



Digitalization in the Making – Breaking News from the Automotive Industry

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1. Why we conducted this Study
2. Who and how the Study was conducted
3. The Automotive Market in 2030
4. Questions and Queries



SCM @ ISM



Henry Ford 1863 – 1947

Yesterday:

“If I had asked people what they wanted, they would have said faster horses.”

Today:

“If I had asked people what they wanted, they would have said faster cars.”

➤ Will cars disappear in the near future?



Congested
Infrastructure

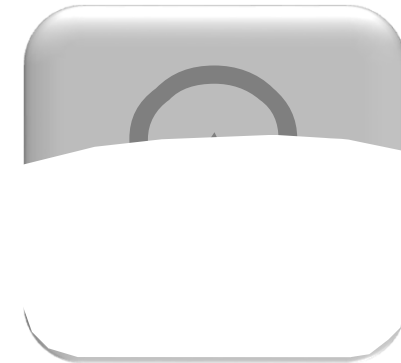


Less driven
Kilometers per car

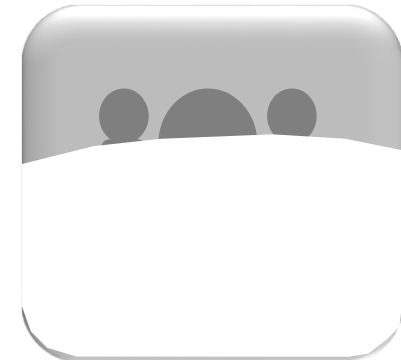
Did the car industry
exceed its climax?



Peak Car




Technological
advancement

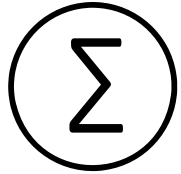


Car rationalisation
and sharing

➤ What are the impacts on the automotive industry?

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1. How will the future automotive industry be structured?
 2. How will the automotive services in the future look like?
 3. How mature are automotive suppliers regarding Big Data Analytics?

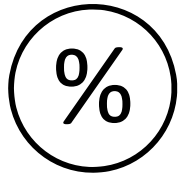
The sample represents a solid basis for the indication of industry trends...



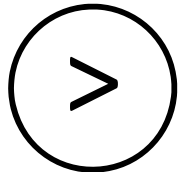
168 experts participated



67% work in small and medium sized enterprises (SME) with less than 200 employees



Most represented functional departments* are Sales (55 %), Marketing (51%) and Strategy (49 %)

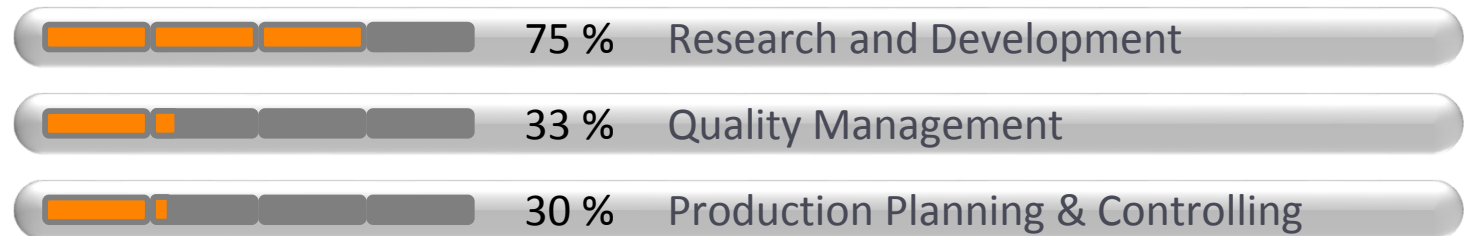


Original Equipment Manufacturers (OEM) represent 16 % of the participants

- 1** Shift of tasks from OEM to Suppliers
- 2** Future Market: After Sales
- 3** Formula 1 Analytics
- 4** Big Data
- 5** Digital Services



Core Competencies OEM



- Information management & big data analytics are not seen as core competencies even though they are critical success factors (7%).
- Synchronisation and orchestration of supplier networks is not seen as a core competence (18%).
- The high profit sector of after sales is also not seen as a core competence for OEMs (14%).

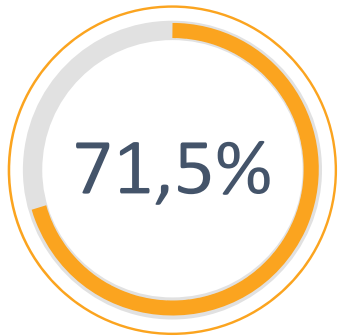


Core Competencies Part Supplier



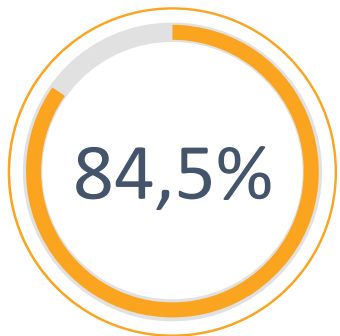
- Supplier state that they have higher competencies in supply chain management (30%).
- Information management and big data analytics are the least selected competence (2%) even though expending knowledge is required for future business.

Trend 1



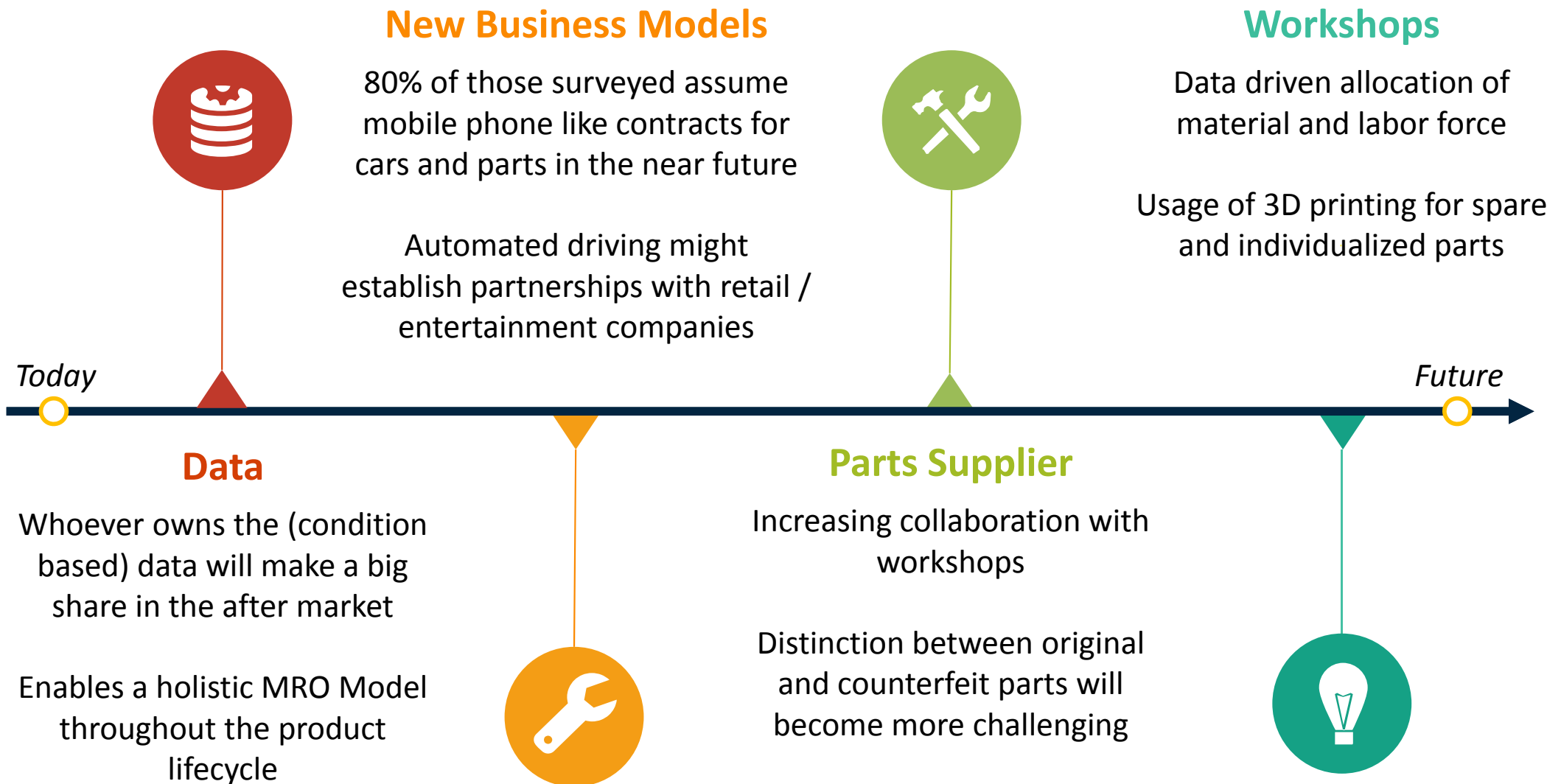
“OEMs only focus on R&D, customer management as well as monitor the quality of the products produced.”

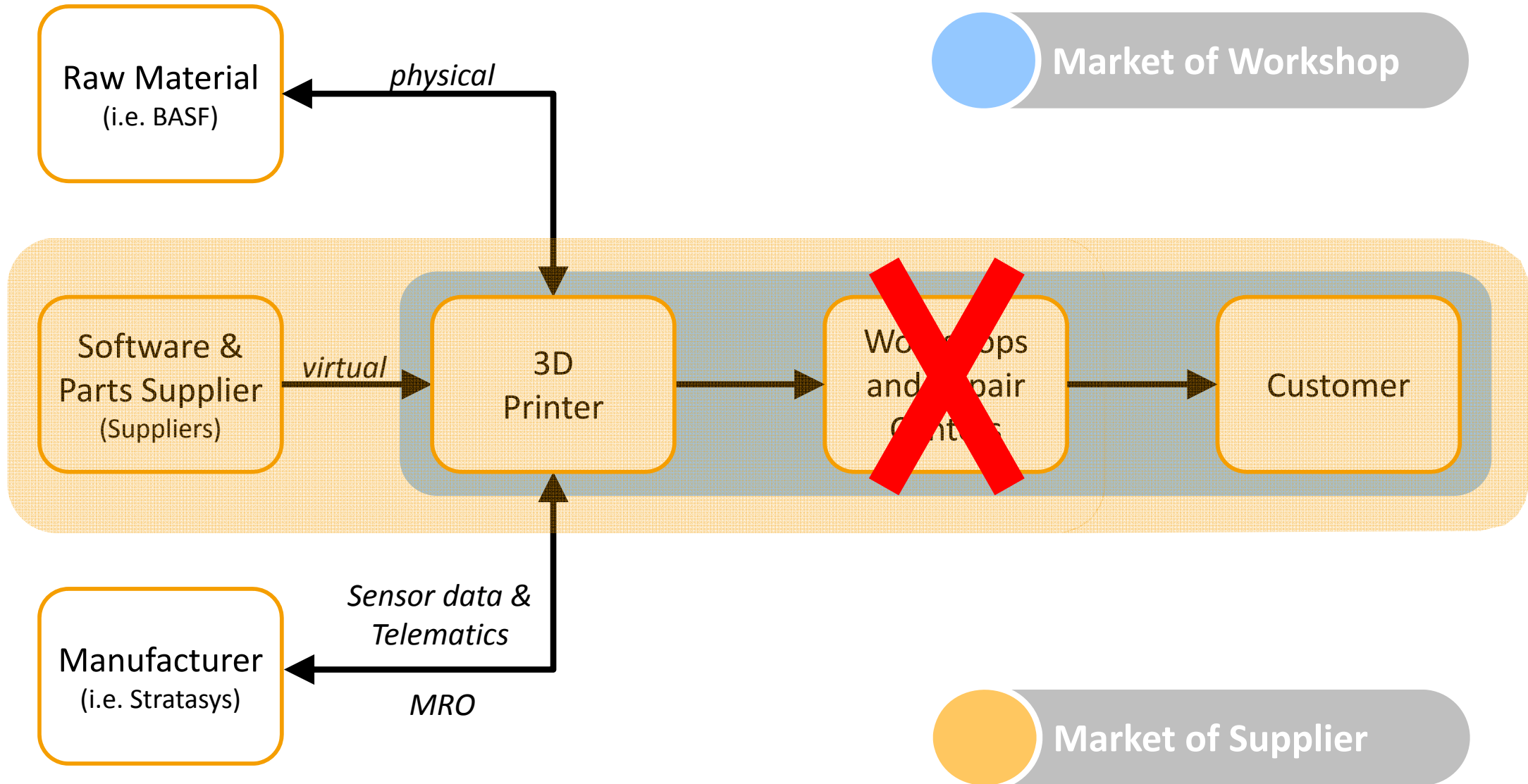
- 68% think OEMs will **only assemble components**. Preconditions for this are efficient **supply chain management** and **transparency** through IT systems.
- 87% believe in the sustainability of the automotive industry. – The experts believe that the automotive industry **will stay a volume market**.



„Suppliers and part manufacturers will share data with OEMs for root cause analyses and early warning in manufacturing and logistics.“

- It is **uncertain** whether the industry has already obtained the specific know-how in terms of **big data analytics** and **information management**.
- Increased co-operation between part supplier and (authorized) workshops. – The after market will **further move away** from the OEM.







OEM as mobility provider that manages car upgrades and mobility requirements



Ubiquitous connectivity and data exchange between workshops and vehicles



Increased (on demand) spare parts availability due to additive manufacturing



Data as a competitive advantage throughout the whole supply chain – “who owns the data owns the business”

Trend 3

What percentage of the data required for your planning task do not originate from the systems in your area of responsibility?

44,3 %

A donut chart with a white center and an orange ring. The ring is approximately 44.3% of the way around, representing the percentage of data not originating from systems in the area of responsibility.

32,1 %

A donut chart with a white center and an orange ring. The ring is approximately 32.1% of the way around, representing the proportion of total time spent collecting and preparing data.

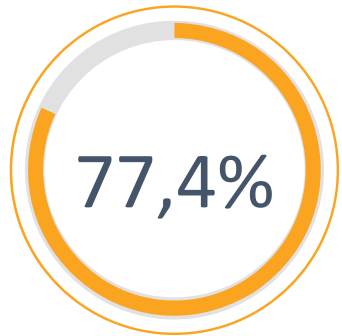
What proportion of your total time do you spend collecting and preparing the data necessary for your analyses?

„Where do you see the largest potential in Big Data Analytics for automotive suppliers?“



- **Big data analytics** is acknowledged as a **crucial prerequisite for industry 4.0**. A better understanding of the end-customer and the usage of real-time information systems enable companies to **realize smaller and more individualized lot sizes**.
- Real-time quality analyses are regarded as further field of application for big data analytics („Six Sigma on the fly“).
- A usage in the area of performance management and **activity based costing** is **rather disregarded** by the surveyed experts.

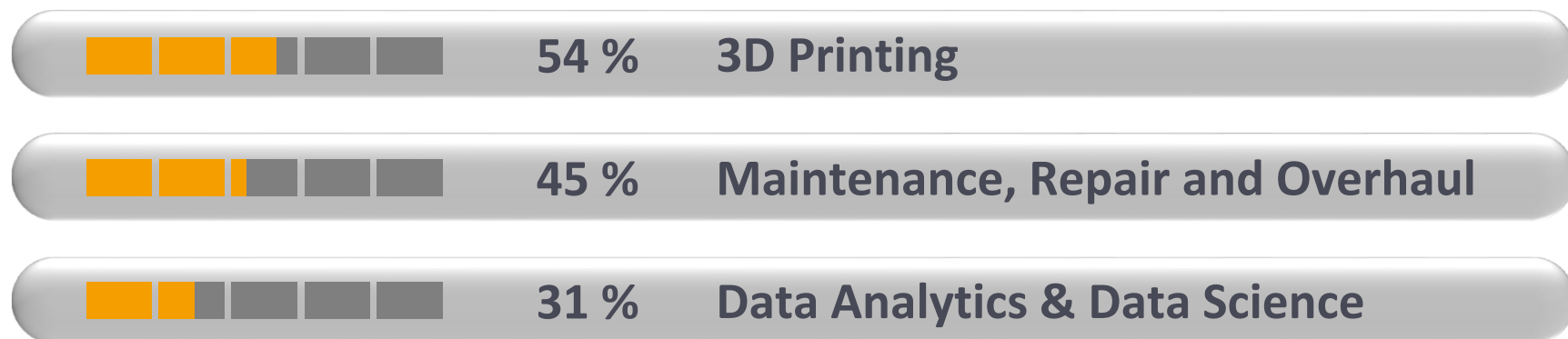
Trend 4



“OEMs will focus on mobility management”

- Nearly 80% of the experts forecast a shift of **OEMs to the field of mobility service providers**. As a consequence, **suppliers will increase their area of responsibilities** by functions which were initially duties of OEMs.
- Suppliers just begun to regard digital services as source for potential revenues. **Predicative maintenance** and **data sciences** are seen as opportunities for **business diversification**.

„What are possible new markets for automotive part manufacturers / suppliers?”



Trend 5



74% agree: Cars will be subject to contracts similar to smartphone (e.g. new car / components every two years)



Therefore, product life & development cycle might shorten dramatically



There will be a separation into “everyday cars” (e.g. Google egg) and “leisure cars” (i.e. customized private car)



Only 10% agree with the disappearance of cars in the near future

automechanika



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Thank you for
your attention!