

*I = interviewer; P2 = participant. Refer to DDM2020 dataset documentation for more information.*

1 I so erm let's get started  
2 in the email discussion that we had you told me  
3 about this packaging design project could you  
4 just briefly remind me what the project was and  
5 what the product was  
6 P2 yeah so er it the sustainable packaging project  
7 was at my current company which is a consumer  
8 durables company we deal with kitchen appliances  
9 and electrical er fans and other er other such er  
10 goods so this project looked at how to er  
11 eliminate the use of polystyrene expanded  
12 polystyrene with something which is more  
13 sustainable  
14 I mhm  
15 P2 and er we wanted to take this project more like a  
16 pilot project to test out how the alternative  
17 material works and the alternative materials is  
18 called ((product name)) which is developed by  
19 another er startup called ((company name)) they  
20 have used flowers the waste flowers from temple  
21 and they have er cultured it with mycelium to  
22 make this alternative product so that's the  
23 I okay  
24 P2 gist of the whole project which was done  
25 I and what usually happens to the flowers from  
26 temples er where do they usually end up  
27 P2 in the current situation er this startup is based  
28 in varanasi er in the state of uttar pradesh it's  
29 also very famous for er its pilgrim status there  
30 are many temples there and there's this river  
31 ganga which flows through it so all the temples  
32 are used to er put the garbage like the waste  
33 flowers into the river  
34 I yes  
35 P2 or even if it's a big body collects it er they  
36 think it's er sort of you know a natural and it's  
37 not no harm to put it in the open er or in the  
38 water so it doesn't really er has any use as of  
39 now so yeah  
40 I yeah  
41 P2 that's the current situation with that

42 I and so the the startup company that that uses the  
43 the flowers did they collect them from the river  
44 even or is it before they get thrown that

45 P2 er I believe they have tied up with the local  
46 temple authority so every temple in up is  
47 governed by some rules which they have and I  
48 believe that's how they work that out also they  
49 have er er sort of spoken to the local  
50 authorities so they perhaps go to their  
51 collection point and get whatever er is needed  
52 for their consumption

53 I okay that's really interesting and so the  
54 packaging product that you worked on was it an in  
55 house idea from your company or how where did the  
56 idea come from to do this

57 P2 yeah sure so I was a wild card participant for er  
58 an international programme called ((name))  
59 challenge er based in Netherlands er and that  
60 year the theme was circular economy and er I was  
61 new into the company my main primary primary goal  
62 is as industrial designer but I always because of  
63 my background in the education er in the master's  
64 which I did in design I want to I work on  
65 circular economy and sustainability I wanted to  
66 bring that er in the company as well and I saw  
67 this challenge as a perfect opportunity  
68 opportunity to do that so this was part of the  
69 impact plan which I had envisioned for the  
70 company er and this was er chosen because it was  
71 more or less er less radical if I talk about  
72 evaluating say product life cycles it's a big  
73 task

74 I yeah

75 P2 but packaging with the secondary to the primary  
76 product I have some chance so that was my thought  
77 process when I pitched this idea in the

78 I okay so it was it was your idea and then you  
79 pitched it to your company to see if

80 P2 yeah yeah

81 I okay great and

82 so what was your role in in the design of this  
83 packaging

84 P2 erm I would say the role of mine like the  
85 packaging was already there my role was more to  
86 see how to integrate this new vendor and see how  
87 it how they can deliver to us the packaging which  
88 we need according to our requirements so we chose

89 er existing er we chose the fan category because  
90 fans er they usually have this thermal buffer on  
91 which the whole motor unit sits so we had studied  
92 that I had studied all products and I and I tried  
93 to understand which would be the most easiest to  
94 replace because if you have multiple parts again  
95 it's going to be like different moulds and all of  
96 that but this er this is a common throughout all  
97 fans and mostly in India people otherwise er tend  
98 to use the packaging after they buy the product  
99 they store it somewhere but in the case of fans  
100 it's er done during the initial phase when you  
101 construct a house or you are renovating it so the  
102 packaging like the workers who are working on the  
103 fans or installation they usually throw it

104 I so you're talking about ceiling fans rather

105 p yeah yeah the ceiling fans yeah

106 I so not the freestanding ones which which the  
107 consumer might

108 P2 I I I was speaking about the ceiling fans yeah so  
109 I my role was here to find alternative material  
110 which could be produced to the quantity which we  
111 need which was in the price which we need and  
112 also er since in my case it was a nature based or  
113 an organic product you would say I had to look at  
114 its er shelf life er whether how it reacts with  
115 the moisture and er carry out the drop tests and  
116 all the er sort of ((inaudible)) testing was done  
117 like with the help of like my involvement  
118 involvement yeah so that was the

119 I okay and so the was the idea that the packaging  
120 would be the same shape and form as the previous  
121 packaging or were there any changes to that

122 P2 well er we tried to keep it same because erm this  
123 was just the inside this was just the inside the  
124 outside cardboard box would have to remain the  
125 same

126 I yeah

127 P2 so if we change this design maybe because say  
128 this material needs more mass to be added to  
129 sustain the same amount of ((inaudible)) we  
130 cannot change the outer packaging because that's  
131 already fixed and that if we want to change that  
132 it's a huge project which people usually resist  
133 because it's then they need to change the whole  
134 inventory the whole database and all of that and  
135 so the initial idea was to keep it as close to  
136 the extreme dimensions which we have and any

137 modifications like add add an additional say a  
138 strengthening element or something should be in  
139 that sort of extreme dimension which we have that  
140 was the initial idea yeah

141 I interesting okay and then could you tell me about  
142 some of the the decisions that you had to make in  
143 this design project

144 P2 erm the first decision which I spoke about  
145 briefly was to er this was my er like I was  
146 pitching this project and er I needed er  
147 clearance for the initial pilot ((inaudible)) as  
148 well so the decision I made was to choose  
149 something which will have impact on a large scale  
150 er and I I I should be able to quantify it so  
151 most of the products we have third party vendors  
152 but for fans we have our own production facility  
153 the supply chain is managed in house so hence I  
154 saw that it will make sense if I do it for fans  
155 because that's where we can control manufacturers  
156 like I the people I will be speaking to will be  
157 my colleagues not a vendor which I'm dealing with  
158 right so hence the communication gets more easier  
159 as I said it's a single part it's not like  
160 multiple parts hence we chose fans category er  
161 apart from that er the decision er of quantifying  
162 it so that I can create the buy in and we have  
163 multiple aspects it shouldn't be just that it's  
164 not it's toxic free but it should also have a  
165 social aspect to it that okay is we are we are  
166 diverting the waste from the landfill but at the  
167 same time we are employing er socially er sort of  
168 challenged women in the company who are employed  
169 there so I try to er give many faces to the  
170 proposition sort of so that it's easier to erm  
171 adopt

172 I okay and what were what are the socially  
173 disadvantaged women doing are they making the  
174 material

175 P2 ah so er in India there's this caste system which  
176 is in play and er over there the marginalised  
177 caste or the those who belong from the lower  
178 caste they er traditionally have been not given  
179 good work opportunities which are secure so this  
180 er they they do the job of not taking the waste  
181 flowers or something but they do a proper job in  
182 the factory when they roll the incense sticks so  
183 apart from this ((product name)) they the company  
184 also makes incense sticks out of the flowers yeah  
185 so they roll those flowers and they get all  
186 employee benefits which otherwise er they do not

187 I yeah

188 P2 so as they employe some hundred and seventy three  
189 women as far as I know the last record so that's  
190 also a good way right

191 I yeah

192 P2 it's also enabling socially social circularity in  
193 a way or kind of social upliftment of er a part  
194 of society it's not just er another ((inaudible))  
195 product sort of so that was really something  
196 which I wanted to pitch er in the proposition

197 I yeah and did you when you were deciding to pitch  
198 this project did you look at any other potential  
199 materials and decide on this one or was it the  
200 other way around

201 P2 yeah I did consider other propositions er one was  
202 paper pulp-based packaging so it's basically er  
203 the newspaper or any muddy er paper which cannot  
204 be recycled further they mash it up and then they  
205 pressurise it into moulds and that's how you get  
206 paper pulp packaging so that was one  
207 consideration the other consideration was to use  
208 er cardboard itself and create some kind of  
209 supporting er mechanism erm it's difficult to  
210 explain but maybe just cardboard sheets which  
211 give make up a three d sort of

212 I yep

213 P2 structure so as to support it and we did try some  
214 mock-ups so these two options were considered but  
215 the paper was capital intensive you need to have  
216 moulds er for it and in the end er the paper is  
217 wasted after it's used right like also that is  
218 the case and the second one was a cardboard one  
219 so even that er had some challenges on the  
220 technical ground it wouldn't really pass all  
221 these tests so those were the two options which  
222 we considered yeah

223 I okay and and who else were you working with in  
224 considering these options

225 P2 erm I was working with the development engineer  
226 at ((company name)) so they were also in the  
227 early stages of developing this product and hence  
228 I was working with the research scientist who was  
229 coordinating with me on er the samples which we  
230 used to receive er what problems do we have and  
231 in my company I was working with er the factory  
232 production people like the production plant  
233 manager or the supply chain manager so I got all

234 the numbers from him that was the monthly  
235 production of this fan how much ((inaudible)) do  
236 you ((inaudible)) order so all er that kind of  
237 information I got it er from the production plant  
238 manager and I took erm er I wasn't working but I  
239 consulted or I got my work reviewed by the  
240 strategy team which was present er in our company  
241 and also with the r and d department head so I  
242 work for r and d department here so that's the  
243 those are the stakeholders I had in the company

244 I and so I think it's really interesting that you  
245 were looking at the

246 P2 er I would like er I'm sorry to interrupt yeah I  
247 forgot one very main stakeholder so we have a  
248 sustainability department or what we call a  
249 corporate social responsibility team

250 I yep yep

251 P2 so I also er they were the primary partner er for  
252 this project because I wanted these projects to  
253 be pitched through them rather than er you know a  
254 single er say someone from the design department  
255 trying to bring about this change so if I get  
256 their support that would really help so I was I  
257 was working with them to also er kind of er  
258 officially propose this erm ahead so yeah the  
259 sustainability or the csr department was also one  
260 of the stakeholders that I was working

261 I okay interesting and so you were initially you  
262 had these three different material options how  
263 did you make the final decision how did you weigh  
264 these options up

265 P2 yeah

266 erm so in the end er the company is a company  
267 caters to the economy sort of range all the  
268 products are based are very economical they  
269 aren't really into the premium segment or the  
270 luxury segment so cost was always on the back of  
271 my mind that whatever we do it's not adding to  
272 the product as such you know it might add to the  
273 marketing but we had to keep in mind that the  
274 cost is one of the major factors so that was the  
275 first filter er after that as I mentioned the  
276 second part was it should er not be just less  
277 damaging er to the environment like if you  
278 compared it with the existing thing which was  
279 polystyrene it was toxic it's er not recyclable  
280 so either it should be non-toxic or it should be  
281 recyclable at least but er when so when I looked  
282 at ((product name)) it was non-toxic it was er

283 say recyclable to some extent or it was erm sort  
284 of regenerated because you're using waste already  
285 which is something which is waste and then using  
286 it whereas in the case of paper pulp that wasn't  
287 the case right because you are using some paper  
288 as an input which wasn't say waste but it could  
289 have been used somewhere else and in the case of  
290 cardboard yes again cardboard could be used for  
291 many other purposes but it wasn't a waste as such  
292 in first place so those were the filters so the  
293 first as I said cost the second was er how many  
294 sort of facets it has like whether it's just non  
295 toxic recyclable or it has any other regenerative  
296 or it's utilising any waste so that was the  
297 second one and third was of course how easily we  
298 can integrate it into the existing er production  
299 er process which we have er so for example  
300 whether it's mass manufacturable whether it's  
301 easy to transport what is the breakage in terms  
302 of transport whether we can store it and other  
303 factors like that so these were some of the  
304 factors which we considered for deciding which to  
305 go ahead with

306 I and was it difficult to compare these different  
307 factors and make a decision

308 P2 ah to be honest I guess erm I could have done  
309 people or you know I could have done a more  
310 detailed comparison of all these now in  
311 retrospect I'm citing these options but when I  
312 was in the whole design process or the kind of  
313 process ((product name)) like impressed me so  
314 much on the personal front and also the  
315 sustainability department people were like wow  
316 this is really nice so I feel we were a bit  
317 biased toward towards it so that I do realise now  
318 when I look at it so we were trying to make er  
319 that option work because it was so sort of er it  
320 ticked all the requirements which we had

321 I you just had a gut feeling when you

322 P2 you asked me that right was that what

323 I yes yes yeah so it sounds like you had more of er  
324 a gut feeling that this was the best option

325 P2 yeah but it isn't like we didn't explore the  
326 other options we did explore other options up to  
327 prototype level we also spoke to some vendors but  
328 er that's what and the company er like our  
329 company er the chairman which we had he was  
330 really interested in working with startups like  
331 you know especially Indian startups who if if in

332 any way er we could sort of fund their projects  
333 or help them develop their product so ((product  
334 name)) in this case was again falling in that  
335 bracket as well it was a new startup it was  
336 trying to launch something new

337 I yeah

338 P2 so we were trying to er be a part of their  
339 journey and the other two options were just any  
340 other vendor who weren't really doing it for the  
341 say the social cause or the environmental cause  
342 for them it was just you know er minting more  
343 products the paper pulp er the paper pulp based  
344 or cardboard so yeah that was the one thing and  
345 the third option which I spoke about cardboard a  
346 lot of er ((inaudible)) research would have to be  
347 done from our side also you know it had a very  
348 long er sort of er process whereas er in the  
349 ((product name)) option they were our partner so  
350 I could ask them to do a lot of things for us  
351 rather than doing a to z development over here  
352 because er as I said it was a something which I  
353 was trying to talk to people and get it done more  
354 or less it wasn't a mandate as such so we didn't  
355 have sort of costing cost budget or you know  
356 timers

357 I yeah

358 P2 which were connected to this project so hence it  
359 was important that it shouldn't be a lot of work  
360 for the stakeholders like the packaging team or  
361 the er production team which was there so hence  
362 that option felt er really perfect at that time

363 I did you have time allocated yourself for this  
364 extra project did you have time allocated in your  
365 own working time for this

366 P2 yes I had time allocated for it I had like er two  
367 days out of my two or one and a half days of my  
368 five day week

369 I okay

370 P2 but er it was not just the sustainable packaging  
371 project but I was also working on capacity  
372 building projects like circular design workshop  
373 for the design team then sustainability training  
374 for the higher management so these were other  
375 initiatives which were carried out so this was  
376 part of that project yeah

377 I okay and so when you were talking just now you  
378 kept saying we were considering what did you make



379 the decision er as a group with with your  
380 colleagues or did you make the decision yourself  
381 as to which material to go with

382 P2 erm its sort of erm like if I recollect it's kind  
383 of hazy the whole process exactly what happened  
384 but I can er say that I was the primary driver or  
385 I was the primary decision maker the second  
386 partner closest to home I felt like was part of  
387 the decision-making process was the  
388 sustainability team and then came the production  
389 plant er or the packaging team so I tried to  
390 because I I understood after one point that  
391 people were seeing it as my personal agenda and  
392 hence that could act as a barrier to the whole  
393 transition hence I wanted to see that every  
394 stakeholder feels that this is their project too  
395 it's not something which I'm trying to do it for  
396 some xyz competition or a challenge which I've  
397 signed up for and that wasn't the case either  
398 that was just an excuse for me to introduce this  
399 whole er initiative in the company so I wanted to  
400 see that they take the ownership also it  
401 shouldn't be just me hence also maybe perhaps at  
402 times I had already made a decision or I had to  
403 like back of my mind I knew that okay this is the  
404 most import er feasible option I still made sure  
405 that I go and er talk to everybody see what they  
406 think about it and then er take a collective  
407 decision

408 I yeah okay

409 P2 also by that stage it wasn't needed but it was  
410 important for all the stakeholders to feel  
411 accounted for so yeah that was er very clear in  
412 my mind at that er point yep

413 I okay

414 and so you've talked quite a bit about the the  
415 social and the environmental impacts how does  
416 this relate to your own personal values or or  
417 ethics how does that come into your design work

418 P2 er well erm in my master's project er as I said I  
419 was er a year into like I was a fresh employee in  
420 this company and my background er in I I was a  
421 Smith MacArthur Fellow er for circular economy  
422 with the Ellen MacArthur Foundation my systems  
423 project was on waste so it started with waste and  
424 we moved to consumerism then we bought into  
425 climate change and we did a lot of field research  
426 we went to landfills we spoke to many  
427 organisations so that er had really changed the

428 whole direction like when I joined the design  
429 school my passion was to create you know really  
430 fancy looking cars and

431 I yeah

432 P2 really nice appliances but then that shift  
433 happened during that project er or that course  
434 that it brought me face to face with the reality  
435 of what where white goods end up or where do most  
436 of the things which we used end up and that moved  
437 me really moved me a lot but er due to some er  
438 decisions er like due to some constraints I had  
439 to pick up a job

440 I yep

441 P2 which is industrial design so I wanted to still  
442 play my part of course I cannot go to walk into  
443 marketing and say walk to the marketing  
444 department and say guys we need to stop making  
445 new products what would be too too much for them  
446 and for me too so I wanted to see er what in  
447 small steps or whatever in my capability can I  
448 slowly nudge them or steer them away

449 I yeah

450 P2 you know just to start the conversation or to  
451 build up because for this company it was it had  
452 never spoke like sustainability was never an  
453 agenda or on the topic they only know about  
454 business sustainability but I don't think they  
455 looked at it the other way they have a a like  
456 social responsibility when which is about  
457 planting trees and carrying out er but those are  
458 mostly er sort of adaptive I would say

459 I the more external

460 they're more external to what the actual product  
461 is

462 P2 yeah it's not like doing it because the  
463 government has mandated at them to spend say five  
464 per cent of their er whole annual income you know  
465 planting trees and then using plastics over here  
466 which are being recycled I feel yeah although I'm  
467 not a ((inaudible)) of the company he had to take  
468 that call but I wanted to create at least that er  
469 awareness or let them know that there is a better  
470 a better alternative or a different way of doing  
471 things so in the long run I would have loved to  
472 work on circular econ a circular product like  
473 their main sort of proposition er work on solar  
474 powered factories so all of that was in the long

475 run but I saw these projects as the stepping  
476 stones to get that discussion going yeah so that  
477 was my drive to do this yeah

478 I yeah and have you noticed has there been any  
479 change within your company following this project  
480 that you initiated or is it

481 P2 yes er change in which aspect

482 I well I wondered if your focus on sustainability  
483 had maybe influenced people to start thinking  
484 about that in the the normal product development  
485 that you do

486 P2 er well it didn't trickle down to the product  
487 development stage but I would say yes er it did  
488 make people er a lot more aware like I was  
489 labelled the packaging guy or the sustainability  
490 guy so that itself was kind of okay for me  
491 personally it was something okay people are  
492 taking notice of this of me but in a way also of  
493 the project right because they are linking me  
494 with the project

495 I yep

496 P2 and as I said I carried out some ((inaudible))  
497 capacity-building projects too like I had a  
498 circular design workshop for my colleagues we are  
499 a design team of eight to twelve people and as I  
500 realised the perils or the struggle which I  
501 encountered while the bottom up approach you know  
502 I was trying to steer it I did realise that  
503 should be top down so hence I also organised this  
504 er workshop called demystifying sustainability  
505 for the top management so like the cmd the  
506 managing director the all the business heads  
507 everybody was there for the one er day workshop  
508 was carried out by ((organisation name)) have you  
509 heard of them ((organisation name)) they are  
510 based in Delhi yeah

511 P2 yeah

512 I so they are basically an Indian association which  
513 er work on sustainability as part of er a part of  
514 them does so I felt it would really be good to  
515 bring them on board as well to get that  
516 credibility of you know the knowledge sharing  
517 which wasn't happening so yeah that was one  
518 change and the other change yeah erm so after  
519 this what happened was er they did the er as I  
520 said earlier this project didn't materialise in  
521 the end but one stone it did kind of try to move  
522 or kind of one thing which really happened was

523 they made a cross-functional team called the  
524 sustaina for the sustainable packaging project so  
525 the conversation started with ((product name))  
526 but then later the questioning about the carton  
527 whether we are using recycled er cardboard what  
528 kind of inks we are using like I of course I had  
529 in fact that in my proposal but then erm a cross  
530 functional team was formed officially earlier it  
531 was just me right and my sustainability colleague  
532 but now there was like officially on the  
533 ((inaudible)) and it was mandated by the  
534 strategic team and r and d head had allocated  
535 sort of a team to look at how to as a whole  
536 strategy you know periodically and step by step  
537 make whole er packaging which ((company name))  
538 has sustainable so say like recycled er packaging  
539 only by two thousand and twenty two or two  
540 thousand and twenty three so they had on this  
541 team to er er think or brainstorm how do we do  
542 that so there was a guy from the production er  
543 facility so that had happened so that team is  
544 still in place but the irony of it was er I  
545 wasn't part of that team

546 I oh no

547 P2 yeah so I was in the start but later my er like  
548 again a lot of things happen like you know the  
549 leadership changes then they have to be brought  
550 on board as well with why you want to do it so in  
551 that whole transition he started to question why  
552 are you working on packaging when you are a  
553 industrial design guy like you know so everybody  
554 has a different approach he wanted to see like my  
555 new new leadership at the r and d wanted to see  
556 people working their own jobs rather than being a  
557 lot cross functional and that was the demand of  
558 the time so er right now they are still trying to  
559 figure out the progress has has been really slow  
560 on the whole sustainable packaging policy which  
561 they were trying to introduce or the framework  
562 which they were trying to introduce so progress  
563 is slow but yeah that did start because of this  
564 whole conversation because of this whole project  
565 which was carried out

566 I okay and can you explain a little bit about why  
567 the project didn't materialise in the end

568 P2 in the end as I said the leadership changed

569 I yeah

570 P2 so that was one like the support which I had in  
571 the r and d team the head he got shifted back to

572 his department we had a new head so for him it  
573 felt like er again he questioned why are you  
574 doing this like he didn't know the backstory I  
575 did give them a download of why I'm doing it what  
576 ((name)) challenge was and all of that but he  
577 really didn't buy the idea like he went in the  
578 technic technical aspects too soon and also the  
579 product wasn't developed so that was the sort of  
580 the intangible aspects of why it didn't  
581 materialise went on on like the product itself  
582 had some issues when it came to the draining it  
583 used to drain a bit like it used to leave some  
584 residues

585 I right

586 P2 when it was wrapped in the case and it had a very  
587 strong smell because er I don't know because of  
588 the er old flowers or because of mycelium so  
589 those were some buyers which er marketing when  
590 they saw the sample which we had developed they  
591 said okay is there a way to get around this

592 I said yes but it's going to cost you some money  
593 and that's when er things started like they lost  
594 interest because basically you need to coat them  
595 with gelatine gelatine is something that you find  
596 in seashells and other things so you have to make  
597 a gelatine coating on top and that at that point  
598 was still a bit

599 I okay

600 P2 so yeah that was one of the reasons apart from  
601 that erm weight it was fifty per cent more like  
602 sort of heavier than thermocol thermocol is  
603 hardly anything it's just air right expanded but  
604 this is something which has weight to it so it  
605 was fifty per cent more heavier so

606 I yeah

607 P2 that was one thing and erm apart from that that's  
608 those are the points which I believe were er but  
609 I feel in this project they were more what do you  
610 say I won't call it I don't know the term like  
611 the intangible or you know people aspect of it

612 I yes yes

613 P2 so I I cannot I don't have the ((inaudible))  
614 facility right like the testing facility had to  
615 be done by the packaging team er these weren't  
616 fully on board because their KPIs weren't aligned  
617 sort of the key performance indicators or their  
618 annual annual performance goals right

619 I sure

620 P2 so for them it was like if this project is done I  
621 don't get the credit I I feel that was also  
622 something in the back of their mind you know the  
623 ownership ownership issues I would say they  
624 didn't felt that if they really pursued this  
625 project they are going to get at any erm sort of  
626 erm anything back er yeah so like on the what do  
627 you say the organisation structure or the company  
628 benefits and all of that so

629 I the recognition

630 P2 are one of the yeah agenda

631 I yeah

632 P2 and then as I said I was slowly phased out or you  
633 know removed from the whole er team the new team  
634 which they had formed so I lost touch and I try  
635 to stay in touch as much because they were  
636 basically now my friends because I have been  
637 working with them for six seven months but then  
638 er it was more or less because of some office er  
639 bureaucracy and changing targets and changing  
640 approach the new leadership added a different  
641 strategy he wanted to keep all of the secondary  
642 projects at the after you know in the backseat  
643 and concentrate on other parameters which is  
644 totally justifiable and that is what the business  
645 wanted back then so yeah that was showing more or  
646 less

647 I okay and do you know and whether the the material  
648 is being successfully used by any other companies

649 P2 as I was speaking like er I didn't mention I was  
650 coordinating with the research scientist over  
651 there or the research guy there and yes he did  
652 mention at many points that many of our  
653 competition players were actually exploring the  
654 same material for them

655 I okay

656 P2 but as of now I do not know or haven't seen in  
657 any er in the market anybody using it it's often  
658 a more erm apt application for other app like  
659 other industries which they have already used  
660 like for say icebox sort of things wherein you  
661 need to insulate temperature insulation and other  
662 applications but for packaging as such I haven't  
663 really seen and I don't have any updates as such  
664 if anybody's introducing it at this point right  
665 yeah but there were active interest for sure like

666 I have confirmed er ((inaudible)) that many other  
667 people were also trying for the same thing

668 I okay it's interesting and so you've talked about  
669 how complex it is to try and make a product more  
670 sustainable in the structure of a company who do  
671 you think is ultimately responsible for the  
672 sustainability of the product

673 P2 for the sustainability of the product

674 I yeah

675 P2 erm I do not know if I could comment on that  
676 because I feel in my case the product was already  
677 sustainable my challenge was to introduce it and  
678 to make it compatible for the company but I yeah

679 I in your company who do you think possibly should  
680 be responsible for whether the packaging is  
681 sustainable or not for example

682 P2 er many people can be responsible like I was  
683 responsible right like I voluntarily was  
684 responsible that packaging should be respons er  
685 sustainable but yeah that doesn't work out so I  
686 feel the most important person er should be the  
687 strategy team or be er managing director the head  
688 er head of the company he should have that agenda  
689 that mission like see if you look at philips  
690 their ceo is very vocal about circular economy  
691 and how they want to make it a new way of like  
692 doing business

693 I mhm

694 P2 so I feel usually a top down approach has to be  
695 there so if it's packaging related the packaging  
696 head should be on board and should drive it

697 I yeah

698 P2 otherwise I feel er there are many examples such  
699 as mine when something was started looked  
700 promising some small difficulty came and then it  
701 all went down

702 I yeah

703 P2 until and unless you have that top er sort of  
704 backing or that support it's really challenging  
705 to do these projects

706 I yeah yeah I can see

707 P2 because you need budgeting you need money you  
708 need a bit of risk or like you need that space to  
709 fail also because it won't go right in the first

710 time so somebody a leader who can understand that  
711 that that should be there and of course there  
712 should be some people who are internal like  
713 intrinsically motivated to do it it's not like  
714 somebody has asked them to do it like for example  
715 in this case it was me I personally felt that I  
716 should be doing it or this company should be  
717 doing it but yeah that those two are the key  
718 responsible people

719 I and have you is there any interest from consumers  
720 of the products that you develop in  
721 sustainability

722 P2 erm I spoke to some consumers I listed consumers  
723 because this was exactly the question which was  
724 which ((inaudible)) that okay if we do say spend  
725 ten or fifteen per cent more for this packaging  
726 do you think the customer will be ready to pay  
727 and that made me go to the shops and talk to them  
728 and I said this was a economy product

729 I yeah

730 P2 and and also to make this project viable we had  
731 to have a large quantity of er sort of order so  
732 it shouldn't be like say something which is just  
733 five hundred a year it should be in thousands to  
734 make it feasible

735 I yes

736 P2 so hence we have to look at more economic er  
737 products like cheapest of the cheapest fans which  
738 we sell and when I speak to those consumers they  
739 don't really bother like for them it's not an for  
740 them it's just another fan like if the other  
741 ((inaudible)) sells ((inaudible)) for like ten or  
742 fifteen rupees less that is like maybe a quarter  
743 quarter of one dollar even that price difference  
744 is more than enough for them to choose it but if  
745 that same quarter of a dollar they had to pay to  
746 buy say something which is sustainable they might  
747 think twice

748 I yeah

749 P2 and at the same time it has to be presented  
750 properly to them maybe some of the consumers  
751 might even do that like in the er economic band  
752 or what do you say in the budget band some of  
753 them might even spend that extra money but that  
754 kind of branding that kind of communication on  
755 the product side or the company side should be  
756 there



757 I mhm

758 P2 and I have seen at the same time as you go higher  
759 up the ladder on the consumer sort of parameter  
760 if you see people who are the premium er category  
761 or the top end sort of they are more they're more  
762 aware I would say and they also have that  
763 purchasing power as you see go green or you know  
764 vegan lifestyle and all of these are more or less  
765 lifestyle trends nowadays and some people are  
766 totally like they don't really connect to the  
767 need of it but they just want to do it because  
768 it's the new cool you know in a way because they  
769 are aware okay er going like sustainable products  
770 are something which everybody is trying to like  
771 you know discussing on their ((inaudible))  
772 parties or wherever their social circle more more  
773 more or less or say somebody who is er kind of  
774 working with such organisations who are committed  
775 to such er agenda you know sustainable agenda so  
776 these people are usually not the budget buyers  
777 which our company catered to they are usually  
778 usually comes they come into the picture when  
779 it's some expensive products or some you know  
780 they might buy a fan which is say twice the  
781 amount of what we sell

782 I mhm

783 P2 so in that and also I feel in premium products  
784 you have that margin to accommodate these costs  
785 you know the extra costs initial costs which the  
786 company will then make that shift from you know  
787 existing linear economics to circular economies  
788 so that transition cost er can be ((inaudible))  
789 by these premium products that is margin is there  
790 you know that margin is there and they can er  
791 sort of absorb this cost but when you are making  
792 something which is lead er say the ((inaudible))  
793 or you know or the ((product name)) you know or  
794 something which is like third floor competition  
795 five ten rupees it's really difficult to produce

796 I yeah

797 P2 yep yeah at least at the initial stage yeah  
798 that's what I ((inaudible)) so

799 I yeah okay well that's all the questions I had it  
800 was really interesting to hear about this example  
801 and it's quite an unusual and interesting context  
802 erm

803 P2 yeah

804 I was there anything else that you'd like to share  
805 that's related to to this project

806 P2 erm yeah I have written some points before er so  
807 I will just go through them and see if I've  
808 missed something

809 yeah I guess I have covered most of er the things  
810 yea most of the things I have er covered and as I  
811 said er people are really resistant to change

812 I yeah

813 P2 if it means I need to to like there are these  
814 people who are er okay it's my perspective again  
815 but it's my personal perspective here but I feel  
816 er I have interacted with some of my colleagues  
817 who are working for ten fifteen years in the same  
818 company in this company and their job routine is  
819 very fixed you know

820 I yeah

821 P2 they they would like to er keep it that way and  
822 if I am introducing something it is something  
823 which they don't know right er they are used to  
824 working with the same material the same processes  
825 the same guidelines for the last five ten years  
826 but if this new thing comes they need to er maybe  
827 adapt or change or upgrade sort of their  
828 knowledge base their practice base to this new  
829 level so I feel that's the resistance which is  
830 there usually in the companies when you are  
831 trying to introduce something new not just  
832 sustainable sustainability related but anything  
833 so that I have observed as one of the er points

834 I yep

835 P2 and decision-making I feel it's distributed most  
836 of the time but it also depends on the company  
837 like my company was very like it has more or less  
838 it's ((company name)) it's a huge company but in  
839 the end it's people-driven I would say it's not  
840 so process-oriented as of now we are  
841 transitioning to it we are bringing in SOPs like  
842 the standard operating procedures but it's still  
843 in the end people-driven if the boss says yes  
844 everybody is aligned if the boss says no  
845 everybody is like okay can't help it he has said  
846 no

847 I yes

848 P2 so I feel that that needs to change right some  
849 companies have already policies which say okay we

850                    need to contribute to at least fifteen per cent  
851                    of projects which have such outcomes you know  
852                    sustainability outcomes so some kind of er agenda  
853                    or that rule should be incorporated into the  
854                    whole operations process you know  
  
855    I                yeah  
  
856    P2              it shouldn't be just something which people do er  
857                    er their personal agenda or like you know it  
858                    should be integrated into the whole appraisal or  
859                    performance review system which we have that  
860                    would be a good motivation to get things yep  
  
861    I                yep no that's that's really useful and really  
862                    interesting thank you so much for er for taking  
863                    the time to talk to me about this  
  
864    /end/