What is your understanding of industry 4.0, smart factory or smart manufacturing? For me it’s home about manufacturing stuffs like that how we integrate our systems for other nations basic example will be a robot changing name where you don’t have interaction of people basically packing and keeps product what . we do have is robotic reversion systems, robotic arms, we have sexual boards, we have 24 robotic arms packing and placing products. We then look at how we use that column to task force to feel safe it’s a bit from that perspective that’s what we are looking at.

What does it mean for your organisation ? It’s about how we look at high labour cost ,high turnovers before margins, key state margins to create bigger margins so basic example for us is to get eight people packing ,so what about projections how do I maybe reduce that to two people and we used something like multi-head wheel packing system ,we install multi-head where both cells we launch products in a pocket that will dispense into the packaging where we got robbed instead of someone hand packing it. So you are looking at cost, productivity ,what about flexibility .hard for as can they got their own brand so they can tell their customers that’s what we want, this what we are producing stuffs like that and they can team up their schedule around that. Unfortunately for us all our stuff for our customers for their own brand is not our own stuff, it’s not like we know how sooner where customer could come in one day and say I don’t want anything and then they choose they won’t need at that point you have to be very flexible in changing other companies will say that’s a plan we need for a few days or next week we have to change. Are you looking at increasing productivity ,the amount triple, yeah. Sure how do we do that we look at ways, we look at human labour if the machine can package faster more reducing, we look at process, taxing process of improving.

How many of these technologies have you currently implemented.Cyber physical systems,3D printing of gun here in this factory .no. Automative robotic system, energy saving, cloud manufacturing. Do you have machine to machine communication, yes. And so in the future at your current pace will your factory one day become a smart factory. From that point of view you will get certain point where it is very autonomous , but there’s no certain product where robotic or autonomous engineer could not produce due to the design, due to texture or fragility of some our products

What are some of the challenges or barriers in implementing these technologies, have you being here for a while .Over a year. I guess it’s culture, so people in other culture don’t like change so a few other job don’t feel threatened buts it’s not that at all ,it’s when you have to maintained staff you would actually upscale them and move the internet because they wouldn’t actually be the people unfortunately culture is the biggest barrier for change because people don’t like anything new, don’t want to do anything new because they have done that job for ten- fifteen years and they don’t want to do anything different. In your opinion how do you think we can overcome this cultural barriers. The biggest way ,do their job for a day, talk to them, communicate with them ,sit with them, don’t just implement something which is very bad, work with managers and above all project engineers that can work with ten years improvement managers what they do is they come straight from university and they sent it won’t work they don’t need to communicate with the people that are there like.communicate with the people that are on the shop floor explain to them ,talk to them,ask them a few questions ,why they don’t want to do that .Explain to them that they changes are for them,the benefits for the company to connect. Explain from the company’s point of view that if you don’t implement changes or you don’t try to improve in five times you and the company that are back as compare to other businesses and other competitors. However, given that when the factory fully becomes autonomous these people loose their jobs,so how do you explain that to them. The thing is we won’t our manufacturing will retain use day staff while agency staff .so they can be here one day some people may become redundant or may loose certain jobs but majority people shall become upscale to being machine operators though machines are autonomous you need someone to operate so they will be moved to different areas where there isn’t autonomous maintenance for example you need truck drivers to drive,you need hygiene staff to clean the floor you upscaled them to become some factories called advanced teamed members who carry out maintenance for the robots .Has training become a problem?Yes ,the reason not being.What are the risk involved,affects productivity,endangering of colleagues you need to show them the benefits

If you were a manager of a small and medium size company how will you go about typically implementing some of these technologies.i will look at what a small and medium size company produce,I will look at am trying to implement I will get a user requirement specification of what we are gonna do,I will then go to three or four companies and a place for what we gonna do.I will then go to the finance department to bring up our business case to show the benefits obviously the project package and where we show the benefit over payback periods at that point I will go the directors and present them with payback periods over the benefits and show them the risk of not doing it. If it don’t get approve we go to implementation stations,implementation stage that will involve some operators that is going to affect to mainly give them ownership of the machinery and the of the new apartment process basically trying to get involved.

Do you look at the entire business what technologies will go into the business o ryou just learn from there or strategic roadmap that am gonna start implementing this first and moved on this or you gonna look at specific production lines or specific aspects how do could I improve this or that.For me the more you think about implementation strategy because if you you quickly get lost,you need to have a three –five year old implementation plan.Why three to five year implementation plan? We always have a three to five year project so we set projects that will cover the periods replacing the roof of a field factory in one year you need to use Could virtual reality be a great tool for implementing new technologies,first of all simulate it.they go for training,they go for dimensions and space.Has the implementation of this technologies being an upgrade or change in management structure.it hasn’t change the management structure.

What are some of the changes brought about by the implementation of these technologies within your organization.So depending on what the technology has being implemented it could be communication ,easier communication,improved training scenario’s ,increased wage, reduced wastage ,reduced labour cost and reduced packaging cost depending on what we are doing.

Some small and medium size companies have problem with cost, do you think bringing a robot is a good idea to retain on investment because some people will say why spend one hundred thousand pounds on a robot when I can employ this number of people and pay them.so first of all to do something like that depends on the process,if you gonna do that you are going to have a three year view or five year five view because it’s a short term goal where people will do it better in short term using a robot. Do you think implementing these technologies will help your organization to detect and visualized new technologies mainly to diversify new markets.no I think certain machinery will be to new products process,with the packaging so upgrading,we can reduce package sizes.In your factories are different departments connected or linked together maybe production and marketing,sales .They are both separate functions but if you are going implement technologies you are going to have individuals for each department