

*I = interviewer; P13 = participant. Refer to DDM2020 dataset documentation for more information.*

1 I erm so yeah let's get started I asked you by  
2 email to think of one particular product or  
3 project that you've been working on that erm  
4 involves bringing sustainability into design  
5 could you briefly outline the project

6 P13 sure erm the project the the starting point or  
7 project was actually when I when I was er  
8 researching humane design

9 I mhm

10 P13 which is about making making technology the  
11 automobile more conducive to er a sustainable and  
12 thriving human social er social economic  
13 structure that wouldn't er cause all the problems  
14 that is doing problems being that er like loss of  
15 environment erm er dissection of social groups  
16 through in cities that type of thing also to  
17 encourage more er entrepreneurship and more  
18 commerce and more more togetherness because the  
19 the the whole thing with that I saw and some  
20 colleagues of mine identify as well as that that  
21 that that er car ownership and car use actually  
22 doesn't bring out the best in people it actually  
23 brings out the worst psych psychologically it  
24 just makes people defensive and isolates people  
25 from the rest of the world so that's where the  
26 idea came from and then just exploring that idea  
27 of er a humane automotive product led to  
28 introduce introduction of erm the erm cradle to  
29 cradle philosophy

30 I yeah

31 P13 whereby okay if we're if we're going to make this  
32 humane and it's really like humane work it's not  
33 it's not it's not a toxic legacy that we're  
34 building up

35 I mhm

36 P13 so it's the the footprint of the automobile  
37 should be reduced to the fact that it becomes  
38 something which is sustainable to the point where  
39 it's thriving you can actually use the use the  
40 nutrients as as it as it's defined to  
41 reconstitute and make better and more more humane  
42 er transportation

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43 I mhm and so are you working on a particular kind  
44 of product as an example or what are you doing

45 P13 so far erm I'm I'm I'm working on a framework to  
46 which erm the idea of er cradle to cradle becomes  
47 attractive to the company company broadly what  
48 whereby they can actually start erm initiating er  
49 product lines

50 I yeah

51 P13 or a group of product lines er similar to that  
52 like ((inaudible)) brand where it's like it's  
53 very it's a very experimental erm future  
54 transportation technologies they work on so it  
55 will be a combination of working with materials  
56 suppliers but also infrastructure and how the  
57 cars are designed using more erm er outsourced  
58 ideas from from consumers so the consumers  
59 actually hack or you can wait I think we define  
60 this as prosumers people consumers actually like  
61 to personalise

62 I yeah

63 P13 and develop the product with their own developing  
64 lifestyles

65 I mhm

66 P13 and habits erm this led to the idea of a erm a  
67 multi generational vehicle er examples of this  
68 would be like a cirtoen h fan or volkswagen bus  
69 or like a porsche ((inaudible)) where it doesn't  
70 just like live for three years and get passed  
71 down until till it goes to scrapyard is something  
72 which becomes more like an heirloom

73 I yeah

74 P13 which gets passed on and it gets has the ability  
75 to to change develop through using er very  
76 flexible er production techniques localised  
77 production techniques which which use a lot of  
78 additive additive manufacturer so you're getting  
79 rid of like the big like heat beat and treat  
80 machinery to something which is more organically  
81 grown and then er and then er inst installed on  
82 site or locally so you get like local pavilions

83 I mhm

84 P13 design centres and manufacturing centres

85 I right

86 P13 which then which er which would then erm update  
87 the vehicle to its needs

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88 I yeah

89 P13 er the idea I was working on this last week was  
90 actually erm trying to reach back to more legacy  
91 vehicles and then implement those into the into  
92 the system where you try and keep those on the  
93 road as long as possible

94 I yep

95 P13 by by having even going out you probably probably  
96 even going outside of the ((company name)) brand  
97 where you actually an example would be so if  
98 there's like parts that were out in the inside of  
99 the car then you could probably go to quote  
100 unquote a ((company name)) design manufacturing  
101 pavilion and they would actually remanufacture  
102 new parts for your car to your specific  
103 requirements and then they would take in your old  
104 parts and then start reintroducing those into  
105 like into the er technical nutrient cycle

106 I okay

107 P13 so that so then what happens is according to what  
108 McDon McDonough highlight outlines is the fact  
109 that the man the big manufacturer it becomes more  
110 the the keeper of the technical nutrients which  
111 then lends it out to the consumer then the  
112 consumer uses that and then gives it back to then  
113 be reused

114 I yeah it sounds really ambitious and and forward  
115 thinking what I guess what stage are you at with  
116 it

117 P13 erm to the point where I've actually managed to  
118 work out this framework so it kind of it kind of  
119 works it makes sense

120 I yeah

121 P13 it's it's something which I mean you got to to  
122 make this more successful I can't just aim for  
123 the for the styling department and make it look  
124 cool that's not that's not the point the point is  
125 fundamentally it's it should work as a as a  
126 viable business model

127 I yeah

128 P13 erm I mean first see if I get firstly I'm in  
129 design department so I've got to get past my  
130 design executives

131 I yeah

132 P13 who who like the idea and they can push it up to  
133 the vice chairman and then if he likes it and he  
134 can see potential in in it servicing all the  
135 parts of the curr of the curr majority the  
136 majority of the parts of the car business model  
137 and something that they can actually make a  
138 profit on and be sustainable as a business model  
139 then that's when I think I am going to start  
140 getting traction with it so at the moment I've  
141 just concentrated on that basic idea

142 I yeah

143 P13 for design for design though I mean I've actually  
144 got to give examples of okay what would the car  
145 look like

146 I yes

147 P13 so I've come up I've come up with er with er I  
148 think four four concepts

149 I mhm

150 P13 of different transportation I mean I've I've I've  
151 grouped these into extra large to compact so  
152 extra large would be like a commercial size van  
153 something which can be augmented to either be  
154 like a family a family vehicle a camper van the  
155 adventurous down to erm something commercial that  
156 can be used like a cirtoen like del citroen h van  
157 almost like a coffee truck or food truck

158 I yeah

159 P13 something which is adaptable to to people's  
160 entrepreneurial erm desires or family needs or  
161 adventure lifestyle needs

162 I okay

163 P13 so I'm going to I'm going to primarily focus on  
164 that type of product something which then  
165 obviously explores the humanity side of what I'm  
166 trying to get at and then yeah something that  
167 that they can actually visualise themselves  
168 obviously the more you can help them visualise  
169 the idea how it hits the ground the more that the  
170 idea will make sense to them like the more they  
171 can actually get into it and think okay how can  
172 we make a profit how because now it's a business  
173 like it's the whole whole model is to make profit

174 I mmmm

175 P13 or make revenue

176 I yeah

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177 P13 so erm the whole I mean the whole thing with  
178 ((company name)) right now is it's it's an  
179 industrial joint it's not just making cars it's  
180 part of a larger group which which does the  
181 mining it does the oil extraction it does the  
182 material refining it does the shipping containers  
183 it does the ships it does like the the heavy  
184 industrial plants so the car trust the car side  
185 is a very small part of them the ((company name))  
186 group

187 I yeah

188 P13 but if you can if I can at least convert like  
189 first of all design department and then the  
190 automotive department

191 I yeah

192 P13 then I can hopefully I can spread out this like  
193 this message of like erm of er nutrient er how do  
194 we put it nutrient corralling

195 I mhm and are you

196 P13 that the whole ((company name)) group can  
197 actually get into

198 I yeah and are you working on this concept design  
199 on your own

200 P13 pretty much er I I do have touch points within  
201 the department er like some of the some of the  
202 design managers who who are open to thinking more  
203 fluidly outside of the constraints of like okay  
204 we have a care we have current car lines and  
205 products that need to be refreshed so we're just  
206 going to do whatever and not really push push up  
207 our ideas too much we're just gonna like yeah do  
208 this but I know that recently for latest er  
209 directives from our executive management have  
210 actually asked us for er input and new ideas of  
211 how the car the car industry will develop in the  
212 next ten twenty ten twenty years thirty years  
213 even further so I've been around a lot of er  
214 european and also er asian car manufacturers and  
215 also working for ((company name)) as well

216 I mmm

217 P13 the fact that I know that ((company name)) has  
218 this like grand plan overarching it's like it's  
219 not always er apparent apart from from like week  
220 to week er operations but he has this like big  
221 big massive plan of where in ((company name))'s  
222 terms where er he basically wants to see like

223                    everybody driving clean efficient vehicles or  
224                    even basically like car sharing

225    I                yeah

226    P13             and everything but he was he was into that a long  
227                    long time before majority of other car companies  
228                    were even considering it

229    I                yeah

230    P13             again the car I mean car industry is very  
231                    reactive reactionary er ((company name)) er  
232                    specifically so because they're very conservative  
233                    that like to play like cautious likes play  
234                    cautious they don't want to make the mistakes  
235                    like other other first movers so they're very  
236                    like of we'll just hold off and wait wait until  
237                    we see what's successful

238    I                yeah and so given that caution how does this  
239                    project work in terms of you've got I guess  
240                    permission and time allocated to to work on this

241    P13             yeah

242    I                yeah but I guess like how did that happen did it  
243                    come from you or

244    P13             er it pretty much I mean I'm considering I've  
245                    worked so long in the car industry I really don't  
246                    like cars

247    I                okay haha

248    P13             haha I grew up I grew up like I grew up in and in  
249                    yorkshire

250    I                yeah

251    P13             so I just liked riding my bike and it's like I  
252                    just you just notice that they're these big  
253                    honking big big hulking lumps of metal that  
254                    people

255    I                yeah

256    P13             drive around in too fast that

257    I                yeah

258    P13             like they don't they don't look like they're in  
259                    control of

260    I                right

261    P13             I was like erm I don't know I've always felt that  
262                    people kind of miss a lot of what's around them  
263                    by driving cars

264 I yeah

265 P13 it just seems to go like straight past it and  
266 it's and to me it's like riding bikes seems to be  
267 seems to be much more natural so although I do  
268 see the benefits in having cars as transportation

269 I mhm

270 P13 options I just think there's this should be a  
271 point where we only build the cars we actually  
272 really need

273 I yeah

274 P13 but I'm it's unfeasible to say okay absolutely no  
275 more cars but I mean what I try what what my goal  
276 would be is to see like people really look at  
277 cars for for the harm they do but also the  
278 benefits that can that comes from having cars for  
279 example I never really thought until probably  
280 last ten ten years that oh my god it's like we're  
281 building all these roads it's like these roads  
282 are toxic

283 I yeah

284 P13 because like they're made made using oil oil  
285 products and you know erm they create just as  
286 much pollution as the cars do cos of like all the  
287 dust that comes off them

288 I right

289 P13 and they're they're basically dead spaces nothing  
290 really grows in there's it's like I wouldn't say  
291 that like just for example I wouldn't say that  
292 it's like sheep could thrive on a on a freeway  
293 they would most likely get hit by the cars or  
294 there's nothing left for them to eat so it's like  
295 they're for me they're they're they're unnatural  
296 er constructions on on on landscape plus the fact  
297 the they they carve up natural wildlife barriers  
298 which then I know where we live now so there's  
299 maybe California's very er very hard on the  
300 environment because there there's so many people

301 I yeah

302 P13 and there's so little space

303 I yeah

304 P13 to er to build they're actually really pushing  
305 encroaching on a lot of er what would have been  
306 natural areas and just for example putting  
307 freeways through er the centre of like erm  
308 natural areas it's pushed the wildlife out into

309                   into suburban areas so we get mountain lions now  
310                   like

311    I               oh wow

312    P13           drinking out of people's swimming pools

313    I               that's a bit different yeah

314    P13           so just just to going back to the idea so when I  
315                   heard the idea of er the er I can't remember what  
316                   it's called the centre for humane technology like  
317                   how they're talking about the the data the data  
318                   driven technology that was that they're trying to  
319                   make more humane now it's like you can you can  
320                   draw a direct parallel with like the rise of auto  
321                   with the car in

322    I               yeah

323    P13           the us for example where there's this huge push  
324                   not for the people but from like lobbyists to  
325                   actually get people to in to drive cars so a lot  
326                   of the environmental development was based purely  
327                   around cars but not actually people walking  
328                   around and enjoying the city like they need it  
329                   happens in europe where the the development of  
330                   cities was much more organic and took a lot  
331                   longer

332    I               yeah so

333    P13           so that's my mission to try and get a car a car  
334                   manufacturer to actually make less cars

335    I               yeah haha it sounds very much like your your own  
336                   personal values are are influencing the way you  
337                   take your design work now from what you're saying

338    P13           pre pretty much I mean that there's a certain I  
339                   mean I mean having kids as well it's like

340    I               yeah

341    P13           you start to consider your legacy thinking okay  
342                   what have I actually done to make their life in  
343                   future better in any way I don't think I don't  
344                   think when the I don't think I can think of like  
345                   producing cars which become landfill already then  
346                   that's much of a legacy

347    I               yeah

348    P13           erm I mean it's it's kind of particularly  
349                   interesting in the us as well because you know  
350                   how much you know how much the big industry  
351                   pushes the narrative

352    I               yeah



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353 P13 more than people people's real concerns do  
354 I yeah yeah  
355 P13 so I mean this this I mean this year it's it's  
356 all becoming very politicised as well so I'm I'm  
357 just feeling this extra energy and push to  
358 actually try and get my ideas out into in sort of  
359 the real world and get people to hear them  
360 I yeah  
361 P13 as opposed as opposed to just bouncing around in  
362 my head  
363 I yeah  
364 P13 and I mean if I'm in position where I can  
365 actually influence people influence more like  
366 some of the designs in the studio like get get er  
367 the current trend department which er is actually  
368 probably the the main department which is  
369 actually more responsible for the types of  
370 material selected  
371 I right  
372 P13 in er in the car development outside of the like  
373 pure engineering for the body of the cars  
374 I yeah yeah and so for the you said you started to  
375 come up with concepts for actual vehicles for  
376 this concept design what are the some of the  
377 things that you need to make design decisions  
378 about  
379 P13 erm what start I'm starting from architecture up  
380 so er the styling is not a priority it's it's the  
381 architecture of the vehicle how a vehicle can be  
382 erm built built and disassembled locally so that  
383 and how like how elements of interior or exterior  
384 can be removed and added on like these aren't new  
385 ideas  
386 I yeah  
387 P13 for for how a car can be updated I think mercedes  
388 had an idea like this er back in like the mid  
389 nineties where you had a had a basic car and you  
390 could like change  
391 I right  
392 P13 the car from a regular sedan to a er station  
393 wagon  
394 I oh okay

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395 P13 and that didn't take off because people weren't  
396 interested just wanted a car but with the types  
397 of materials and technology we've got now  
398 especially like additive manufacture printing and  
399 hopefully in the future like er you can actually  
400 be able to grow parts

401 I yeah

402 P13 erm that that ideas like this become more and  
403 more viable

404 I yep

405 P13 you don't need like the big production facilities  
406 to make like a car like make a minimum number of  
407 these parts to become viable I mean that was I  
408 think that's been the big drawback to ideas like  
409 that where

410 I yeah

411 P13 they've had the had to have minimum numbers but  
412 if you have a flexible like flexibl enough erm er  
413 architecture and also production system  
414 production facility system to actually make those  
415 parts that I think that like er more and more  
416 personalised vehicles become more accessible

417 I yeah

418 P13 and if and the whole thing about personalised  
419 vehicles is ((inaudible)) that they're very  
420 unattractive to other people because they are  
421 personalised

422 I mhm

423 P13 so if you have an opportunity as well where you  
424 have like a basic architecture of a vehicle

425 I yeah

426 P13 and then it's easily personalised and then it's  
427 also then easily erm like reconstituted and then  
428 personalised again

429 I okay right

430 P13 I think that's that's more of a win situation  
431 where you're you're produce you also for  
432 ((company name)) ((company name))'s point of view  
433 you're producing more you're actually producing a  
434 product that people are buying

435 I yeah

436 P13 but you're not losing much because you're like  
437 cradle to cradle says you're actually holding on

438 to the the the technical elements you're not  
439 losing it to pure waste

440 I yeah and I was going to ask well what's the most  
441 important design decision in terms of  
442 sustainability I don't know if that's the same  
443 answer or

444 P13 I think it depends how you look at it you can  
445 either be conscientious you can either do it for  
446 conscious means or you can either do it for for  
447 profit erm I think for so it's a tricky one I  
448 know that from from my point of view I'd rather  
449 be con conscientious first and then the cost will  
450 come later but I know that for a company like  
451 ((company name)) like they have to be they have  
452 to be there they have to be there in the future  
453 so if there's no money in it

454 I yeah

455 P13 the the the the argument for we need we just need  
456 to be profitable obviously does then proceeds  
457 environmental consciousness

458 I yeah sure

459 P13 unfortunately I know cuz I know that when I was  
460 at erm well like volvo or ford then did this they  
461 would actually come down to like point zero zero  
462 one of one of a dollar cent part difference and  
463 if one was cheaper then they'll go with the  
464 cheapest one

465 I yeah and have you looked into materials for for  
466 these designs

467 P13 erm at moment no

468 I okay

469 P13 but I am I am kind of like er aware of materials  
470 that could be used but I don't think there's  
471 anything I've done that's I'm actually going to  
472 suggest just yet

473 I yeah

474 P13 I mean yeah I obviously erm a lot of the a lot of  
475 what I remember from er the talks and some of the  
476 seminars on cradle to cradle where for example  
477 the use the example of the book like not using  
478 paper at all is actually the best and most  
479 sustainable way of going forward which you know I  
480 don't think anybody's ever thought about that  
481 everybody's always like pushing like recycled  
482 wood I don't think many people actually thought

483 well should you even use wood at all and just use  
484 plastic

485 I yeah it's complicated

486 P13 I think I think first of all it's getting people  
487 used to the idea idea what erm the difference is  
488 between technical nutrients and organic nutrients

489 I mhm

490 P13 and the idea of monstrous hybrids as well cos I  
491 know that in cars specifically there's there's a  
492 lot of hybrids

493 I yeah

494 P13 I don't mean like ((inaudible)) hybrids I mean  
495 material hybrids which like as soon as they're  
496 made it's like you can't do anything with them  
497 that just is pure landfill or incinerator  
498 incinerated

499 I or fused together materials and things mhm

500 P13 so I wouldn't I mean I mean for my own sanity and  
501 like try and try and try and develop this this  
502 proposal which erm which hopefully I get people  
503 er interested in

504 I yes

505 P13 I'm not I'm not pro I'm probably not going to go  
506 down the rabbit hole of materials just yet

507 I right

508 P13 I just want to get get them used to the idea of  
509 okay we can like organise production like this

510 I yeah

511 P13 and the consumer interaction like this and then  
512 the materials go to like this cycle which could  
513 be done we hold on to so

514 I so you could

515 P13 I think just just just keeping it simple right  
516 right now we try and keep materials as clean and  
517 pure as possible

518 I mhm

519 P13 like the like forgo finishings which then would  
520 make hybrids I think that's as far as I need to  
521 go with like specifying

522 I yeah

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523 P13 specifying materials otherwise then it just  
524 becomes this huge information dump which

525 I yeah yeah

526 P13 you know for the first stage isn't isn't what I'm  
527 after I'm just trying to get the like ooh wow

528 I sure so you've got principles about the material  
529 but yeah not the details

530 P13 not just yet no

531 I okay

532 P13 I think I mean I think that's that's like that's  
533 a research in it's own right which is probably  
534 outside of my bounds I'm I'm from my own  
535 background I'm more about the architecture

536 I yeah

537 P13 the production

538 I yep

539 P13 and the operation of er design designing things  
540 as opposed to specifying materials and finish

541 I yeah and you could

542 P13 erm to that point though I they they are actually  
543 actively looking at more sustainable materials to  
544 use in the cars

545 I okay

546 P13 but I don't know if they're actually I think I  
547 don't know if they do know about cradle to cradle  
548 but I don't know I don't know themselves I don't  
549 know from not speaking recently how far they  
550 actually got into like er stripping down care  
551 interiors and actually having a system

552 I yeah

553 P13 where you can reconstitute er the technical or  
554 organic nutrients

555 I yeah and I'd like to hear a little bit more about  
556 your design process do you have any particular  
557 ways of working when you're I guess doing all  
558 this research and coming up with different ideas  
559 for the concepts and then narrowing it down

560 P13 er I mean the process for this particular project  
561 er I think it's it I mean this is my this is my  
562 excuse that I mean the process is that for this  
563 this er this specific one at least is erm it has  
564 to come down to a three page document

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565 I yeah

566 P13 it has to be presented as almost like an elevator  
567 pitch

568 I right

569 P13 so what I'm doing is I'm actually I'm actually  
570 working backwards as if you'd write a story so I  
571 know I know I know the end result so what I'm  
572 doing is I'm working back er to the start which  
573 would then be a good invite to get people hooked  
574 into it so what I've done with that is erm the  
575 idea that I wanted to have something which is  
576 ultimately either producing less cars and less  
577 impact on the environment or called being humane  
578 erm I I think I actually had a few meetings with  
579 er with some design managers just to just discuss  
580 er

581 I mhm

582 P13 going going through articles and sending these  
583 out to different people and then like following  
584 up with them but no but just through discussions  
585 about how they think that idea will progress in  
586 I'm not not coralling not coralling them so much  
587 to to erm substantiate my own ideas but just to  
588 get like a bit more perspective from them

589 I mhm

590 P13 on how they think such a such a humane product  
591 would would be

592 I yeah

593 P13 erm it I mean some people have suggested well no  
594 cars at all or erm have car sharing so  
595 everybody's got their their own idea about how  
596 this works erm so that's that was the second  
597 stage I did that which was that then it basically  
598 came down to then I started thinking okay er  
599 would you produce cars so what vehicle would be  
600 the best idea for like being humane or being  
601 being a good candidate for showcasing like a  
602 cradle to cradle car

603 I mhm

604 P13 so that's when I came up with er the bus at first  
605 sorry the bus er the van at first and I thought  
606 well people are also buying a lot of suvs so what  
607 would a what would a erm humane or cradle to  
608 cradle suv look like

609 I mm

610 P13 so it kind of like it kind of grew out of er  
611 like creating the character creating the  
612 characters as it were for for to tell this like  
613 bigger story so I'm just basically working my way  
614 back is there's not really usually I mean usually  
615 when you're doing design you you're given a brief  
616 and you get bright specific erm erm goals and  
617 targets to hit when you do that do that design  
618 for me during this project the the the goal has  
619 been so much more er so much more broad cos like  
620 it's a broad system that I like the idea the  
621 sound off er just figuring out how I can  
622 transpose the idea of what the car is right now  
623 and and how they fit into that future so I'm kind  
624 of like a there's a lot of interplay between like  
625 this two concepts

626 I yep

627 P13 so I'm just again I'm just trying to bridge like  
628 make a story that connects point a to point b

629 I makes sense

630 P13 and I'm feeling the characters as I go so it's  
631 it's a lot of backwards and forwards and like  
632 just having an idea okay what about the sporty  
633 city car could that be where where for example I  
634 mean even going down to the idea where where the  
635 car a car would have zero voids so you'd have you  
636 wouldn't have all this wasted space inside the  
637 car so you you you're you're being much more  
638 efficient with the material you're using

639 I yeah

640 P13 er and still having that space inside but also  
641 having it so it's it looks cool it's erm it's  
642 aerodynamic

643 I mhm

644 P13 it's practical and it's something that can be  
645 assembled disassembled around a er for example  
646 like a an electric platform which then is shared  
647 between all of them and there's there's I'm just  
648 at the moment I'm kind of just like bouncing  
649 around a lot I feel like I'm bouncing around a  
650 lot but I'm like always working on like a  
651 singular document where

652 I yeah

653 P13 I can explain explain everything with one one big  
654 chart I'ts actually honestly it's like a mind map

655 I yeah okay yeah

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656 P13 it's it's is probably the best way how I can  
657 present this idea within a three page document

658 I yeah there's a lot of elements to it I can see so

659 P13 so I mean doing I mean doing the mind map or  
660 doing this this er this chart it also helps would  
661 help me further further down narrow narrower  
662 narrow down my offering and streamline the idea

663 I yeah

664 P13 of what what a cradle to cradle humane automotive  
665 product would look like from ((company name))

666 I yeah

667 P13 so I could say at the moment I'm probably ninety  
668 five per cent ready to show the information to  
669 the executives

670 I yeah

671 P13 but I just need to make it concise enough for the  
672 for the specific people

673 I yep

674 P13 that that they can they can like really like buy  
675 into the idea

676 I yeah and so what's your usual design process you  
677 mentioned there'd be a design brief but year how  
678 do you usually go about doing design

679 P13 usually it's it's a very start starting base  
680 there's not really it's not really what you call  
681 industrial design it's much more based around  
682 okay we have a vehicle chassis these the given  
683 dimensions erm and then you have you're given  
684 you're coming up with a theme that's like a story  
685 like six up to six images that kind of just  
686 describe the feeling of the product er in the  
687 brief you're you're told it's going to be like a  
688 sports car or something family family orientated  
689 I mean you always aim high with the goals of like  
690 trying to trying to get visual impact then  
691 gradually this gets refined er over the second  
692 stage erm to something which is more a package  
693 has more engineering requirements worked into it  
694 so it's more manufacturable

695 I mhm

696 P13 then parts get reduced to the third stage and  
697 they go and it gets sent off to ((country name))  
698 for a review and then it comes back and because  
699 we're competing against because we have because



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700 I'm working in a satellite studio and there's  
701 studios around the world

702 I okay

703 P13 what we're basically all competing against for  
704 the same projects

705 I right so the brief comes from where from some  
706 central

707 P13 so the brief comes from ((country name))

708 I okay

709 P13 so that they like the they are the hub which  
710 which then erm is controlling er markets for I  
711 think europe asia and then north america

712 I mhm okay

713 P13 three big areas yeah

714 I okay and I guess I just have one last question  
715 erm just wanted to talk a bit about  
716 responsibility in design and who do you think's  
717 responsible for the final product within a kind  
718 of large company set up

719 P13 er that would be the vice chair

720 I the vice chair

721 P13 because the er ((company name)) is not not a  
722 group owned company it's a family owned company

723 I right

724 P13 so the basically the buck stops with the vice  
725 chair vice chairman

726 I and do you think they therefore also have  
727 responsibility for how sustainable the products  
728 are

729 P13 I think they do yes

730 I they do do you think do you think they see it  
731 like that or haha

732 P13 I think I think they're starting to

733 I yeah okay

734 P13 I think that I mean when the when the vice  
735 chairman thing last year er said that the he  
736 wants ((company name)) to be the most loved brand  
737 in the world that's pretty that's pretty out  
738 there for what what a what a what a chairman of a  
739 automobile company can say say it's like we want  
740 to be the most loved car brands it's like I mean

741                   it's so open to interpretation how do you love  
742                   like loves like producing good cars or love for  
743                   like being a caring brand I don't know

744    I               yeah

745    P13            but there's that there's definitely like a  
746                   consciousness consciousness in the company it's  
747                   just the fact that I'm again this it's the same  
748                   old thing it's like people have their own day to  
749                   day er stresses and things they have to deal with  
750                   it's like so they actually care other than  
751                   getting the paycheck

752    I               yeah

753    P13            I know I know that I know that a lot of people I  
754                   would say at least at least half the people I  
755                   know in my studio I work are actually very much  
756                   very conscious about the environment

757    I               okay

758    P13            and like thinking I you know if if they had a  
759                   choice not to drive then they would probably not  
760                   drive

761    I               right

762    P13            but I know that the culture is changing

763    I               yeah

764    P13            in ((company name)) to ((company name))'s credit  
765                   the they are actually one of the the I think the  
766                   faster brands to actually implement change within  
767                   a company

768    I               okay

769    P13            like it it the change comes down pretty quickly  
770                   and pretty often in the last ten years I've been  
771                   there it's like it's you there's a been a big  
772                   change a big shift towards being more  
773                   environmental being being thinking about being  
774                   being a bit more on trend of trying to get ahead  
775                   of the curve with like erm offerings that are  
776                   less polluting

777    I               yeah

778    P13            but a lot of the a lot of the practices are still  
779                   held in korea because there's less mandate from  
780                   from environmental policies like for example in  
781                   the U in the in the US when they're when they're  
782                   when they're producing the prototypes and moulds

783    I               right

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784 P13 but again in ((country name)) that's also been  
785 changing quite a lot as well as a company as a  
786 country trying to get people to have healthier  
787 lifestyles

788 I yep

789 P13 so it's kind of it's I would say it's ultimately  
790 yeah I would say yeah I think there is a push  
791 towards being more considerate to the environment

792 I okay and would you say that you feel  
793 responsibility for sustainability yourself as a  
794 designer

795 P13 I think I think every designer should do right I  
796 think it's almost like erm I mean er I would I  
797 mean I would almost say that er designers should  
798 take an oath

799 I right

800 P13 when they when they when they finish when they  
801 finish a degree that they should do their best to  
802 make the world better or at least make it better  
803 for the next generation

804 I mhm

805 P13 and shouldn't be shouldn't be complacent in just  
806 producing products which they know themselves  
807 will have an impact on the environment negatively  
808 I mean I but it's like it's the old it's it's the  
809 old er dichotomy it's like well we need to get  
810 paid

811 I yeah exactly yeah

812 P13 do we do we do we do we say no I'm not designing  
813 anything like this is this is a bad product or do  
814 you try and cajole people to like not produce  
815 things

816 I mhm

817 P13 with with plastics or have known carcinogens  
818 endocrine disruptors in them or that you know  
819 will go directly into the environments are are  
820 disposable

821 I yeah

822 P13 I think I think it's something that every  
823 designer should probably need to be taught more  
824 about and then instilled into it's almost like I  
825 mean the joke was ten ten twenty years ago  
826 designers were all these people who marched  
827 around in black clothes

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828 I mhm

829 P13 like contemplating the next next product I think  
830 it was er tim bro tim brown from ideo

831 I right

832 P13 he did a ted talk about this as well and er it's  
833 how how he's basically saying well design is  
834 more than just designing something like knowing  
835 when not to design something and knowing what  
836 actually people need for example they need  
837 probably more experience than they do actually  
838 need a product

839 I mhm

840 P13 to do that erm I'm I kind of feel the same that I  
841 think we were too eager to er to jump to  
842 designing a product and thinking about the  
843 framing behind it as opposed to like designing  
844 the next widget to solve it that's what I think  
845 about the car as well it's like it's we're very  
846 eager to erm design something cool

847 I yeah

848 P13 that's gonna get drive fast but I think but you  
849 know what's the real framing here I think there's  
850 another talk by er advertising executive ro is it  
851 rory sutherland and he's talking about the  
852 example of how you can how erm er the eurostar  
853 spent was it three hundred billion pounds trying  
854 to make it half an hour faster

855 I right

856 P13 and he said for a fraction of that cost they  
857 could have employed a hundred of the world's top  
858 models and said everybody ((inaudible)) and  
859 everybody would want it to be an hour slower

860 I haha yeah

861 P13 it's like it's just he's saying we're solving  
862 we're we're jumping we're solving with too much  
863 energy in the wrong areas it's for example it's  
864 like er the cradle to cradle idea as well I think  
865 that it's I don't know it's er have you ever seen  
866 the film by michael moore planets of the humans

867 I i'm not sure if I have seen that one

868 P13 it's it's pretty eye opening actually it makes  
869 you think actually it I mean his whole idea is  
870 pretty much what I'm talking about now which is  
871 like we're we're design we're manufacturing our

872 way we're trying to manufacture our way our way  
873 out of an environmental crisis

874 I mmm

875 P13 which is completely wrong it's like instead of  
876 like keeping producing stuff like we are doing  
877 like erm

878 I yeah

879 P13 like more cars more windmills and things we're  
880 not actually thinking about the process

881 I mhm

882 P13 I think the the the the real key for innovation  
883 is actually designing the process not the product

884 I yeah it's like everyone's jumping on electric  
885 cars as being the answer but you know they come  
886 with their own challenges

887 P13 yes I mean you think about the mining of of

888 I exactly yeah

889 P13 of of the rare earth metals

890 I yeah

891 P13 that go into the batteries

892 I yeah

893 P13 I mean you're you're plugging a gap now but

894 I yeah

895 P13 but are we just like creating gonna create more  
896 mess further down the line by doing making all  
897 these cars

898 I mhm yeah

899 P13 we could just make I mean everybody always argues  
900 is it better just to keep the the petrol cars  
901 running right now

902 I yeah

903 P13 and just just wait until we get something cleaner  
904 or

905 I yeah

906 P13 do we I don't know

907 I yeah

908 P13 it's there's a lot of unanswered people and a lot  
909 of people not willing to

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910 I no it's not easy no

911 P13 come up with the solutions so I mean this is  
912 where I came up come up with this I more another  
913 reason to do this project which is yeah somebody  
914 needs to start putting ideas out

915 I yeah okay well those are all the questions I had  
916 and I realise we've gone on a bit er was there  
917 anything else you'd like to add

918 P13 er no I think haha I think I've pretty much told  
919 you all I can do I mean I don't want to I don't  
920 want to start erm talk like talking vapour or  
921 anything but I I just think right now it's more  
922 important than ever to actually get ideas and get  
923 people talking or at least even if nothing comes  
924 of the idea for me

925 I mhm

926 P13 maybe somebody else can like can inspire somebody  
927 else who sees the project and thinks ah I can do  
928 this or we can do this

929 I yeah

930 P13 even if it's just even if it's incremental at  
931 least it's still a shift in the in the direction

932 I sure yeah it takes time to sort of change a whole  
933 culture yeah

934 P13 and that that's the whole thing that you're  
935 innovation is always trumped by culture so we  
936 have to change we have to somehow change culture  
937 and the the best way to do that I can see is like  
938 through design through making something  
939 attractive

940 I mhm

941 P13 and that's I mean nobody's going to I mean  
942 nobody's going to do something just because  
943 somebody tells you to do it people only do it  
944 because they they see something attractive that  
945 they want so

946 I mmm yeah okay well I don't want to keep you any  
947 longer cos I'm sure you've got plenty to do but  
948 thank you so much er for talking to me this was  
949 really interesting

950 /end/