Subject: I am trying to slim down/optimize my model (for cost). Anybody have any advice?
Posted by desionalpha on Thu, 04 Apr 2013 05:45:54 GMT
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Hello, I am new to this forum (and 3D printing in general). I am just looking for some helpful criticism and advice. The model below has been hollowed out, hole added to the base and is roughly 4.5 inch tall. I am really looking for some good tips and tricks to streamline my workflow and my models cost efficiency further. I would love to be able to print it (or something like it) at around 5 inches without it costing me an arm and a leg.

My workflow is a work in progress but so far I seem to really dig designing my models in Sculptris and cleaning them up/editing in Meshmixer. Any advice is greatly appreciated!

I am also looking into joining a hackerspace where I live. They have a 3D printer on hand and I think I will learn more there as well.

File Attachments

1) Buddha1_0at112mm.stl, downloaded 38 times

Subject: Re: I am trying to slim down/optimize my model (for cost). Anybody have any advice?
Posted by UniverseBecoming on Thu, 04 Apr 2013 16:48:58 GMT
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Nice job.

There's not anything you can do to make this less expensive to print. The shell is a nice even 1.1 mm so you cannot get any better than that. You can make it into a wireframe design and that would lessen the cost, but then that would be a complete diversion from the original design and things like the necklace, wouldn't be seen.

There is one way though to lesson the cost. Print it, take good pictures, put it up for sale in your Shapeways shop, advertise it and recover the initial cost that way. You can even eventually make a profit.

Subject: Re: I am trying to slim down/optimize my model (for cost). Anybody have any advice?
Posted by stonysmith on Fri, 05 Apr 2013 00:34:47 GMT

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At 112mm tall, the model's volume is 35cm3 and would cost approx. $47 in WSF.
If you reduce that to approx. 80mm, it drops to 14cm3 and would cost around $21.

So, a small bit of reduction in size can really help with the cost.

Subject: Re: I am trying to slim down/optimize my model (for cost). Anybody have any advice?
Posted by desionalpha on Fri, 05 Apr 2013 01:18:19 GMT
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Thanks Stoney! Thats really helpful information to know. My goal is to get as much practice and experience as I can before printing certain designs of mine and selling them on my own website. I am definitely exploring this process to get a price that customers wouldn't be too afraid to pay. Ideally I would want to sell my prints with enough of a profit margin that I can donate a little bit of money to charity.

Subject: Re: I am trying to slim down/optimize my model (for cost). Anybody have any advice?
Posted by desionalpha on Fri, 05 Apr 2013 01:35:49 GMT
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Thanks Universe!

I shrunk it down a little and that seems to shave a lot of the cost out. I really dont want to print my designs so small they are tiny though. Have any good advice on wireframing tricks or tools? It seems that a lot of people are building wireframe and filigree models to save on production costs wherever they can. I havent attempted to design anything like that yet but I would love to learn more about it.

I certainly do plan on selling anything I intend to print for myself. My end goal is to make, print and sell a bunch of my different models.

Subject: Re: I am trying to slim down/optimize my model (for cost). Anybody have any advice?
Posted by Bathsheba on Fri, 05 Apr 2013 05:06:28 GMT
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Making stuff smaller is always good for the price point -- remember, it goes as the cube of dimension, so twice the size is eight times the price! -- just watch the wall thickness as you take it down.

Subject: Re: I am trying to slim down/optimize my model (for cost). Anybody have any advice?
Posted by UniverseBecoming on Fri, 05 Apr 2013 17:31:38 GMT
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That's surprising to me; I didn't know about that. Thanks Stony and Bathsheba!

Subject: Re: I am trying to slim down/optimize my model (for cost). Anybody have any advice?
Posted by desionalpha on Fri, 05 Apr 2013 19:40:07 GMT
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"so twice the size is eight times the price!"

Wow! That is super valuable info to know! Thanks for the info!