop image

Design steps

1. Pixelate
2. Recolor
3. Edit pixels
4. Finish & Order

Step 2. Change fabric colors



The screenshot shows a web browser window with the URL <https://www.youpatch.com/account/quilt/4079/recolor/>. The page features a navigation bar with links: Home, Design, Patterns, FAQ, Tutorials, About, Andi's Blog, and Contact. The main content area is titled "Recolor" and includes a "Video" button and a "Select New Color" dropdown. Below this, there is a table with four color options: Smoke, Taupe, Mahogany, and Earth. Each option has a radio button and a "change color" link. A checkbox labeled "Show pixels for selected color" is checked. At the bottom left, there are two buttons: "Pixelate" and "Edit pixels". The central part of the page displays a pixelated image of a person's face, with a red outline indicating the selected color. On the right side, there is a "Re-crop image" button and a "Design steps" section with four steps: 1. Pixelate, 2. Recolor (highlighted in red), 3. Edit pixels, and 4. Finish & Order.

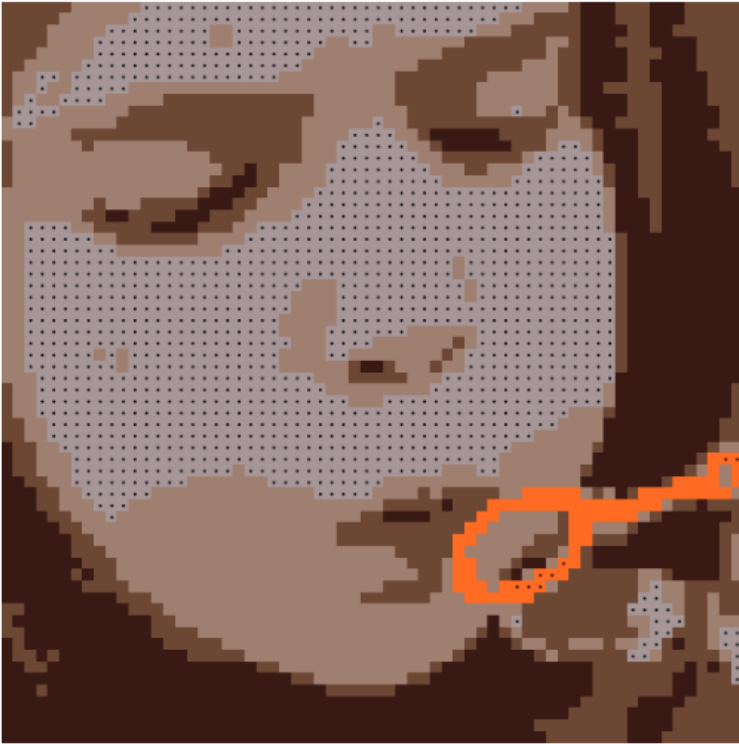
Recolor [Video](#) [?](#)


Palette [Select New Color](#)

	Original	New
<input checked="" type="radio"/>	Smoke	change color
<input type="radio"/>	Taupe	change color
<input type="radio"/>	Mahogany	change color
<input type="radio"/>	Earth	change color

☒ [Show pixels for selected color](#) [?](#)

[← Pixelate](#) [Edit pixels →](#)



 [Re-crop image](#)

Design steps

1. Pixelate
2. Recolor
3. Edit pixels
4. Finish & Order

Step 3. Edit individual pixels

Edit Pixels [Video](#) [?](#)

[Edit](#) [Add New Color](#)

[Warms](#) [Pinks & Purples](#) [Blues](#) [Greens](#) [Neutrals](#)

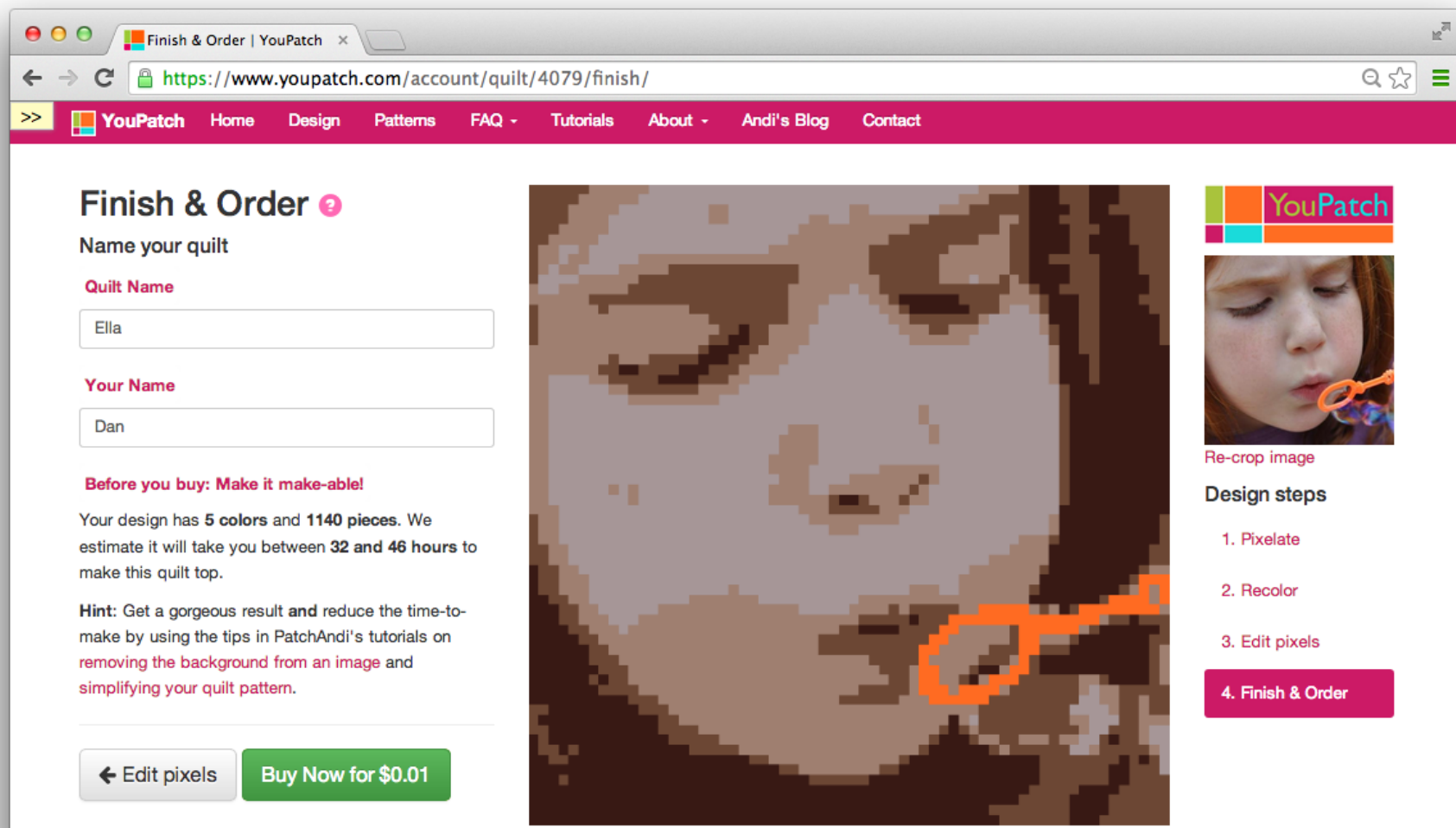
Meringue	Maize	Butter	Sunflower
Lemon	Buttercup	Mustard	Cheddar
Daffodil	Banana	Citrus	Canary
Corn Yellow	Curry	Ochre	Sunny
Wheat	Butterscotch	Caramel	Yarrow
Gold	Papaya	Mango	Amber
School Bus	Orange	Torch	Persimmon
Kumquat	Cedar	Carrot	Tangerine
Flame	Coral	Cayenne	Lipstick
Ruby	Red	Poppy	Crimson
Paprika	Tomato	Cardinal	Chinese Red
Rich Red	Burgundy	Wine	

[← Recolor](#) [Finish & Order →](#)

Design steps

1. Pixelate
2. Recolor
- 3. Edit pixels**
4. Finish & Order

Step 4. You pay \$9.50 for a customized PDF pattern



From the 19 page pdf...

Front page

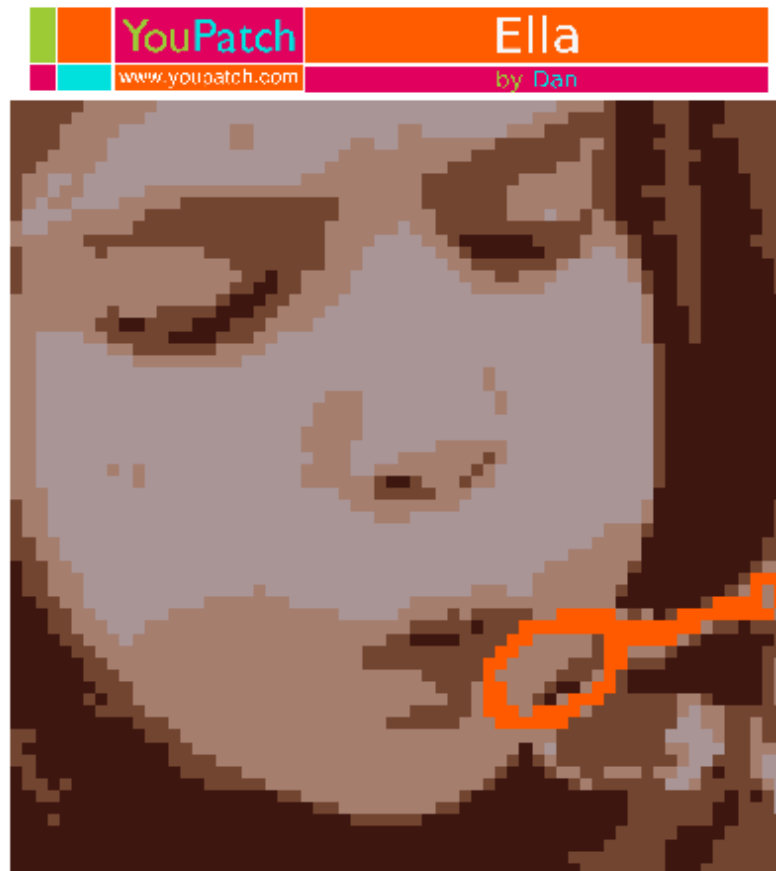


Figure 1: Ella by YouPatch and Dan on August 30, 2014

Customised instructions

1 License

The Ella quilt pattern is licensed strictly for personal use to Daniel Pinger (daniel.pinger@gmail.com). It may not be re-sold, given away, or otherwise distributed without permission from YouPatch Pty Ltd. Please consult www.youpatch.com/faq/private-licensing for details.

Note that production of more than one or two quilts for sale based on this pattern requires additional licensing. Please email info@youpatch.com if you wish to discuss a commercial license.

2 About the Ella quilt

- Finished block size: 8" x 8"
- Finished quilt size: 64" x 64"
- Seam allowance: 1/4"

3 Fabric Yardage

- Kona Smoke: 1 1/2 to 1 3/4 yards
- Kona Earth: 1 to 1 1/4 yards
- Kona Taupe: 1 1/2 yards
- Kona Mahogany: 1 1/4 yards
- Kona Torch: 1/4 yard

Notes

- When a range is given, the first number is a tighter estimate, while the second is more generous to allow for the odd mis take, and stitching. See **Appendix B** for illustrations.

- The names of the fabrics refer to the Robert Kaufman Kona Cotton Solids range.
- Please note that colors can and do display differently on different monitors and print differently.

4 Cutting the Fabric

You will be cutting a total of 1140 pieces for the quilt top. See **Appendix B** for an efficient cuttings scheme:

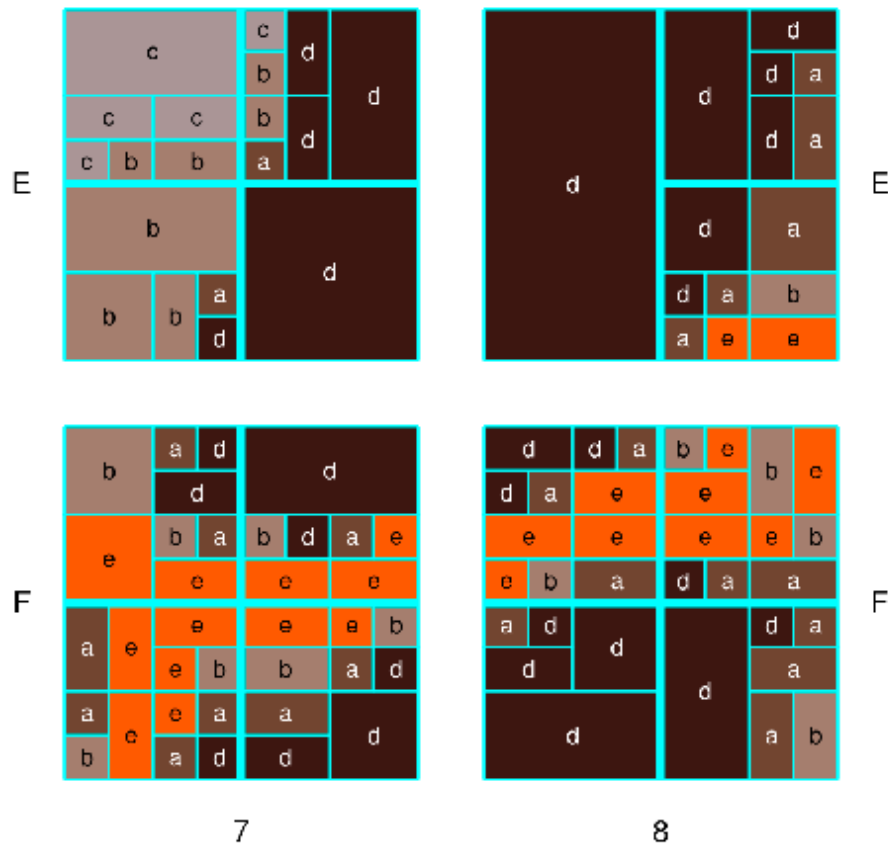
- **Kona Smoke**
 - out 4 squares of 8 1/2" x 8 1/2"
 - out 11 rectangles of 4 1/2" x 8 1/2"
 - out 8 squares of 4 1/2" x 4 1/2"
 - out 33 rectangles of 2 1/2" x 4 1/2"
 - out 26 squares of 2 1/2" x 2 1/2"
 - out 70 rectangles of 1 1/2" x 2 1/2"
 - out 55 squares of 1 1/2" x 1 1/2"

- **Kona Earth**
 - out 1 rectangle of 4 1/2" x 8 1/2"
 - out 3 squares of 4 1/2" x 4 1/2"
 - out 16 rectangles of 2 1/2" x 4 1/2"
 - out 34 squares of 2 1/2" x 2 1/2"
 - out 133 rectangles of 1 1/2" x 2 1/2"
 - out 145 squares of 1 1/2" x 1 1/2"

- **Kona Taupe**
 - out 5 rectangles of 4 1/2" x 8 1/2"
 - out 5 squares of 4 1/2" x 4 1/2"
 - out 28 rectangles of 2 1/2" x 4 1/2"
 - out 38 squares of 2 1/2" x 2 1/2"
 - out 142 rectangles of 1 1/2" x 2 1/2"

Packing in the value...

Quilting by numbers



a ● Kona Earth c ● Kona Smoke d ● Kona Mahogany e ● Kona Torch
 b ● Kona Taupe

Cutting guide

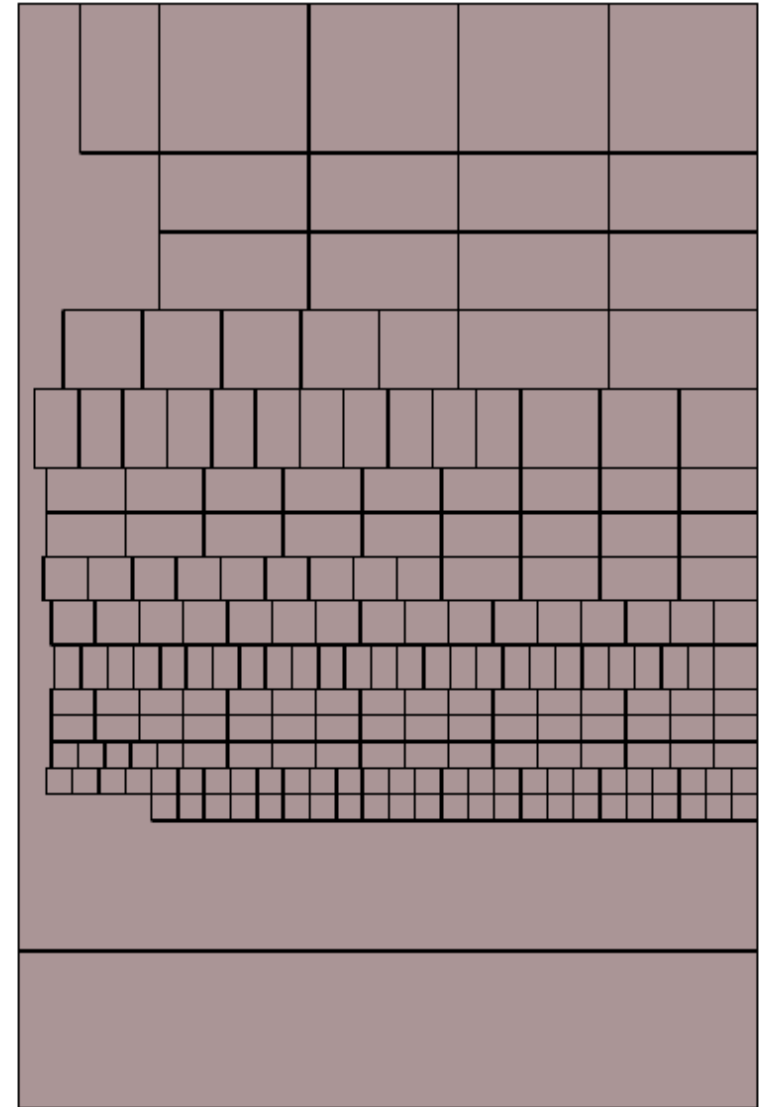
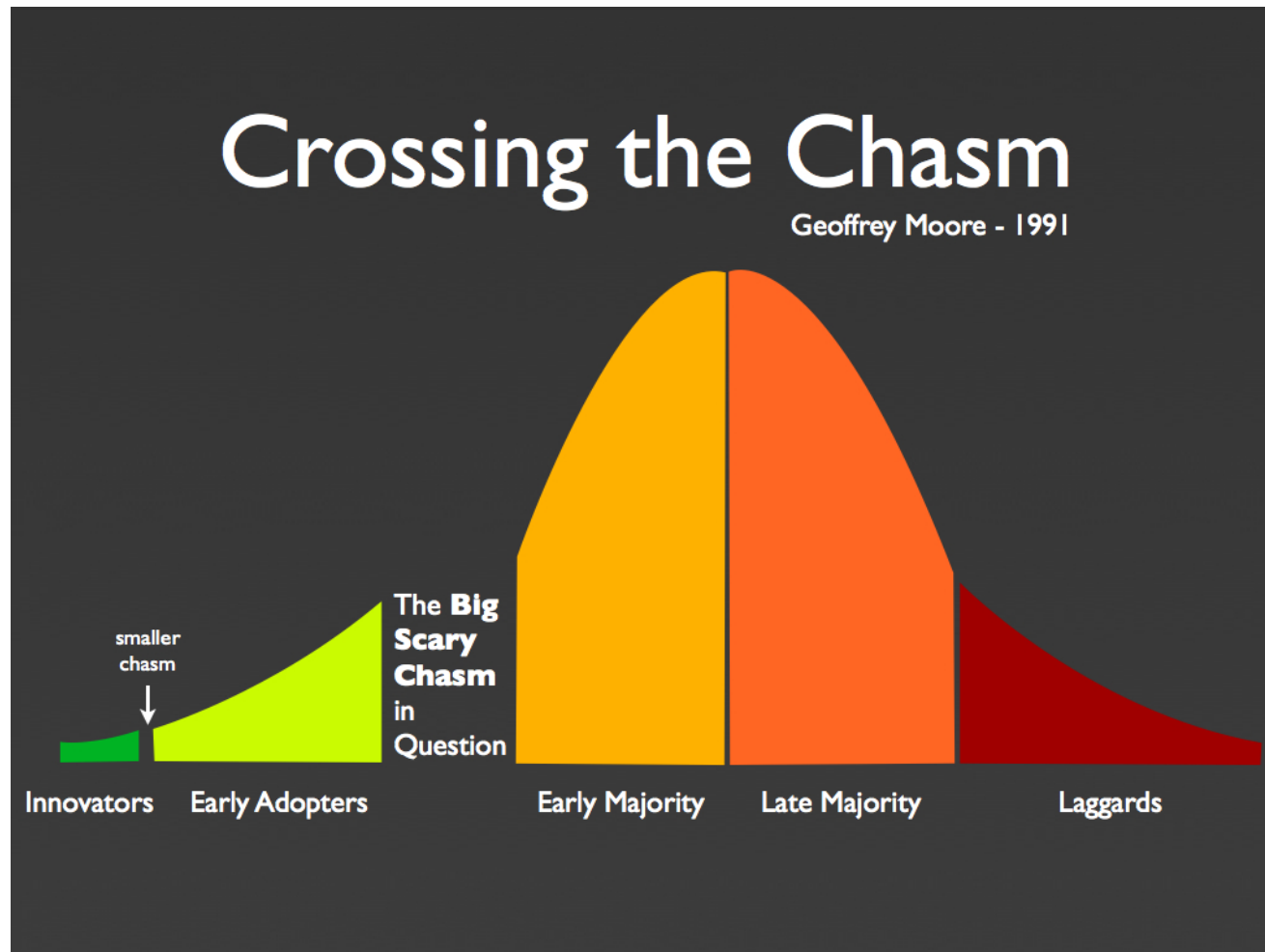
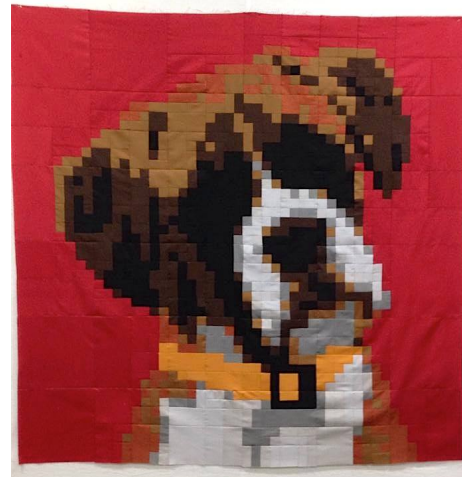


Figure 18: Kona Smoke: 1 1/2 to 1 3/4 yards

The challenge...



What our customers are making...



Featured in Aussie & UK quilting magazines



NEW! PATCHWORK & Quilting
Sharing your passion for fabric!

**MAKE IT MODERN
MAKE IT NOW!**
Jo Avery's colourful cathedral windows

PETAL POWER CUSHION!
A quick appliqué pick-me-up for your home

SIGN HERE!
Start labelling your quilts – we explain why and how

MICE SEW NICE!
They're easy to make, hard to resist!

20 GORGEOUS PROJECTS+IDEAS

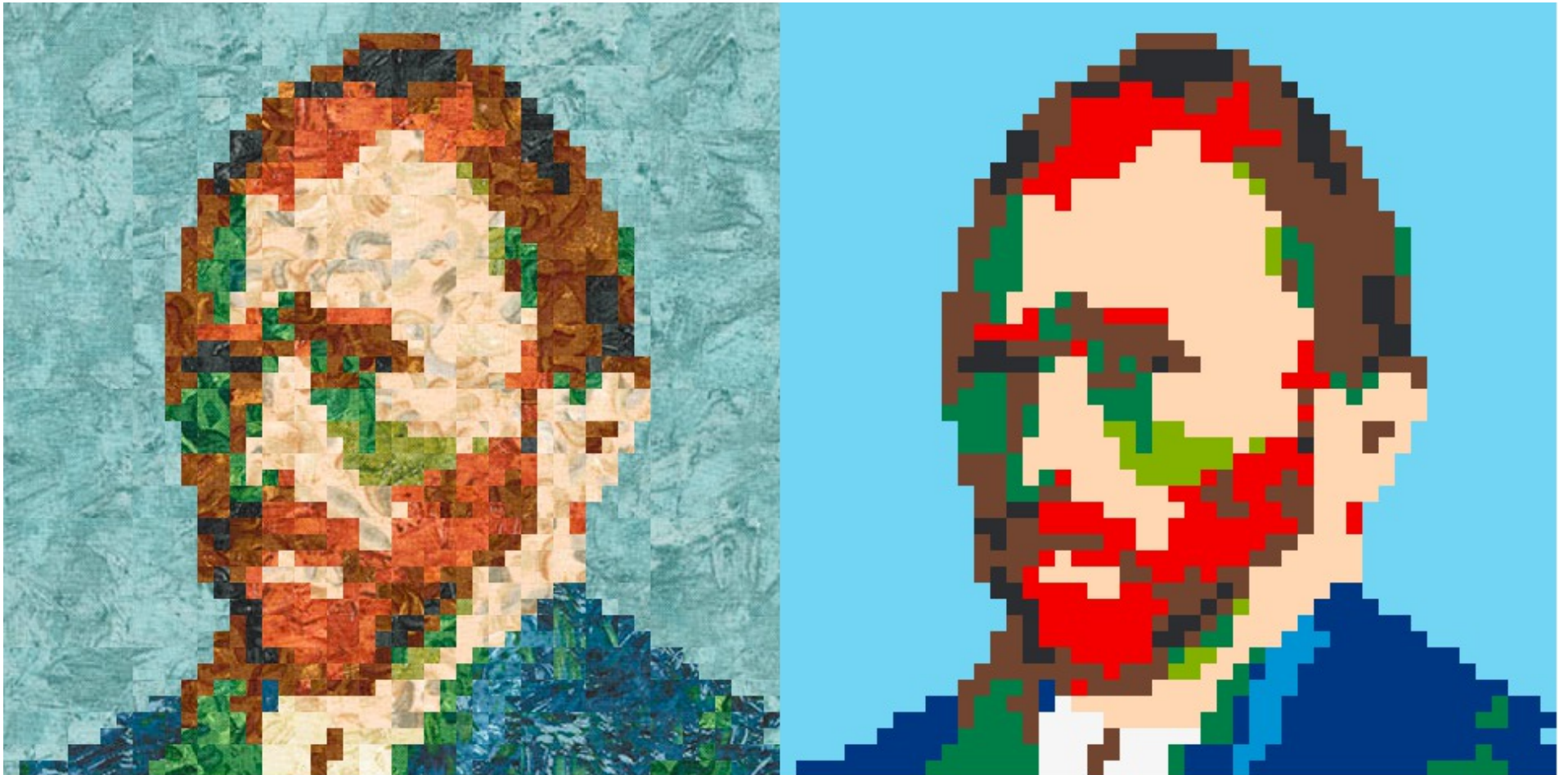
GREAT GIRLY GIFT IDEAS!
Wall art • Liberty print bags • Sweet sachets

YOU PATCH

Launched by Australian quilter Andi Herman, new website, youpatch.com aims to make the process of designing a pixel quilt from your favourite pictures easy! Simply upload your image and create a quilt-ready version of your pic. Once you've decided on your design, YouPatch (for a fee) will send you a PDF of your quilt pattern, complete with fabric yardage (with colours matched to Kona Cotton Solids), cutting instructions, piecing instructions and glorious full colour diagrams. What are you waiting for?

e.g. Love Patchwork & Quilting - March 2014

Collaboration with fabric manufacturers



e.g. Robert Kauffman Fabrics

Not there yet ...

- Support for our early adopters
 - Personalised support
 - Email newsletters
- Reaching the mainstream
 - Quilt and craft shows, US magazines
 - Iterate
 - Positive pivot?

Part Three

Racket and exploratory programming

Why Racket?

- Low barrier to entry; no real limits
- Fast, quality feedback:
 - DrRacket REPL, Racket community
- Powerful, clean abstractions. E.g.:
 - 2http/image, Scribble
- R & D, production, integration

Options for creative programmers

- Hobby programming
- Academia
- Regular job
- Startups

- **Why startups?** Fun, Freedom, Fame, Fortune
- **Why not?** Fear of failure, Feed the family
- **How?**
 - Self-funded: low cost (mainly sweat), low risk, DIY
 - Lean Startup approach and Agile development
 - Smart technology choices - e.g. Racket

Q & A

Links

- www.youpatch.com
- daniel.a.prager@gmail.com
- @agilejitsu